Attachment A

ECONOMIC OPPORTUNITY AND EMPOWERMENT PROGRAM

KING COUNTY EOEP PLAN

SUPPORTING THE CHILDREN AND FAMILY JUSTICE CENTER

A plan for Economic Opportunity and Empowerment in King County construction projects, using the Children and Family Justice Center as a pilot project.

King County

ECONOMIC OPPORTUNITY AND EMPOWERMENT PROGRAM

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Intelligent Partnerships is a full-service consulting firm focused on helping organizations capture opportunity through targeted and inclusive approaches.

CBE Strategic is a public affairs firm dedicated to providing our clients with a comprehensive plan of action targeted to achieve their goals.

BDS Planning & Urban Design offers comprehensive community development services, focusing on building consensus, communicating complex information, demonstrating leading ideas, and shaping policy

Intelligent Partnerships

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Economic Opportunity and Empowerment Program Advisory Board members:

- **Sean Bagsby**, President of IBEW Local 46
- **Lisa Bogardus,** Assistant Executive Secretary for the Seattle King County Building and Construction Trades Labor Council
- **Michael J. Fox,** Retired King County Superior Court judge with experience representing the United Construction Workers Association
- **Carl Gasca,** Member and officer of the Teamsters Local 174 Executive Board
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INTRODUCTION

In King County, many young people — especially those from economically disadvantage communities — emerge from school and enter the job market without marketable skills to offer employers. Despite the economic boom that King County is currently experiencing, well paying, secure, challenging, and career-oriented opportunities will not be offered by employers to young people without skills appropriate to the positions which need to be filled for the employer to successfully operate a business.

Construction is an industry in which hardworking people can get access to well-paying careers through which they can acquire skills that enable them to perform valuable work with pride and become valued workers in the market. A skilled carpenter, pipe fitter, electrician, sheet-metal worker, and any other skilled construction worker can count on a life of economic security. These careers also provide the opportunity to become an entrepreneur and start a business and employ others. These opportunities are more realistic in the construction trades because of several factors, not the least of which includes the entry training pipeline through Registered Apprenticeship.

The construction trades offer a motivated individual the opportunity to live a prosperous life and perform important work in their communities. Blue collar workers have the unique opportunity to look with pride on a community structure that contributes to the beauty, prosperity, and safety of the community and say, "I helped build that". This is why the King County Economic Opportunity and Empowerment Program described in this plan is so important to the economic well-being of King County and its young people. By adopting and rigorously enforcing this plan, the County will be training, empowering, and enriching young residents.

EXECUTIVE SUMMARY

This plan is the product of six months of work by the King County Economic Opportunity Program Advisory Board (Advisory Board). The Advisory Board was appointed to develop this Economic Opportunity and Empowerment Program (EOEP) Plan with immediate focus on the King County Children and Family Justice Center (CFJC) as a pilot project.

The plan suggests strategies for implementing successful priority hiring programs, supporting small and minority business inclusion, and supporting apprenticeship access as well as steps to improve key relationships and effectively coordinate outreach. Through this plan, the County will support and expand diversity in its construction workforce as well as increase opportunities for disadvantaged workers and businesses. The final implementation design is supportive of King County's ability to move broader policy elements in line with the CFJC pilot and a focused effort to:

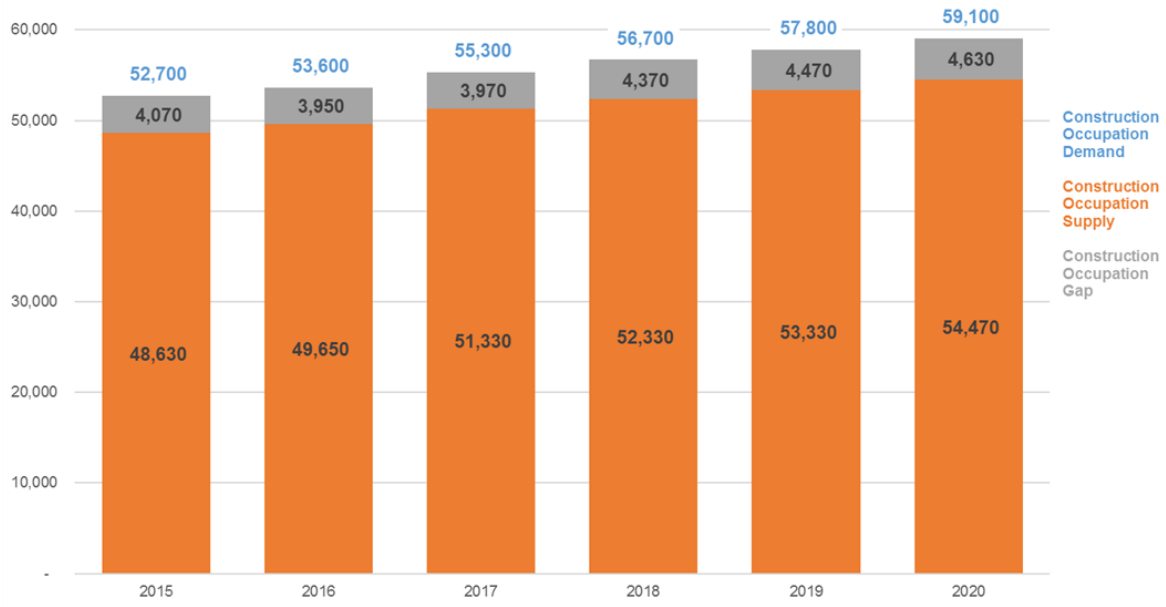
- Secure a Project Labor Agreement, including Community Workforce Agreement language
- Clearly identify a compliance structure
- Generate a comprehensive stakeholder education strategy
- Establish PLA liaison protocols
- Coordinate outreach to construction schedule
- Ensure risk mitigation
- Pay attention to key relationships
- Provide pre-apprenticeship pipeline support

DEMAND AND OPPORTUNITY

There were an estimated 76,000 construction workers in King County in 2015. This figure is forecasted to grow at a rate of 2.3% per year to 85,300 construction workers by 2020. (See CAI Workforce Analysis - Appendix A) Comparing the projected demand among these construction-specific occupations with the projected sources of labor supply for construction jobs, King County will experience labor force shortages through year 2020.

It is probable that workers from different regions or neighboring states will fill the labor gap, which is projected to grow to 9,300 construction related workers by 2020. Exhibit E.1 shows the forecast for the projected labor shortfall in direct construction occupations within King County. As it stands, it is projected that King County will face a chronic shortage of skilled construction workers for the short and mid-term future.

Exhibit E.1 King County Demand-Supply Gap, 2015-2020



Source: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; National Center for Education Statistics Integrated Postsecondary Education Data System, 2015 Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; Washington Bureau of Industry and Labor, 2015; U.S. Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015

This plan and the supporting research (Appendix A) also demonstrate that projections of construction labor supply will be less than construction demand through 2020, yielding an annual shortfall in required construction workers. The projected labor shortage provides the County a significant opportunity to establish programs that direct potential workers to job opportunities. This plan suggests strategies to address the sectors workforce shortage focusing on the CFJC as a pilot. Filling the workforce supply gap with workers from disadvantaged communities while utilizing a workforce that lives in the region advances the County's overall diversity goals.

STEPS TO ACHIEVE PLAN

There are multiple processes that need to be developed or altered to support the success of the EOEP plan. Primarily, a Project Labor Agreement (PLA) should be negotiated to contain Community Workforce Agreement (CWA) language. Compliance and enforcement structures must also be established so that responsibilities are clear among the partners involved with the plan development. This plan suggests a broad and comprehensive education strategy for all those who will interact with the CFJC project. A central point of contact or PLA liaison who can address key process points that include pre-apprenticeship, job placement and related elements is another important tool to ensure that all partners are compliant and the workforce is supported.

The County must identify and build relationships with key partners. All stakeholders should be fully and equitably engaged. The County should also solidify existing relationships, and build a network of support for program participants to strengthen communication and access for all stakeholders. This includes supporting the pipeline from pre-apprenticeship to job placement, where program participants can gain early entry and access to life tranforming careers.

KEY RECOMMENDATIONS HIGHLIGHTED IN THE PLAN:

1. Encourage Design-Builder and Labor partners to negotiate a PLA that includes comprehensive Community Workforce Agreement (CWA) elements.
2. Design a coordinated CFJC outreach strategy to Registered Apprenticeship programs, particularly for those trades the Design-Builder anticipates will play a majority role in the construction process.
3. Identify a Design-Builder point of contact that will act as a "job coordinator" or "liaison" to support the connections between contractors' need, Registered Apprenticeship availability, and the pre-apprenticeship pipeline — or assign to a project administrator.
4. Coordinate outreach design with CFJC construction schedule in order to identify opportunities as early as possible in the construction process.
5. Design and execute a full PLA/CWA education strategy for internal and external stakeholders.
6. Resource an independent administrative support environment either internally housed within the County compliance structure or through an Independent Project Administrator.
7. Connect the Design-Builder with regional providers that are already supporting King County workforce access and providing training support. (ANEW, YouthBuild, PACE, SVI-PACT, etc.)

KING COUNTY POLICY FRAMING DESIGN – BEYOND THE CFJC PILOT

The Advisory Board recognizes that a comprehensive policy is needed beyond the CFJC pilot. As such, the Advisory Board recommends a broader strategic approach in addition to its plan for the CFJC project and includes:

- Establishing a ***baseline*** by reviewing construction compliance, performance strategies and outcomes in order to give King County the ability to measure progress and design an integrated approach to its priority hiring design.
- Designing a comprehensive ***stakeholder education*** approach taking into account the broad partnerships required to deliver successful outcomes. Partners include internal stakeholders, as well as contractors, labor, community, training providers, and other regional construction purchasers.
- Evaluating the Economic Opportunity and Empowerment Program ***relationship to other County initiatives*** that focus on social support structures in order to evaluate how they can leverage the EOEP initiative to create a comprehensive design that empowers participants.

BACKGROUND

Over the last several years, King County and other regional municipalities have improved their procurement processes to create programs that deliver broader community value. These tools direct publicly funded projects to create opportunities for disadvantaged communities and expanding job access.

King County has experienced some success in increasing contractor responsibility in its procurement processes through ***Registered Apprenticeships*** and creative contracting models like ***Project Labor Agreements*** (PLAs). Though these models have shown progress, reliable gains cannot be achieved through PLAs alone. Through this effort, King County is interested in strengthening its contracting policies in order to ensure participation by disadvantaged contractors and workers, giving priority to those most in need of support, and providing access to family-transforming careers.

In August 2012, voters approved a tax levy to build a new ***King County Children and Family Justice Center*** (CFJC), and replace the King County Youth Services Center. This project provides a modern, efficient, and safe facility for court, youth, and family services. Groundbreaking is expected in Summer 2016, with completion of the facility in 2020.

The CFJC was designated as a pilot project to test creative contracting policies and programs that support King County's efforts to ensure participation by disadvantaged contractors and workers.

In February of 2015, King County Ordinance 17973 established the ***Economic Opportunity and Empowerment Program*** (EOEP) to help achieve this goal. In August 2015, the ***King County Economic Opportunity and Empowerment Program Advisory Board*** (Advisory Board) was created to assist in the development of the EOEP. Comprised of 10 to 12 community, business, and union leaders, the Advisory Board will continue to develop and execute these efforts.

The CFJC project represents a platform to model inclusive strategies in a controlled environment, creates a working partnership with regional stakeholders, and sets the tone for how the County and the region continue to develop these efforts.

DEFINITIONS:

- ***Apprentice**: A person who has signed a written Apprenticeship Agreement with and enrolled in a training program approved by the Washington State Apprenticeship and Training Council to learn a skilled craft or trade as an apprentice.*
- ***Apprenticeship Utilization:** Targets for use of apprentices on a project.*
- ***EOEP:** Economic and Opportunity Empowerment Program*
- ***CFJC:** King County Children & Family Justice Center*
- ***CWA:** Community Workforce Agreement*
- ***Design-Builder**: The CFJC prime contractor (Howard S. Wright)*
- ***Advisory Board:** King County Economic Opportunity Program Advisory Board*
- ***PLA:** Project Labor Agreement*
- ***PLA Liaison:** A job coordinator function which acts as a central point of contact for the CFJC CWA functions*
- ***Registered Apprenticeships:** A Career Technical training model that combines in-classroom and on the job training which is certified by the US Department of Labor*
- ***SCS:** Small Contractor and Supplier*
- ***Priority Hire:** A workforce policy strategy designed to prioritize economically disadvantaged workers for inclusion. Also referred to as Targeted Hire.*

The growing gap in the region's construction workforce coupled with a projected increase in demand reemphasizes the need to strengthen procurement processes that directly affect the community, its contractors, and workforce. Exhibit E.2 shows a forecast of the total construction employment demand in King County and in the wider tri-county region, which is expected to grow to 137,300. Within King County alone, there will be a projected 85,300 construction jobs by 2020.

Exhibit E.2 Tri-County Construction Employment, 2015-2020

Source of Employment Demand	2015	2016	2017	2018	2019	2020
Public Works	16,500	16,800	17,400	17,800	18,100	18,600
State and Local Government	12,100	12,300	12,700	13,000	13,300	13,600
Counties	1,390	1,410	1,460	1,500	1,530	1,570
King County	960	980	1,010	1,030	1,060	1,080
Pierce County	220	220	230	240	240	250
Snohomish County	210	210	220	230	230	240
Federal Government	4,400	4,500	4,700	4,800	4,900	5,000
Private Sector	101,200	102,900	106,200	108,900	111,000	113,600
Households	4,600	4,700	4,800	4,900	5,000	5,100
Total Construction Employment	**122,300**	**124,400**	**128,400**	**131,600**	**134,200**	**137,300**

Sources: Source: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; U.S. Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015

The majority of these positions will be construction-specific, such as carpenters and pipefitters. Comparing the projected demand among these construction-specific occupations with the projected sources of labor supply for construction jobs, King County is expected to experience labor force shortages at least through year 2020. Projections of future construction labor supply will be less than construction demand through 2020, yielding an annual shortfall in required construction workers. (See Appendix A)

This plan outlines the key components needed to implement a comprehensive support strategy for the CFJC project, and identifies additional opportunities and best practices for King County decision makers to consider as part of a broader long-term policy.

CFJC IMPACT STRATEGY

Project Labor Agreement including Community Workforce Agreement Language

Howard S. Wright is the prime contractor for the CFJC project (Design-Builder). The master agreement for the project (between the County and the Design-Builder) includes criteria requiring a ***Project Labor Agreement (PLA)***. A PLA template was provided as a model to help inform the Design-Builder and prospective bidders to understand the intent of this requirement and learn

about the specific criteria. This plan also recommends inclusion of ***Community Workforce Agreement*** (CWA) language as a critical path to maximize the community economic opportunity efforts by the Design-Builder.

To create access for a specific workforce makeup (such as the disadvantaged workers prioritized in Ordinance 17973) the PLA contract must contain CWA language. This language specifically designates priority hire criteria based on economic disparity, and allows the union dispatch system to include workers that meet the set criteria on the jobsite ahead of other protected workers.

Contractor outreach efforts should include information related to these criteria. The County's expectation is that all contractors will participate in the negotiated PLA. As such, all subcontractors are accountable to help the Design-Builder fulfill the project criteria specific to small business inclusion, apprenticeship utilization, and priority hiring. The Design-Builders contractual obligation ensures that all participating contractors' sign onto any final approved PLA. As of publishing this report, the PLA is still outstanding.

Compliance Structure (for executing EOEP)

It is critical that King County adopt clear accountability measures and encourage the Design-Builder to do the same by coupling the pilot program expectations with existing compliance structures to meet or exceed contractual obligations for the CFJC project. Through Ordinance 17973, the King County Council created a mandate for the EOEP plan. In addition to Council action, it was the Executive's recommendation to make the CFJC project a pilot effort to achieve priority hiring and workforce diversity goals.

Priority Hire, also referred to as Targeted Hire, relies on the ability for the Design-Builder to utilize specific 'call- out workforce protocols,' which allow the labor dispatch system to legally prioritize workers who meet specific criteria identified via a contractual engagement. Without these criteria spelled out specifically in a negotiated contract, the dispatch workforce order is legally protected and cannot be altered. The only contractual tool currently authorized and in use by the National Building Trades Department is the *Project Labor Agreement* (PLA). These agreements contain basic access protocols that allow the inclusion of specific pre-apprenticeship pipelines, non-affiliated core journey-level workforces, and the inclusion of non-signatory contractors. These contracts **DO NOT** include specific economic, geographic or demographic criteria priorities and only allow for the general access of non-affiliated contractors.

Working within a post-award, design-build construction environment poses some challenges in the delivery of the EOEP as King County no longer has sole control over the project oversight. This is especially true since the Design-Builder oversees the majority of the project responsibilities and has the option to establish compliance protocols on its own, revert these responsibilities to the County's control or assign them to an external provider.

The compliance design will need to support the contractors' efforts, monitor progress, and report outcomes through the EOEP. Some compliance elements are already included in the existing CFJC contract with the Design-Builder. These include criteria focused on small business and supplier participation and the structures established within the core PLA. Other compliance elements, including those tied to disadvantaged worker access require additional direction to deliver the highest possible EOEP outcomes from the CFJC pilot, which was not included in the contract with the Design-Builder.

The Advisory Board recognizes these constraints and acknowledges two options with which the Design-Builder can manage compliance. The first option is the existing contractual model, which leaves control to the Design-Builder. (Figure A). This option may limit neutrality and could create difficulty in correcting labor-related issues resulting in project interruptions. The second option allows the Design-Builder to assign compliance responsibilities to an independent administrator. The second option could create an opportunity around compliance management that avoids the escalation of issues from the onset by creating a neutral space for issue review. (Figure B). Both options are depicted graphically in **Figures A and B** as follows:

Figure A: CURRENT DESIGN (Option 1):

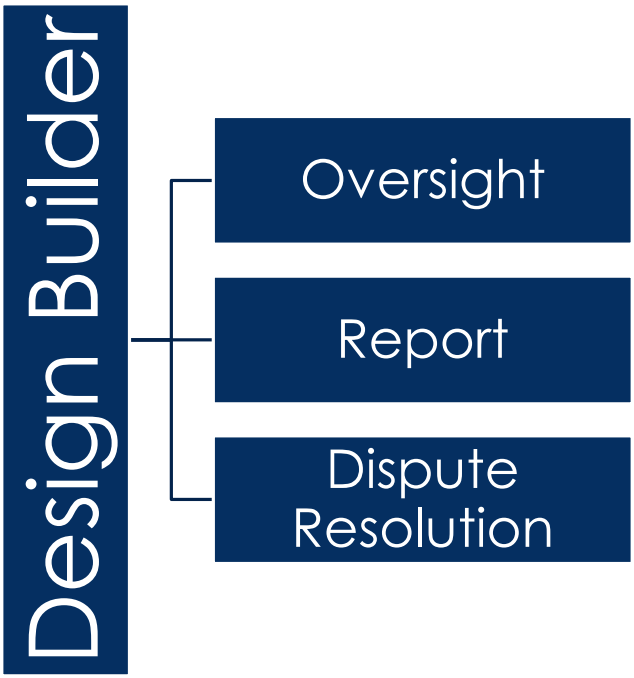
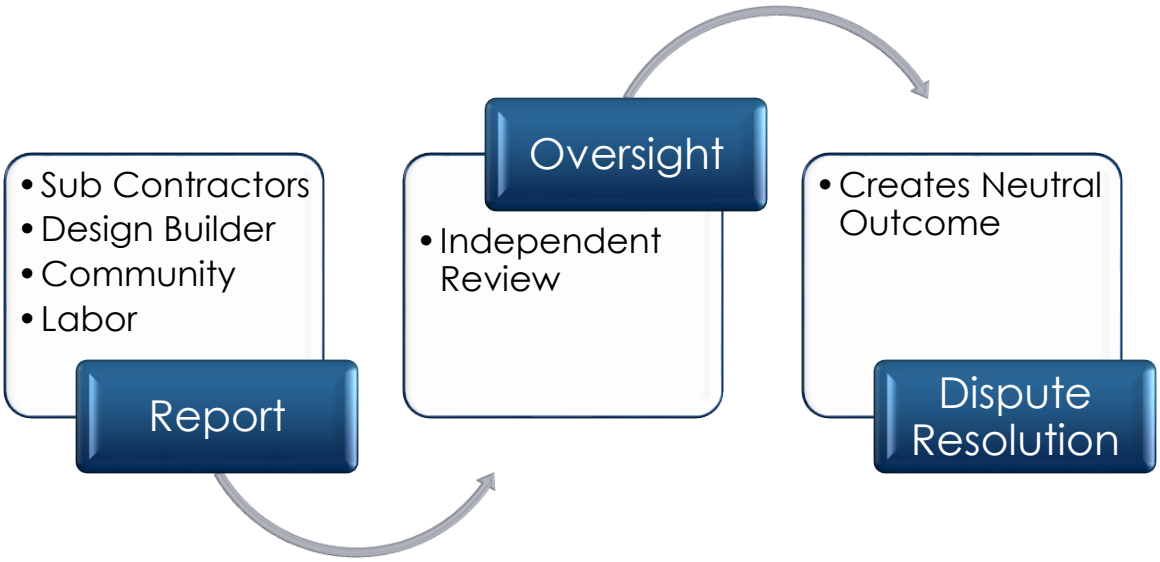


Figure B: OPTIONAL DESIGN (Option 2):



Apprenticeship Utilization Targets:

- ***15%** of all Labor Hours are to be performed by certified apprentices*
- *Aspirational Targets:*
- *Apprentices shall be:*
  - *21% minorities*
  - *25% women*
  - *2% persons with disabilities*
  - *7% economically disadvantaged youth*
- ***1 of 5 Apprentices** from a recognized pre-apprenticeship program within the **Priority hire area***

King County has already established the ***Apprenticeship Utilization*** compliance structure for contractors participating on the CFJC project through its existing procurement language. The County will need to determine the ***Priority Hire*** compliance structure it intends to utilize over the life of the CFJC project. The Design-Builder and its contractors are aware of these expectations and of specific apprenticeship utilization targets for the project.

The Advisory Board recognizes that the Design-Builder controls the execution of all construction-programming efforts under its contract with the County. As such, the Board recommends that the County use its approval authority over the negotiated PLA to ensure inclusion of a compliance structure. Some of these structures are not part of the contract PLA sample agreed to by the Design-Builder and included in their accepted bid response. Nevertheless, the Advisory Board recommends the Design-Builder consider assignment for neutral oversight (Option 2) as follows:

1. An onsite autonomous administrator to oversee implementation of the PLA, monitor jobsite PLA compliance activities, manage issues of concern, and act in the interest of the EOEP's goals. There are several choices available for fulfilling this role: (1) the Design-Builder may reassign this function to the County and the County could perform it using internal staff or a contractor; (2) the Design-Builder may designate a contractor to manage the functions on behalf of the Design-Builder; or (3) the Design-Builder could hire an independent Third Party Administrator to perform this function on its behalf. All of these

choices would have to be negotiated with the Design Builder, as they only agreed to the provide direct administration of the PLA in their original contract documents.

2. A neutral structure where disputes, misunderstandings, and/or unfair practices by any party are addressed and resolved. To this end, the Advisory Board recommends that a Project Administrative Committee (PAC) be established as part of the PLA. The PAC should include representatives of the Design-Builder, the leading Union Organizations working on the project, and the County or other assigned as Chair (to ensure neutral oversight). The PLA template included in the Design-Builder's contract designates the Design-Builder as the PAC chair. Incorporating this recommendation would have to be negotiated with the Design-Builder.
3. A reporting mechanism that includes specific requirements for data gathering and analysis, in order to allow objective performance evaluation of workforce utilization on the CFJC project. This should include demographic data tied to contractors of all tiers and its independent verification. The County could coordinate with the Design-Builder, Labor, subject matter experts, and regional training and workforce providers to design the appropriate metrics that align with King County's goals.

"The Design-Builder may reassign the oversight function to the County and the County could perform it or designate a provider to manage the functions on behalf of the Design-Builder"

The County clearly identified the ***Small Contractor and Supplier (SCS) Inclusion*** compliance structure it intends to utilize over the life of the CFJC project through its procurement process, and provided specific criteria in the Design-Builder's contract with the County.

The Advisory Board also recognized the need for reporting tools that give stakeholders the ability to regularly review, and make recommendations throughout, the CFJC project. The Advisory Board recommends creating reporting tools for the following project elements in support of the EOEP to the King County Council:

1. Small Contractor and Supplier inclusion through PLA/CWA.
    a. Outreach
    b. Pre-job reporting
    c. Outcomes
2. Priority Hire components
3. Apprenticeship inclusion in CFJC project
4. External education (General Public Education and External Stakeholder Education)
5. Project Advisory Committee (PAC) process
6. Pre-Apprenticeship Utilization

SCS Utilization Targets:

- ***20% of GMP*** *(Guaranteed Maximum Price) budget to SCS Certified firms.*

Voluntary Goals

- *10% Minority owned*
- *6% Women owned*

The Design-Builder is also subject to liquidated damages and other penalties for failing to meet these commitments.

Comprehensive Stakeholder Education Strategy

Critical to a successful plan integration and project outcome is a clear understanding of expectations and program modeling. The Design-Builder needs to be equipped with relevant data and be active in the support structures that help to meet project expectations. Moreover, the Design-Builder should understand how the various systems and processes touch the CFJC project. From the beginning, all contractors, sub-contractors and lower-tier small businesses must understand the required non-project delivery elements in their contracts. Internal agency stakeholders and external partners (labor, community, and training) must support programs that can help to educate and engage all parties.

To avoid communication gaps, it is important that project, agency, and stakeholder representatives are equipped to discuss CFJC Project Labor Agreement information. This can be accomplished through a contractor education boot camp, community education, and other communication tools. Of primary importance is the design of contractor and community education tools regarding the CFJC PLA/CWA project as early as possible in the Design-Builder's schedule.

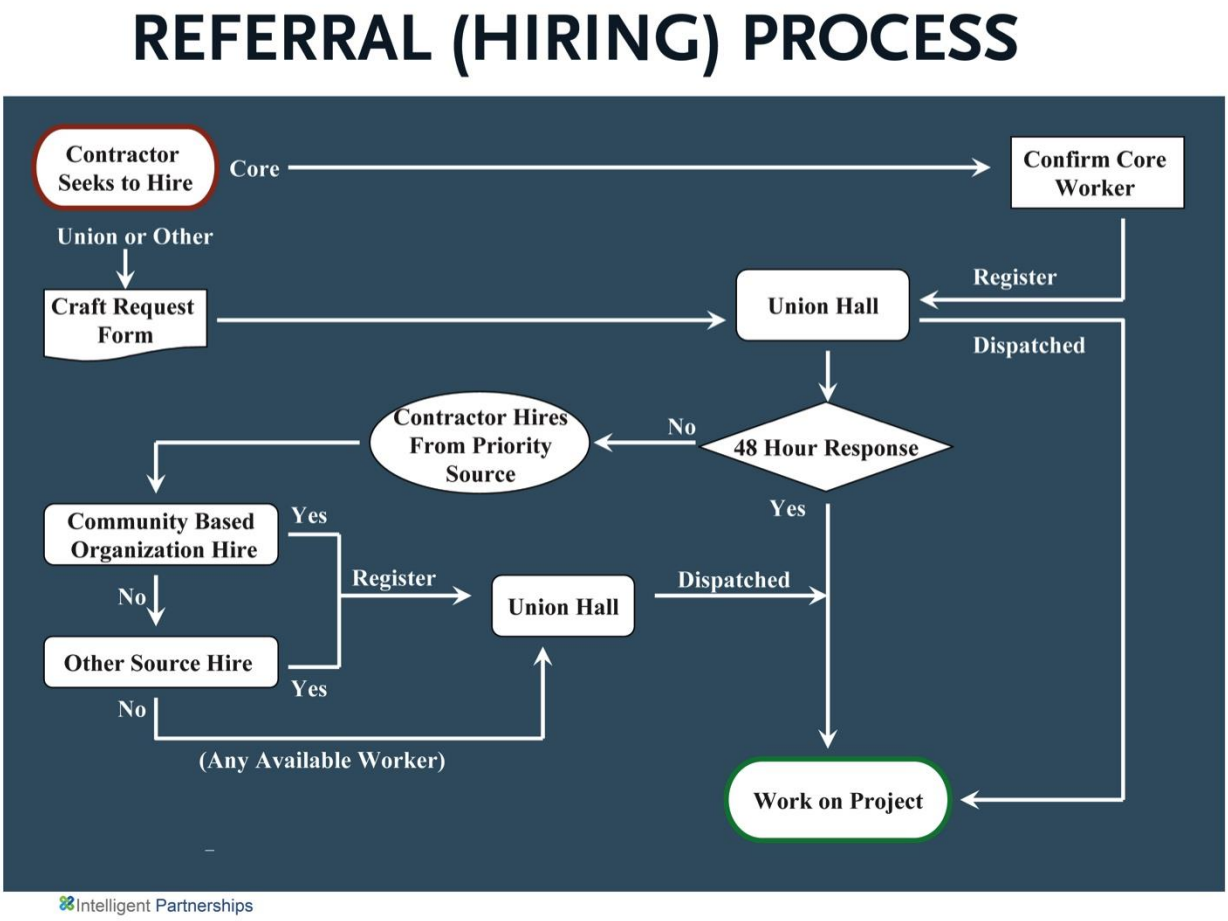
In addition, the Design-Builder and key sub-contractors should participate in the education of contractors of all sizes and in the external stakeholder education process.

The Advisory Board recommends the design of a comprehensive stakeholder education strategy that includes:

1. Delivery of CFJC PLA/CWA project information that is available to the public about the broad elements of the program as well as how the Design-Builder will integrate EOEP objectives into their project delivery. Creating a public education structure around general project information will ensure consistency in its delivery for a variety of stakeholders that include workers, parents, schools, advocates and other interested parties. A good example can be found in the City of Seattle's strategy, which uses multiple web portals to ensure information access for the public. (www.seattle.org/FAS)
2. Creating leadership education tools with key messages that County project leaders, Design-Build team members, and community leaders can rely on for accurate information about the EOEP objectives that are tied to the CFJC project. Tools focused on informing internal stakeholders that interact directly with the project become critical to ensure every participant has the same understanding, and will help mitigate issues.
3. Creating contractor education tools that provide detailed information regarding critical components and expectations in the PLA environment. These include pre-job and dispatch process forms, instructional info for contractor scheduling with building trades, priority hire zip code information, core worker processes, and trust fund payment expectations. See Appendix D for sample contractor education model from Los Angeles Unified School District.
4. Creating a deployment strategy and schedule that makes education tools available as early as possible in the construction cycle. This will ensure broad adoption of the goals through clear and timely communication standards.

5. Creating an accountability structure for all CFJC project team members to ensure a collaborative problem solving approach that supports the Design-Builder's communication efforts.

Figure C: SAMPLE REFFERAL HIRING PROCESS, adopted from LAMTA 2013



PLA Liaison (Job Coordinator) Protocols

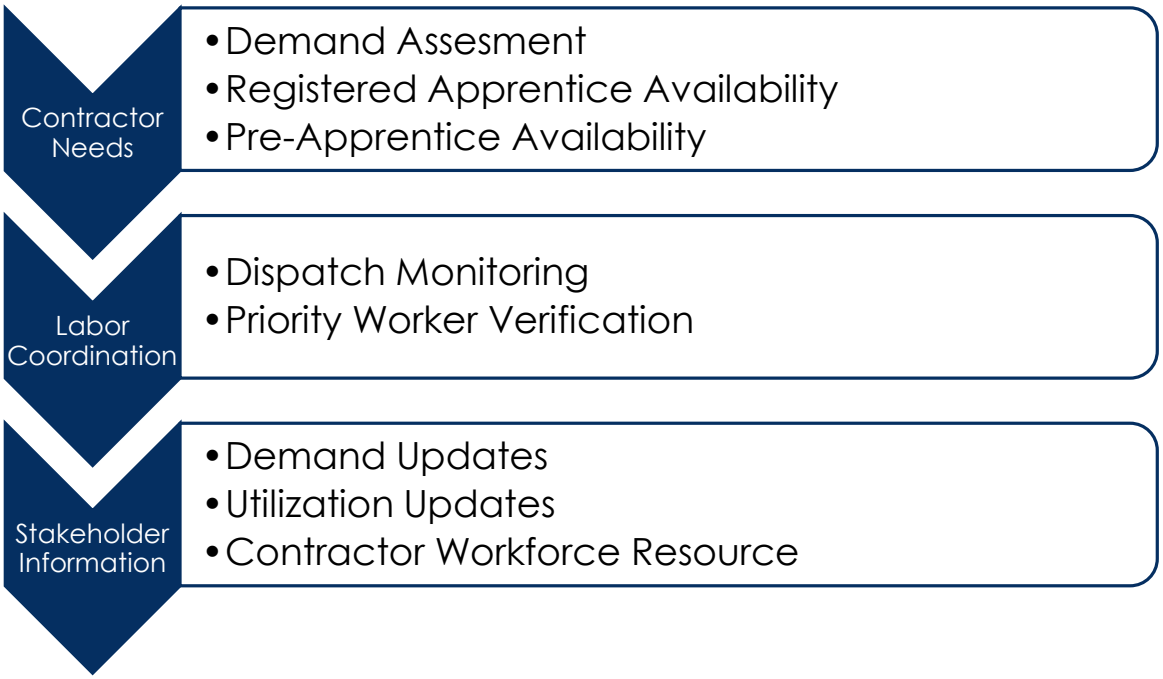
Implementation of the PLA should address pre-apprenticeship to apprenticeship access, apprenticeship and journey-worker inclusion strategies, contractor management and reporting requirements. A PLA Liaison or job coordinator, which works across each of these levels, can also serve a role in educating the support providers, participants, and contractors.

The Advisory Board reviewed a variety of best practices and regional delivery methods. They then identified key elements that can support the Design-Builder's ability to create pathways for disadvantaged workers and SCS firms in the CFJC project. Establishing a PLA Liaison is one of these key elements. This liaison acts as a centralized point of contact to manage the many project and worker interactions including moving people and partners through complex processes. PLA Liaison responsibilities are to:

1. Identify and design meaningful partnership strategies for each of the EOEP recommended elements including pre-apprenticeship, registered apprenticeship, priority hiring, and SCS inclusion in support of the Design-Builder's efforts.
2. Ensure the support of workers prioritized for the project by creating a resourced tracking system for the pre-apprenticeship pipeline designed to ensure that the CFJC project has available disadvantaged, eligible, and pre-screened candidates to move into registered apprenticeship positions that become available.
3. Support the sub-contracting process by creating a useful data tracking system for labor dispatch and apprenticeships to allow for just-in-time information sharing as the CFJC project creates labor demand.

Figure D demonstrates examples of PLA Liaison's coordination efforts, they are distinguished from the broader PLA Administration functions and could sit under the authority of the PLA compliance function.

Figure D: PLA Liaison Coordination



Outreach Coordination with Construction Schedule

To maximize impact, outreach efforts should be coordinated and synched to the Design-Builder's project schedule and bid announcements (including both small business inclusion and pre-apprenticeship direct entry). To this end, the PLA liaison is a critical component in this coordination and should be involved ahead of awarding construction sub-contracts.

The Advisory Board supports charting the Design-Builder's construction timeline with the projected sub-contracting and workforce demand needs. This will help partners understand and plan for anticipated demands to help meet or exceed CFJC project goals.

Risk Mitigation

Risks are significantly mitigated by the fact that the recommended approach and core program models have been implemented for more than a decade throughout the country and that similar practices have been successful in other public agencies within King County (See Appendix B for example).

Among the key criteria and core recommendations is expanding the PLA contracting tool that is already included in the obligations of the awarded contract with the Design-Builder. PLAs have been successfully used as a standard process on large-scale King County construction projects, including the Brightwater Treatment Plant, the Factoria Recycling and Transfer Station, the Murray Combined Sewer Overflow Project, and others.

The use of PLA language has been incorporated nationally over the last two decades. This includes broad utilization by the City of Seattle in Ordinance #124690 (Appendix B). These policies have been tested in the courts at the highest level (Building Trades Council v. Associated Builders and Contractors, 507 U.S. 218 -1993) and approved for use by Federal Transportation Authorities as well as in a variety of other recognized public sector contracting environments. King County should review the policy designs to find any circumstances not previously vetted on King County's behalf. These include the extensive reviews already approved in other regional policy adopted language, or by the exhaustive adoption and practice of these and similar public contracting policies already in use across the nation.

Figure E Best Practices in Priority Hire Policy Map; UCLA, 2014

Key Relationships

Stakeholder engagement is central to the success of the CFJC pilot project and to longer-term policy design and implementation. It is critical that every interested partner is educated, empowered, and involved. This will ensure that engagement is an iterative communication process that couples education with responsibility, and creates a common vision for project delivery.

Construction projects are fluid environments; everything from permitting to production schedules can influence progress. It is important that the EOEP plan and policy design be flexible enough to work well with the construction process.

To the extent practical, stakeholders should be consulted for their expertise and have opportunities to align their processes with the pilot program. Direct stakeholder involvement will help produce the best outcome for King County and maximize value. The Advisory Board will deepen this commitment through on-going stakeholder engagement through project construction, and will be key to the accountability and feedback process.

DESIGN-BUILDER

The Design-Builder's full engagement will achieve successful project outcomes. The EOEP program must support the delivery of an on-time on-budget project, and incorporate compliance mechanisms that ensure participation without interference. Responsibility in the education process, participation in the Labor/Management partnership strategies, and an early commitment to sub-contractor accountability will help the Design-Builder meet or exceed King County desired outcomes.

SUB-CONTRACTORS

In order to successfully participate and engage in the project sub-contractors must understand how the EOEP plan and processes affects their work. Sub-contractors need to be aware of expectations and may require additional support beyond the efforts of Design-Builder to ensure complete contribution to the program goals. Pre-bid education support during the initial contract period and ongoing access to information are key to maximizing sub-contractor outcomes.

LABOR

Program and project success also relies on maximum engagement by labor partners. Labor organizations have significant investments and capacity in training and dispatch control, which minimizes costs for the County and all participating contractors. Labor's interest is in capturing work opportunities for their membership and ensuring that compliance requirements provide equal opportunity for their contractors. Ensuring an active role for labor in project education, labor/management strategies, and an early commitment to engaging their affiliates can help achieve successful CFJC project outcomes.

COMMUNITY

The County must ensure that community stakeholder groups are actively engaged. Their participation is essential to the success of the CFJC pilot project. This includes involvement in contracting outreach and job access as well as roles in education, support, accountability, and outcome measurement. Accurately capturing and relaying stories about family-transforming career and business successes can deepen community trust and translate into long-term support of EOEP strategies.

Pre-Apprenticeship Pipeline Support

Establishing an awareness of expected outcomes, training provider support, and a comprehensive transition process empowers program participants that are equipped and ready to work. Regional training providers play a particularly important role in preparing community members who are unfamiliar and untrained for construction careers. These programs also play an important role in the compliance cycle for contractors.

Educating providers about the needs of the CFJC project, managing communications with registered apprenticeships, coordination with dispatching processes, and inclusion in contractor education will strengthen the regional pipeline. These programs will require ongoing investments to achieve the outcomes needed by the Design-Builder and should be accounted for in any priority-hire strategy as a critical success factor.

Creating a connection to the pre-apprenticeship network as part of the CFJC pilot project will help meet EOEP goals and, move priority-hire participants onto the early phases of the CFJC project. The Advisory Board recommends:

1. Connect the Design-Builder with regional providers that already support King County workforce access and provide training support (ANEW, YouthBuild, PACE, etc.).
2. Expand the existing engagement of providers to deliver project support in tracking, identifying and placing pre-apprenticeship graduates towards the CFJC project liaison, job coordinator or project administrator. (i.e. Port Jobs).
3. Invest in support resources for pre-apprenticeship program participants to support direct engagement in the CFJC project (i.e. tools, boots, bus passes, childcare and related support funding).

KING COUNTY POLICY FRAMING DESIGN

Beyond the call of King County Ordinance #17973, the Advisory Board recognizes that a more comprehensive strategy for broader policy design is needed once the pilot program is underway. By evaluating industry best practices, related policy models, and regional design efforts, the Advisory Board developed a broader approach for consideration.

Establishing a Baseline

Measuring project outcomes is only possible by comparing the pilot performance against King County's existing projects. It will be important to weigh, where possible, the County's experience with and without PLA-supported projects and to recognize that the targeting tools available in the CWA components can escalate the value of a PLA.

King County should consider inclusion of data which measures:

1. SCS demographic information including project size and scope, comparative data of contractor utilization by race, gender, economic and similar criteria

2. Worker profile information, where available, including length of time on County funded; construction programming, specific worker trade classification information, race, gender, economic and similar criteria
3. Apprenticeship project utilization and demographic make-up information including length of time on County-funded construction programming, specific worker/trade classification information, race, gender, economic and similar criteria.

Creating a baseline of historic performance for King County projects will help the Advisory Board support the Design-Builder as the program progresses, will assist King County in identifying clear expectations for its sub-contractor's performance, and create a transparent accountability standard strategy that can set the tone for broader policy adoption.

Long-Term Stakeholder Education

As described earlier in the plan document, a comprehensive methodology to stakeholder education is a lynchpin for a successful program design model. A systematic stakeholder education approach is required in order to maximize the pilot project's impact as well as to leverage existing internal and available regional best practices. This includes a full inventory of stakeholders that takes into account interests, impact, and influence.

King County has a strong start in this effort with its commitment to the EOEP and the establishment of the Advisory Board. A broader policy design would allow for the expansion of tools developed and tested through this pilot CFJC project could support a broader integrated priority hire policy design.

The recommended broader policy would require Prime Contractors and Sub-contractors to be fully versed on program expectations, participate in the education processes with contractors on every tier, and to be involved in the external stakeholder education process.

The Advisory Board recommends the design of a comprehensive stakeholder education strategy that includes:

1. Structured PLA/CWA policy information tool that can inform any interested stakeholder on the broad elements contained in the program; and how prime contractors will incorporate the policy objectives into their construction project delivery
2. Leadership education tool that allows for centralized key points that all internal King County project-focused leaders, contracting team members and community leaders can rely on for accurate information regarding the components tied to the policy and the related program objectives
3. Contractor education tools that provide detailed information access regarding critical components and expectations in the PLA environment. These include pre-job and dispatch process forms, instructional info for contractor scheduling with Building Trades, priority hire zip code information, core worker process and trust fund payment expectations

4. Deployment strategy and schedule focused on ensuring education tools are available as early as possible in the construction cycle to ensure broad adoption of the goals and a clear standardized communication model
5. Accountability structure for all team members that ensures a collaborative approach to problem solving and supports the County's efforts around the education elements of the program.

Relationship to Other Initiatives

King County participates in a variety of compliance and community impact activities that influence job and project access. These activities include business development, workforce training and support services that are integrated into the contracting practices targeted in the CFJC pilot. The pilot should include a scan of how resources are authorized and used in other initiatives. This analysis could identify existing gaps, coordinate potential solutions and structure tools that allow the Advisory Board to engage in strategy integration that leverages existing practices.

King County leaders have the opportunity to review existing investments across social support services and evaluate how they can support the broader priority hire policy. The Advisory Board supports a broad analysis of existing resources and a coordinated evaluation of pre-apprenticeship provider needs in the region. The same evaluation could serve as a significant support tool to pursue new resources based on King County's own priority hire efforts or in combination with other supportive regional approaches including public construction purchasers with similar policy goals.

RECOMMENDATIONS

CFJC Pilot Project EOEP Plan recommendations include:

Hiring and Training Goals for Apprenticeship

1. Strongly urge the Design-Builder and Labor partners to negotiate a PLA that includes comprehensive CWA elements.
2. Design a coordinated CFJC outreach strategy to Registered Apprenticeship programs, particularly for those trades the Design-Builder anticipates will play a majority role in the construction process.
3. Identify a Design-Builder point of contact that will act as a PLA liaison (job coordinator) to support the connections between contractors' need, Registered Apprenticeship availability, and the pre-apprenticeship pipeline — the fallback option is to assign to a County project administrator to perform this critical function.

Plan for Small Contractors and Suppliers

1. Coordinate outreach design with CFJC construction schedule in order to identify opportunities as early as possible in the construction process.
2. Design comprehensive contractor education strategies.
3. Establish direct communication with each dispatch office as part of overall CFJC program integration model.
4. Develop tools for CFJC contractor's requests in dispatch processes and coordinate with Local Building Trades Council and individual trades.
5. Work with Design-Builder on initial target design for inclusion, moving beyond normal performance practices and engaging compliance team to breakout project elements that can be managed by smaller providers.
6. Provide contractor information resource or liaison as a point of contact.

Priority Hiring

1. Utilize Project Advisory Committee (PAC) environment to inform external partners of anticipated CFJC project needs.
2. Design and execute a full PLA/CWA education strategy for internal and external stakeholders.
3. Include recommended dispatch prioritization in PLA language and contractor accountability design.
4. Expand CFJC project outreach to include a diverse set of stakeholders – Advisory Board, Labor, etc.

Pre-Apprenticeship Pipeline Support

1. Connect the Design-Builder with regional providers that are already supporting King County workforce access and providing training support. (ANEW, YouthBuild, PACE, etc.)
2. Expand the existing contracts with providers to deliver support in tracking, identifying and navigating pre-apprenticeship graduates towards the CFJC PLA liaison (job coordinator)

or depending on how responsibilities are distributed, towards the autonomous administrator functions (i.e., Port Jobs)

3. Invest resources to focus engagement of pre-apprenticeship in the CFJC project that provides immediate access to support resources for participants (including tools, boots, bus passes, childcare and related support funding).

EOEP Compliance Structure

1. Establish a clear compliance structure for the oversight of the PLA/CWA. The Advisory Board recommends an independent administrative support environment either internally housed within the PLA's compliance structure or through an autonomous administrator.
2. Establish a neutral dispute resolution structure where disputes, misunderstandings, and/or unfair practices by any party are addressed and resolved. The Advisory Board recommends that a Project Administrative Committee (PAC) be established as part of the PLA.
3. Create a reporting mechanism that includes specific requirements for data gathering and analysis, in order to allow clear and objective performance evaluation of workforce utilization on the CFJC project.

Broader Policy Design Considerations

1. Adopt regional best practices to establish priority-hiring criteria in CWA elements of a PLA.
2. Tie program compliance approaches to sub-contracting and pre-job obligations.
3. Expand internal staffing or consulting capacity to ensure King County expertise in design and execution of policy.
4. Expand capacity and evaluate compliance structure for effective tracking of workers, contractors and demographic data collection.
5. Leverage available support resources, track gaps in support-resource delivery and identify potential solutions.
6. Create a measurement model that is reviewed regularly.
7. Collaborate with existing King County support-service strategies to ensure new workers have resources available to succeed in early training and meet the demands of Registered Apprenticeship.
8. Design pre-apprenticeship expectations to meet Registered Apprenticeship and project needs.
9. Design comprehensive contractor education strategy.
10. Provide contractor information resource or liaison as a point of contact.
11. Design education structure with proactive issue identification approach in mind leveraging pre-job, PAC and related environments as opportunities to achieve successful outcomes.
12. Establish feedback forums led by prime contractors for small contractors to review and explain procurement process.

RESOURCE NEEDS

Implementation Funding for EOEP

A budget for implementing the EOEP for the CFJC project is currently being developed. The budget is expected to have the following five elements:

- A neutral administrator who serves as part of the compliance structure for overseeing the execution of the PLA and the EOEP.
- A job coordinator reporting to the Design-Builder who understands the construction schedule and will facilitate the placement of youth workers, apprentices and priority workers, and small business subcontractors.
- A consultant team to provide comprehensive stakeholder education as envisioned in the EOEP plan.
- Contracts with one or more regional providers to supply apprentices and pre-apprentices for the CFJC project.
- A County apprenticeship and priority hiring coordinator to serve as the County's single point of contact for assisting the job coordinator and other members of the Design-Builder team.

To meet these needs a combination of funding sources will be utilized including: the $1 million set aside in Ordinance 17973 for the EOEP for the CFJC project (a portion of which has already been spent for development of the plan); expenses that are already programmed as part of the Design-Builder's contract with the County; and other project-related expenses that were anticipated within the overall CFJC project budget. The County will also leverage its existing staff in the Business Development and Contract Compliance unit of the Finance and Business Operations Division to monitor apprenticeship requirements and support small business engagement for the project. The County's project team and the Design Builder are currently discussing how these various funding sources will be used for EOEP execution. The County expects that the budget will be confirmed no later than March 2016.

Other Resource Considerations

King County will need to evaluate resources currently committed to the CFJC pilot process as well as review potential needs for the broader policy implementation approach. Responsibility for executing and administering a PLA lies within the elements of the CFJC contract award that the Design-Builder has agreed to. King County may want to review additional needs as the project moves forward to maximize data capture and the programmatic implementation experience. This could include assigning staff as part of the support structures in conjunction with the Design-Builders implementation and ongoing project social impact delivery. For future imple-

mentation, King County should consider assignment of resources to identify or map existing programs that can interact with its future social impact procurement strategy and real-time compliance evaluation strategies.

Among the needs King County may want to review are critical components identified in the EOEP Plan that include, but are not limited to, decisions on the design, implementation, and ongoing management elements of a future policy design. In addition, King County may want to consider needs related to public and broader stakeholder education and outreach strategies, staffing or outsourcing needs related to compliance design and management, expanded responsibilities within the existing resourced position structure, and the appropriate technology adoption related to these efforts. Internally housed comprehensive compliance and management designs are modeled in the City of Seattle's comprehensive Labor Equity Program, City of New York and the Los Angeles Unified School Districts approaches. Hybrid public-private partnership models exist in the Los Angeles Metropolitan Transit Authority, the City and County of San Francisco, and City of Cleveland programs.

In every case, irrespective of the comprehensiveness of an adopted policy model, there are two common threads that all models rooted in best practices have: These models are collaborative in prioritizing the engagement of all stakeholders and are fully committed to by the agencies that adopt them.

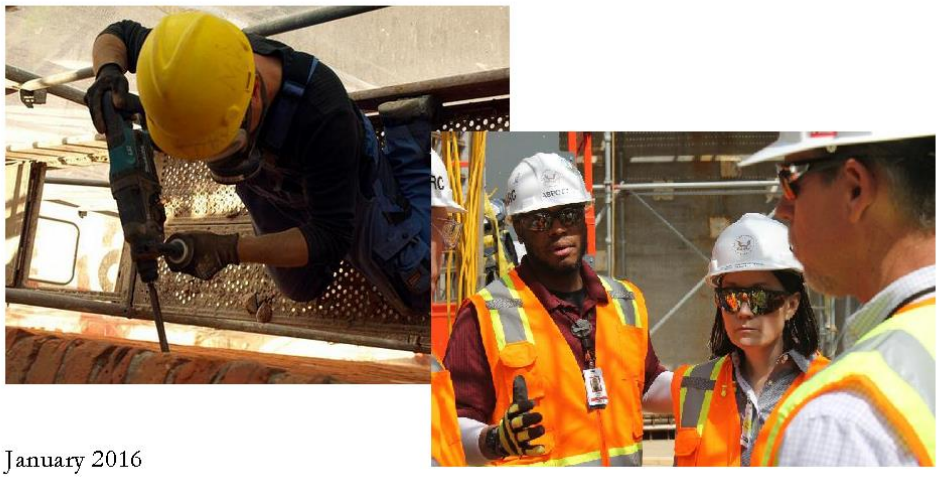
APPENDICES

Appendix A:

King County Workforce Assessment Report

CAI, Inc., 2015

Construction Workforce Analysis for King County and the Region



January 2016

Prepared for:

King County

Intelligent Partnerships

Prepared by:

cai community attributes inc

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EXECUTIVE SUMMARY

Background and Purpose

King County seeks to expand access to employment within the construction industry for populations that have historically faced barriers to securing construction work. The King County Economic Opportunity and Empowerment Program (EOEP) is an initiative that supports the recruitment and hiring of workers from traditionally disadvantaged communities into family wage careers. As an initial phase of this initiative, the EOEP advisory board is working to ensure employment opportunities, generated by the construction of the county's new Children and Family Justice Center (CFJC), are available to the most economically disadvantaged workers in the county.

This report is intended to aid the EOEP's charge for fostering a more diverse construction workforce by presenting a rigorous analysis of construction labor characteristics, as well as projections for King County and the wider three-county region (King, Snohomish, and Pierce counties). Estimates on the quantity and demographic composition of the region's construction labor force will help articulate opportunities for King County to prioritize economically disadvantaged workers to construct the CFJC.

This analysis establishes supply and demand for the region's construction workforce through 2020 and provides a baseline scenario for the existing labor pool, absent any new policy interventions.

Findings from this report will help the EOEP advisory board prepare a strategy for hiring individuals from the parts of King County specifically identified as having greater numbers of veterans, women, people of color, and youth in need of employment. The strategy will inform construction hiring and training priorities set for the CFJC project, and help advance opportunities for economically distressed areas of the county.

Findings

There were an estimated 76,000 construction workers in King County in 2015, and the workforce is forecasted to grow at a rate of 2.3% per year, to 85,300 construction workers by 2020. Of this total construction employment, public works projects account for approximately 14%, and public works jobs are expected to grow from 10,500 in 2015 to 11,800 in 2020.

King County government spending represents approximately 9% of all public works construction employment and about 1% of total construction employment. This translates into 960 annual construction jobs supported by King County projects in 2015 and is forecasted to grow to 1,080 workers in 2020 (**Exhibit E.1**).

Exhibit E.1 King County Construction Demand, 2015-2020

Source of Employment Demand	2015	2016	2017	2018	2019	2020
Public Works	10,500	10,700	11,000	11,300	11,500	11,800
State and Local Government	7,700	7,900	8,100	8,300	8,500	8,700
King County	960	980	1,010	1,030	1,060	1,080
Federal Government	2,800	2,800	2,900	3,000	3,000	3,100
Private Sector	62,700	63,700	65,800	67,400	68,800	70,300
Households	2,800	2,900	3,000	3,100	3,100	3,200
Total Construction Employment	**76,000**	**77,300**	**79,800**	**81,800**	**83,400**	**85,300**

Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

In 2015 there were an estimated 48,630 workers employed in construction occupations, a figure that is forecasted to grow to 54,470 by 2020.

The supply of construction workers (i.e., workers who are qualified and seeking construction employment) is composed of multiple sources. The year-over-year retained workforce represents the largest share, and is estimated to grow from 45,300 construction workers in 2015 to 50,800 by 2020. Another source of supply—construction occupation unemployment claims—is estimated to grow from 2,760 claimants to 2,890 in 2020.

Educational completions in construction occupations from accredited institutions and new apprenticeship openings round out the final sources of construction occupation supply. Completions are estimated to stay constant at 300 graduates from 2015 through 2020. New construction apprenticeship openings are estimated to grow from 270 in 2015 to 480 in 2020 (**Exhibit E.2**).[1]

[1] Apprenticeship openings are treated as a new source of demand. Actual apprentices are treated as employed workers, and thus are included in the year-over-year retained workforce.

Exhibit E.2 Construction Occupations in Construction Supply Forecast in King County, 2015–2020

Source of Employment Supply	2015	2016	2017	2018	2019	2020
Retained Construction Workforce	45,300	46,100	47,600	48,800	49,700	50,800
Unemployment Claimants	2,760	2,750	2,760	2,750	2,850	2,890
Completions (est. of prior year)	300	300	300	300	300	300
New Apprenticeship Openings	270	500	670	480	480	480
Total	**48,630**	**49,650**	**51,330**	**52,330**	**53,330**	**54,470**

Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; National Center for Education Statistics Integrated Postsecondary Education Data System, 2015; Washington State Department of Revenue, 2015; Washington State Employment Security Department, 2015; Washington Office of Financial Management, 2015; Washington State Department of Labor & Industries, 2015; United States Census Bureau, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

Demographic Composition of Construction Workers

Within King County, 94% of all construction workers are male and 6% of construction workers are female. Furthermore, 76% of the construction workforce in King County identifies as white. The second largest racial demographic category identifies as solely Asian, accounting for 8% of the construction workforce. Black or African American construction workers constitute 4% of the total construction workforce.

Priority Hire Zip Codes

Priority hire zip codes refer to areas across the county that have high concentrations of economically disenfranchised individuals, based on a set of socioeconomic criteria. Identification of these zip codes will help King County in its mission to recruit construction workers from economically disadvantaged areas.

Priority hire zip codes for construction hires are determined by the following three criteria:

- In the top 20% of zip codes by percent persons below two times the federal poverty rate or by persons below two times the federal poverty level per acre
- In the top 20% of zip codes by percent unemployed or by unemployed persons per acre
- In the top 20% of zip codes by percent persons over 25 with no college degree or by persons over 25 with no college degree per acre

Using these criteria, the following economically disadvantaged zip codes were identified and ranked for possible priority hiring (**Exhibit E.3**).

Exhibit E.3 Priority Hire Zip Codes, King County, 2013

Rank	City / Neighborhood	Distressed Zip Codes	Share Unemployed	Share Under 200% Federal Poverty Line	Share with No College Degree	Share of Minority and Women Construction Workers out of Construction Workers	Minority and Women Construction Workers
1	Kent/Auburn	98002	8%	44%	87%	43%	390
2	Pioneer Square	98104	4%	56%	73%	83%	80
3	Pacific	98047	9%	41%	90%	29%	60
4	White Center	98146	6%	38%	73%	56%	360
5	East Kent	98030	7%	42%	78%	46%	320
6	Rainier Beach	98178	5%	33%	72%	72%	350
7	Boulevard Park/Tukwila	98168	8%	44%	83%	56%	450
8	Seward Park	98118	5%	41%	63%	80%	510
9	SeaTac/Tukwila	98188	7%	44%	80%	55%	120
10	Federal Way	98003	6%	39%	80%	54%	410
11	Bitter Lake	98133	5%	29%	58%	35%	260
12	Central Business District	98101	3%	36%	43%	26%	10
13	Belltown	98121	3%	33%	41%	0%	0
14	Delridge	98126	3%	25%	60%	30%	90
15	Madrona	98122	2%	34%	38%	43%	180

Sources: United States Census Bureau, 2015; Community Attributes Inc., 2015.
Note: headcount of minority and women construction workers represents an estimate, and is rounded to the nearest 10.

Contents

1.0 INTRODUCTION

1.1 Background and Purpose

The King County Community Economic Empowerment Program (EOEP) supports the recruiting and hiring of workers from historically disadvantaged communities into family wage careers. The program's advisory board is charged with preparing a strategy for hiring individuals from parts of King County specifically identified as having greater numbers of veterans, women, people of color, and youth in need of employment. Therefore, it is critical to have a firm grasp as to which areas of King County have the most people of color and which areas are the most economically disenfranchised.

As a first phase of this work, the advisory board was tasked with ensuring that employment opportunities created by the construction of the county's new Children and Family Justice Center (CFJC) are available to the most economically disadvantaged in the county.

This analysis provides a rigorous, data-rich assessment of the construction workforce, including forecasted supply and demand for construction workers. Throughout this analysis, figures and projections will be presented for both King County and the broader three-county region, defined as the combined counties of King, Pierce, and Snohomish.

Pursuant to the EOEP's mission, this report also identifies geographic areas that have the highest concentrations of women and people of color available to work in construction occupations.

This report will help the advisory board better understand the sources of construction demand, with disaggregation between public and private sources, and serve as an important resource in future planning.

1.2 Report Structure

This analysis begins with a demographic overview of King County and the three-county region's (King, Snohomish, and Pierce counties) construction workforce. A detailed forecast of construction sector and occupational employment is presented, and is then matched with a robust forecast of construction occupational supply to identify potential future labor force gaps.

The remainder of this report is organized as follows:

- **Construction workforce characteristics**. A detailed, data-rich review of the demographic characteristics of construction workers, sources of new workers, and apprentices.
- **Construction industry employment forecast**. Projections through 2020 of total employment demand for the industry, across all types of jobs in King County.
- **Construction occupational forecast**. Projections through 2020 for construction occupations, both within construction businesses and construction jobs within non-construction industries.
- **Construction occupation workforce supply forecast**. Projected sources of construction workers within the region each year, including new entrants through accredited programs and unemployment insurance claimants, factoring in turnover within the industry.
- **Priority hiring analysis**. Geospatial analysis of where qualified workers of economic disadvantaged backgrounds live.

2.0 CONSTRUCTION WORKFORCE CHARACTERISTICS

2.1 Demographic Characteristics

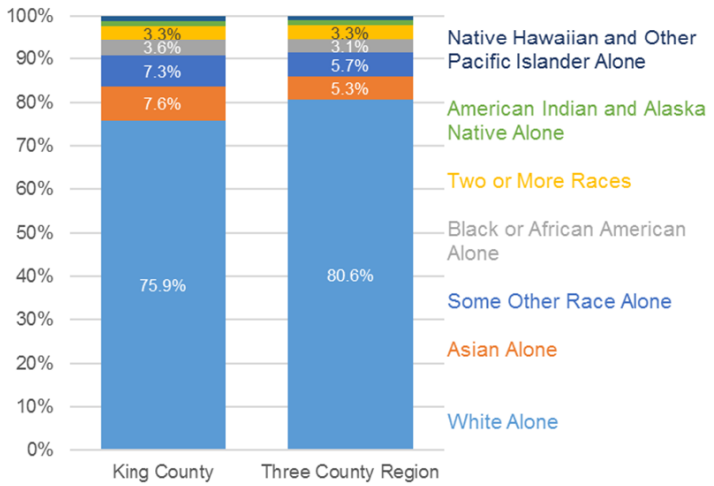
This section presents a comprehensive, data-rich review of the demographic composition of the existing construction workforce, leveraging data gathered from state and federal sources.

Across the three-county region, 81% of the construction workforce identifies as white. Self-identifying Asian construction workers account for a 5% share of the construction workforce. Black or African American construction workers account for 3% of the total construction workforce and construction workers who identify as "some other race" or "two or more races" account for an additional 9% of the construction workforce. Construction workers who identify as American Indian and Alaskan Native, or Native Hawaiian and Other Pacific Islander, account for the remaining 2% of the three-county region's construction workforce (**Exhibit 2.1**).

Looking at just King County, 76% of the construction workforce identifies as white. The second largest racial demographic identifies as solely Asian at 8% of the construction workforce. Black or African American construction workers constitute 4% of the total construction workforce. Other racial groups include construction workers who identify as "some other race" (7%) or "two or more races" (3%), which together comprise 10% of the construction workforce. American Indian and Alaska Native, and Native Hawaiian and Other Pacific Islander, only account for 1% each of the construction workforce in King County (**Exhibit 2.1**).[2]

[2] These shares are consistent with the overall racial demographics in King County. The racial demographics of workers in King County are 77% White, 6% Black or African American, 1% American Indian or Alaskan Native, 13% Asian, 1% Native Hawaiian and Other Pacific Islander and 3% Two or More Races.

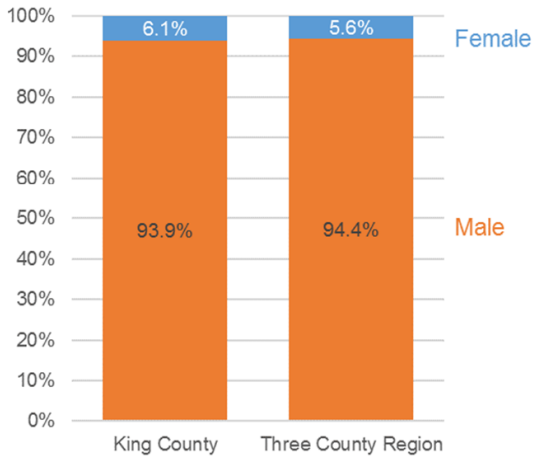
Exhibit 2.1 Racial Composition of Construction Workforce, Three-County Region and King County, 2013



Sources: United States Census Bureau, 2015; Community Attributes Inc., 2015

In both the three-county region and King County, the construction workforce is heavily male dominated. Within the three-county region, males make up 94% of the total construction workforce. Females, on the other hand, only account for 6% of the total construction workforce. This trend is similarly seen in King County, with males making up 94% of the construction workforce and females making up the remaining 6% (**Exhibit 2.2**).

Exhibit 2.2 Gender Composition of Construction Workforce, Three-County Region and King County, 2013



Sources: United States Census Bureau, 2015; Community Attributes Inc., 2015

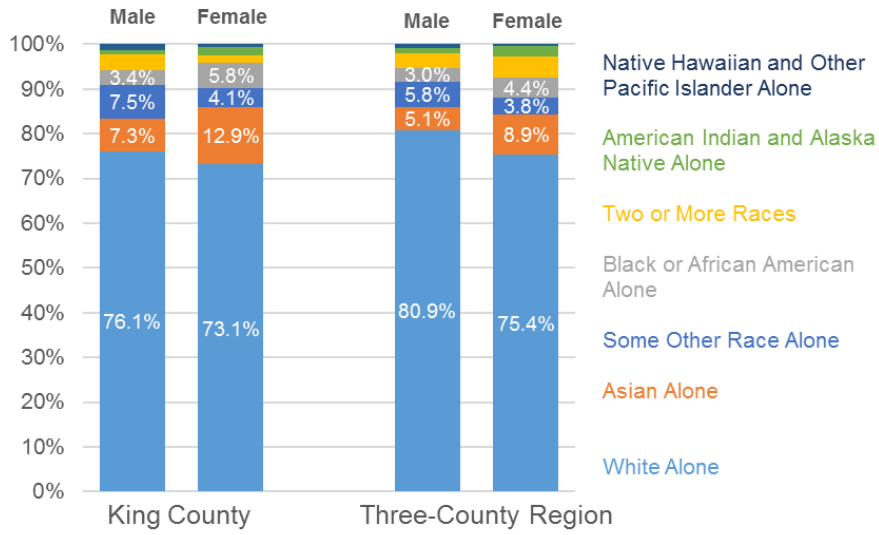
There is slightly more racial diversity within the construction workforce in King County, as compared to the three-county region. Whites make up 81% of all male construction workers in the three-county region, compared with 76% of male construction workers in King County. A similar trend is seen among female construction workers,[3] with white females accounting for 75% of the female construction workforce in the three-county region, but slightly less in King County, with 73% of the female construction workforce identifying as solely white (**Exhibit 2.3**).

Asians are the largest minority in construction occupations amongst both males and females across both the three-county region and King County. Asian construction workers make up 5% of the total male construction workforce and 9% of the total female construction workforce in the three-county region. Similarly, Asian construction workers make up 7% of the total male construction workforce and 13% of the total female construction workforce in King County (**Exhibit 2.3**).

[3] It should be noted that the female construction demographic is a very small percent of all construction occupations in the three-county region and King County. As such it is difficult to know how significant demographic trends are in relation to female construction occupation employment.

Male construction workers who identify as Black or African American account for 3% of the construction workforce and females represent 4% in the three-county region. These distributions generally hold in King County as well, where Black or African American males in the construction workforce account for approximately 3% and Black or African American females account for 6% of the construction workforce (**Exhibit 2.3**).

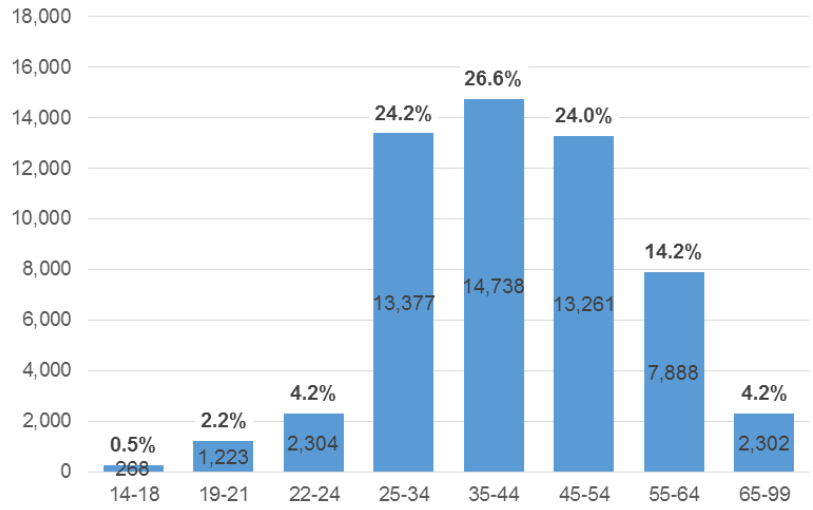
Exhibit 2.3 Racial Distribution of Genders in Construction Occupations, 2014



Sources: United States Census Bureau, 2015; Community Attributes Inc., 2015

In King County, 25 to 54 year olds make up the majority of workers in the construction industry (41,376 workers, or 75% of the total construction industry workforce). By age, the King County construction workforce is primarily composed of workers older than 25. There is a sharp increase in employment of people 25 and older, compared to people who are younger than 25, which may reflect apprenticeship hiring practices (**Exhibit 2.4**).

Exhibit 2.4 Age Distribution of the Construction Industry in King County, 2014



Sources: United States Bureau of Labor Statistics, 2015; United States Census Bureau, 2015; Community Attributes Inc., 2015

2.2 Unemployment Claims

Unemployment claims across construction occupations help inform the prospective supply of skilled construction workers who are available and actively seeking employment. There was an average of 11,100 unemployment claims in construction occupations in 2014 across the three-county region.[4] Approximately 4,200 of these unemployment claims came from King County; another 3,100 unemployment claims were reported from Pierce County and 3,800 claims were reported from Snohomish County.

The three largest occupational categories across the three-county region for construction unemployment insurance claims in 2014 were in Construction Laborers, Carpenters and Electricians (by a significant margin, with 2,040, 1,810 and 1,270 claims respectively). This was also the case for King County, with 780, 690 and 500 unemployment claims for these three construction occupations (**Exhibit 2.5**).

[4] Based on the average monthly claims among construction occupations.

Exhibit 2.5 Top 10 Construction Occupations in Continued Unemployment Claims, King, Pierce and Snohomish Counties, 2014 Average

SOC	SOC Description	King	Pierce	Snohomish	Region
472061	Construction Laborers	780	550	710	2,040
472031	Carpenters	690	500	620	1,810
472111	Electricians	500	410	360	1,270
472073	Operating Engineers and Other Construction Equipment Operators	280	270	340	890
472152	Plumbers, Pipefitters, and Steamfitters	210	170	190	570
472141	Painters, Construction and Maintenance	240	110	160	510
472211	Sheet Metal Workers	130	120	130	380
471011	First-Line Supervisors of Construction Trades and Extraction Workers	140	110	120	370
119021	Construction Managers	180	90	100	370
472181	Roofers	110	90	160	360
	Other Occupations	*940*	*680*	*910*	*2,530*
	Total	**4,200**	**3,100**	**3,800**	**11,100**

Sources: Washington Employment Security Department, 2015; United States Census Bureau, 2015; Community Attributes Inc., 2015

2.3 Educational Completions

Educational completions among local educational institutions constitute a very small share of all new construction workers. However, completions provide insight into the supply of construction occupations that require post-secondary training (such as construction managers). Within King County, there were a total of 296 completions in 2013 with 201 completions in the field of construction management. The next highest completions were in First-Line Supervisors of Construction Trade and Extraction Workers with a total of 74 completions. These two fields account for the vast majority of completions from construction-related training programs in the region (93%) (**Exhibit 2.6**).

Exhibit 2.6 Completions in Accredited Training Programs Related to Construction in King County, 2013

Occupation	Completions
Construction Managers	201
First-Line Supervisors of Construction Trades and Extraction Workers	74
Carpenters	20
Elevator Installers and Repairers	1
Total	**296**

Sources: National Center for Education Statistics Integrated Postsecondary Education Data System, 2015; Washington Employment Security Department, 2015; Community Attributes Inc., 2015.

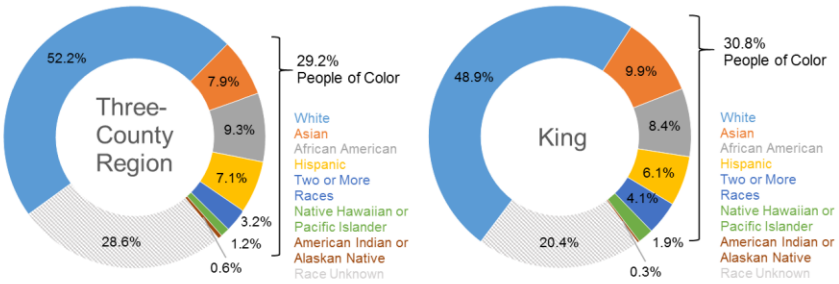
In both the three-county region and in King County almost half of all graduates identify as white (52% in the three-county region and 49% in King County).[5] The total number of minority graduates from

[5] The difference between the number of white graduates and the number of white construction workers might be because of the high number of graduates who did not specify a racial categorization.

construction-related training programs totaled 29% for the wider three-county region and 31% for King County specifically.

The largest minority share of completions of construction-related training programs in the three-county region are Black or African American graduates (9% of all educational completions). Interestingly, this is not true in King County, where Asians make up the largest minority share of graduates, with a total share of 10% as compared to the 8% of Asian graduates in the wider three-county region. Black or African Americans make up 8% of graduates in King County. Hispanic people are the third largest share of minority graduates, accounting for 7% in the wider three-county region and 6% in King County (**Exhibit 2.7**).

Exhibit 2.7 Racial Composition of Educational Completions in Three-County Region and King County, 2013



Sources: National Center for Education Statistics Integrated Postsecondary Education Data System, 2015; Washington Employment Security Department, 2015; Community Attributes Inc., 2015.

2.4 Apprenticeships in Construction

Apprenticeships in construction occupations can help provide a barometer of which construction occupations are in high demand across the sector as a whole. Apprenticeship data is collected by the Washington State Department of Labor & Industries and is categorized as either active (apprenticeships currently in progress) or completed (apprenticeships completed in the last year). Also provided is a total of all construction apprenticeships across all construction occupations.

There are a total of 1,450 active construction apprenticeships in King County. The top five active construction apprenticeships are Electricians (360), Carpenters (235), Construction Laborers (203), Plumbers, Pipefitters and Steamfitters (132), and Structural Iron and Steel Workers (116). All other construction apprenticeships sum to 404 positions (**Exhibit 2.13**).

Exhibit 2.13 Top Five Active Construction Apprenticeships in King County, 2014

1. Electricians	360
2. Carpenters	235
3. Construction Laborers	203
4. Plumbers, Pipefitters, and Steamfitters	132
5. Structural Iron and Steel Workers	116
All Other Apprenticeships	404
Total	**1,450**

Sources: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

There are a total of 310 completed construction apprenticeships in King County. The top five completed construction apprenticeships are Plumbers, Pipefitters, and Steamfitters (85), Electricians (57), Construction Laborers (39), Carpenters (33) and Sheet Metal Workers (29). All other completed construction apprenticeships total 67 (**Exhibit 2.14**).

Exhibit 2.14 Top Five Completed Construction Apprenticeships in King County, 2014

1. Plumbers, Pipefitters, and Steamfitters	85
2. Electricians	57
3. Construction Laborers	39
4. Carpenters	33
5. Sheet Metal Workers	29
All Other Apprenticeships	67
Total	**310**

Sources: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

There are a total of 1,760 construction workers across both active and completed construction apprenticeships in King County. The top five construction apprenticeships are Electricians (417), Carpenters (268), Construction Laborers (242), Plumbers, Pipefitters, and Steamfitters (217) and Structural Iron and Steel Workers. All other construction apprenticeships sum to a total of 494 (**Exhibit 2.15**).

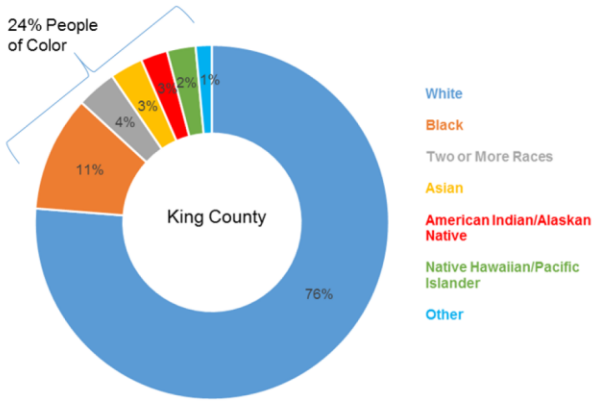
Exhibit 2.15 Top Five Total Construction Apprenticeships in King County, 2014

1. Electricians	417
2. Carpenters	268
3. Construction Laborers	242
4. Plumbers, Pipefitters, and Steamfitters	217
5. Structural Iron and Steel Workers	122
All Other Apprenticeships	494
Total	**1,760**

Sources: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

There is slightly more diversity in King County-based construction apprenticeships versus the county's overall construction workforce. White construction apprentices still make a significant majority (76%), but the total share of people of color in construction apprenticeships is up to 24%. The minorities within construction apprenticeships identify as blacks (11%), two or more races (4%), Asians and Native American/Alaskan Native (3% each) (**Exhibit 2.17**).

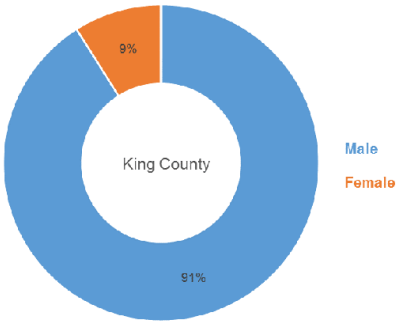
Exhibit 2.17 Racial Composition of Construction Apprenticeships in King County, 2014



Sources: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

Within King County, men account for 91% of all construction apprenticeships while women represent the remaining 9% (**Exhibit 2.18**).

Exhibit 2.18 Gender Composition of Construction Apprenticeships in King County, 2014



Sources: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

3.0 Construction Industry Employment Forecast

This section presents a forecast of construction industry employment. It begins with a review of notable planned or underway construction projects, and then turns to an analysis of projected industry jobs through 2020.

3.1 Major Construction Projects in the Future

A major driver of construction demand in King County is development of Seattle's downtown core. One notable example is the 888 Tower, which is planned as a mixed used office and residential building on 52,560 square feet containing 1 million square feet of office space and about 160 luxury residences.[6] Another large project is the Seattle Times building, which is being redeveloped as two residential towers connected by a multi-use residential podium across 110,607 square feet.[7]

Aside from large office buildings downtown, there are capital improvements in transportation. One example of this is the Seattle

[6] Urban Visions, http://urbanvisions.com/?properties=888-2nd.
[7] Daily Journal of Commerce, "Omni revises mega-project design," 2014 July 15, http://www.djc.com/news/re/12067733.html?cgi=yes.

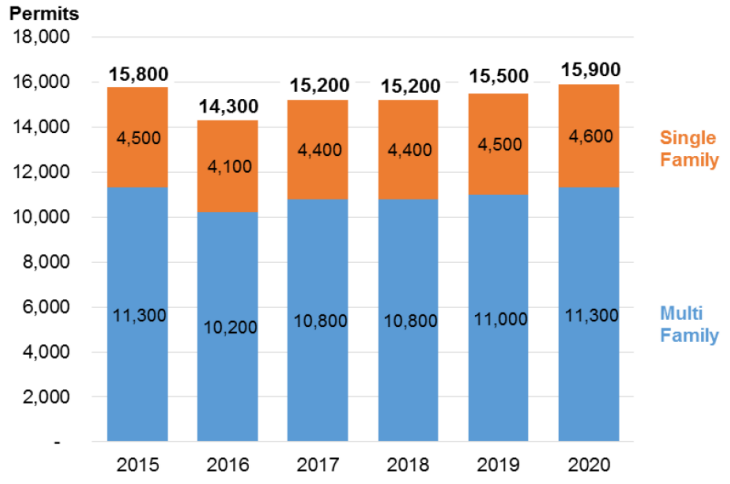
Multimodal Terminal at Colman Dock, which will include upgrades and maintenance to the existing terminal facilities across 300,000 square feet.[8]

Permits for single and multi-family residential housing have historically also accounted for a significant share of construction demand. As such, forecasting residential construction permits can help inform future demand for construction.

Residential permits for King County are expected to be 15,800 in 2015 and are forecasted to reach 15,900 in 2020, representing 0.13% annual growth. Over the same time period, single family permits are estimated to be at 4,500 permits in 2015 and 4,600 permits in 2020. Similarly, multi-family permits are estimated to be 11,300 in 2015 and are forecasted to be at 11,300 permits in 2020.

Housing permits issued in King County are forecasted drop slightly in 2016. Unlike in the aggregated three-county region, multi-family housing permit issuances account for a much larger share of total housing permits in King County. This is possibly due to the fact that King County has a much denser population than Pierce or Snohomish counties (**Exhibit 3.1**).

Exhibit 3.1 King County Single and Multi-Family Housing Permits, 2015-2020



Sources: Conway Pedersen, 2015; Washington Employment Security Department, 2015; United States Census, 2015; Community Attributes Inc., 2015.

[8] Washington State Department of Transportation, http://www.wsdot.wa.gov/projects/ferries/colmanmultimodalterminal.

3.2 Construction Industry Demand Forecast

Construction industry employment represents all jobs within construction businesses and operations. These include both construction-specific occupations (e.g., carpenters) as well as supporting and non-construction occupations, such as administrative positions, sales, and accounting. **Section 4.0** presents an occupational forecast that accounts for construction trades-specific positions.

The estimated total construction demand in King County is expected to grow from 76,000 workers in 2015 and to 85,300 workers in 2020. This trend represents a compound annual growth rate (CAGR) of 2.3% over the same time period (**Exhibit 3.2**).

Total construction demand in King County is also disaggregated by sources of employment demand. Employment supported by public works projects (federal, state, local) sum to an estimated 10,500 workers in 2015 and is forecasted to reach 11,800 in 2020. State and local government demand for construction workers is expected to grow from 7,700 workers in 2015 to a total 11,800 workers 2020. The King County government supported an estimated 960 construction workers in 2105 and is forecasted to reach a total of 1,080 workers in 2020. Federal government construction demand supported an estimated 2,800 workers in 2015 with a final expected demand of 3,100 workers in 2020. (**Exhibit 3.2**).

Exhibit 3.2 King County Construction Demand, 2015-2020

Source of Employment Demand	2015	2016	2017	2018	2019	2020
Public Works	10,500	10,700	11,000	11,300	11,500	11,800
State and Local Government	7,700	7,900	8,100	8,300	8,500	8,700
King County	960	980	1,010	1,030	1,060	1,080
Federal Government	2,800	2,800	2,900	3,000	3,000	3,100
Private Sector	62,700	63,700	65,800	67,400	68,800	70,300
Households	2,800	2,900	3,000	3,100	3,100	3,200
Total Construction Employment	**76,000**	**77,300**	**79,800**	**81,800**	**83,400**	**85,300**

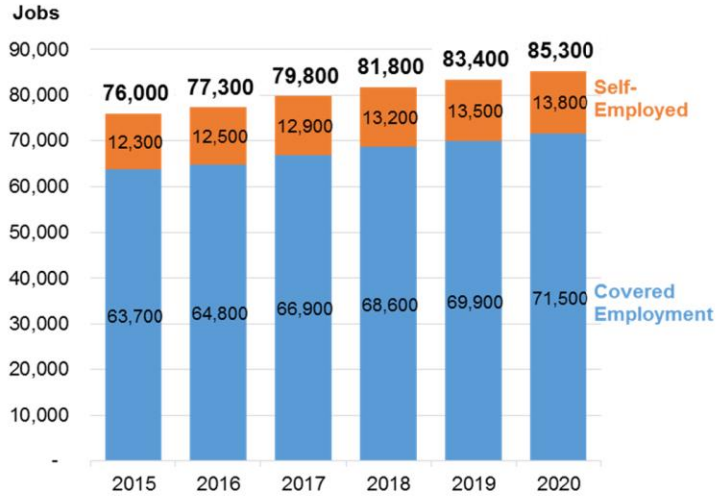
Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

Construction employment falls under two categories: covered and non-covered employment. Covered employment refers to construction workers hired by a company that must pay state unemployment insurance. Non-covered construction employment refers to workers who are not part of a company that contributes to unemployment insurance. Generally, non-covered construction workers are considered to be self-employed.

Within King County, covered construction employment is expected to grow from 63,700 workers in 2015 to 71,500 workers in 2020. Over the

same timeframe, self-employed construction workers are estimated at 12,300 workers in 2015 and forecasted to grow to 13,800 in 2020 (**Exhibit 3.3**).

Exhibit 3.3 King County Covered and Self Employed Construction Employment, 2015-2020



Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

4.0 CONSTRUCTION OCCUPATIONAL FORECAST

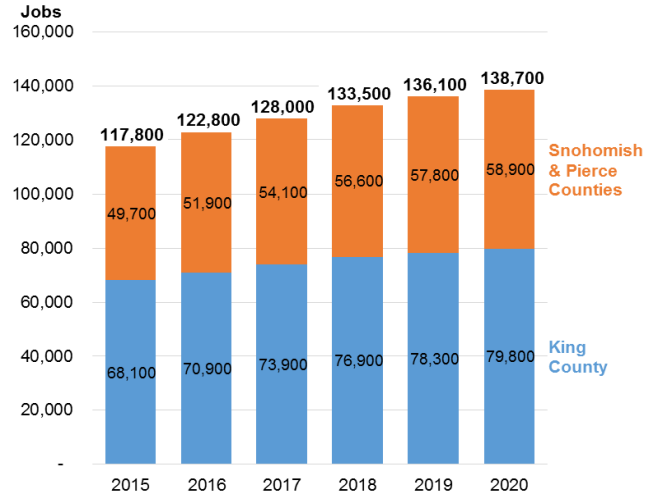
The construction occupational forecast represents future jobs in specifically construction-based occupations. Construction occupations are defined by the standard occupational classification (SOC) codes used by the U.S. government to group workers into occupational categories, rather than industries. For construction, the SOC code 47 is generally used to classify all construction workers in the three-county region employed in construction occupations.[9]

Not all workers tied to construction are classified as being part of a construction occupation. Occupations such as chief executive or accountant employed with a construction firm would not be captured in the construction occupational forecast. Conversely, not all workers classified as being in a construction occupation are employed in a construction firm. An example would be a carpenter employed with a furniture manufacturer. For this reason, this report presents a forecast of construction occupations within the construction sector.

The total number of construction occupations in the three-county area is projected to grow from 17,800 workers in 2015 to 138,700 in 2020. King County had 68,100 construction occupations in 2015 and King County construction occupations are expected to grow to 79,800 in 2020 (**Exhibit 4.1**).

[9] An additional SOC code is used for Construction Managers, which is not under SOC code 47.

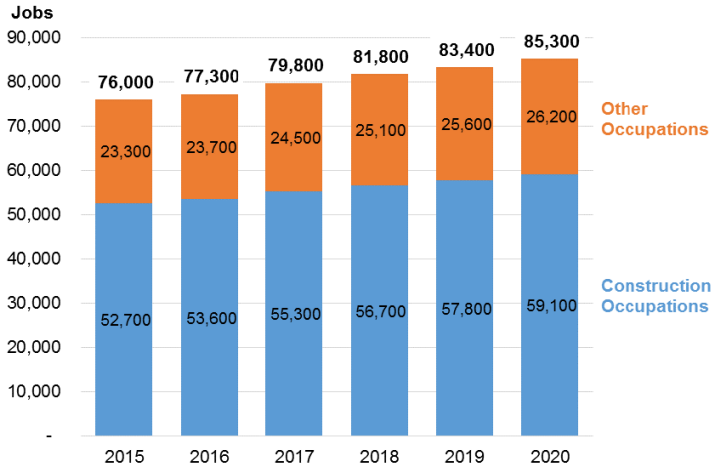
Exhibit 4.1 Total Construction Occupations in Three-County Region and King County, 2015-2020



Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

In 2015, there were an estimated 52,700 construction workers *within* the construction sector in King County. These jobs are forecasted to grow to a total 59,100 in 2020, representing a compound annual growth rate of 3.3% (**Exhibit 4.2**).

Exhibit 4.2 King County Total Construction and Total Construction Occupations, 2015-2020



Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

Within King County, carpenters are forecasted to grow from 13,600 workers in 2015 to 16,100 workers in 2020. Construction laborers are estimated to be approximately 9,300 workers in 2015 and are estimated to grow to 11,100 workers in 2020. Construction managers, and other positions that require some post-secondary training, are estimated to grow from 6,300 workers in 2015 to 7,300 by 2020. **Exhibit 4.3** presents the five largest construction occupations in King County and their projected totals by 2020.

Exhibit 4.3 Top Five Construction Occupations in King County, 2015-2020

Occupations	2015	2016	2017	2018	2019	2020
1. Carpenters	13,600	14,200	14,900	15,500	15,800	16,100
2. Construction Laborers	9,300	9,700	10,200	10,600	10,800	11,100
3. Construction Managers	6,300	6,600	6,800	7,000	7,100	7,300
4. Painters, Construction and Maintenance	6,100	6,400	6,600	6,900	7,000	7,200
5. First-Line Supervisors of Construction Trades and Extraction Workers	5,500	5,700	5,900	6,200	6,300	6,400

Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

Construction occupations employed *within* the construction industry are presented below.[10] Within King County, 9,800 carpenters are employed in the construction sector, and are projected to reach 11,000 workers by 2020 (**Exhibit 4.4**).

Exhibit 4.4 Top Five Construction Occupations in Construction in King County, 2015-2020

Occupations	2015	2016	2017	2018	2019	2020
1. Carpenters	9,800	9,900	10,300	10,500	10,700	11,000
2. Construction Laborers	7,300	7,400	7,700	7,800	8,000	8,200
3. Electricians	5,100	5,200	5,400	5,500	5,600	5,700
4. First-Line Supervisors of Construction Trades and Extraction Workers	4,900	5,000	5,200	5,300	5,400	5,500
5. Painters, Construction and Maintenance	4,000	4,100	4,200	4,300	4,400	4,500

Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

[10] i.e. construction occupations that are in the construction industry.

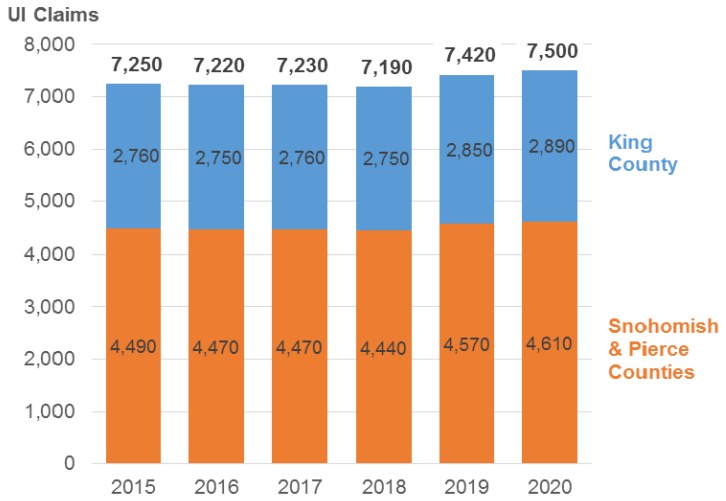
5.0 Construction Workforce Supply Forecast

5.1 Supply Projections by Source

The construction workforce supply refers to workers who are either already employed in construction or qualified for construction work and actively seeking employment in the industry. Four main components inform this aggregate total each year: 1) the existed, retained workforce; 2) the pool of eligible construction unemployment claimants (as in **Exhibit 2.5**); 3) the expected number of graduates from accredited two-year construction programs (as in **Exhibit 2.6**); and 4) the prospective supply of new apprentices through projected new openings. Each component above is forecasted through 2020.

Overall unemployment claims in construction occupations in the three-county region totaled an estimated 7,250 in 2015 and is forecasted to grow to 7,500 unemployment claims in 2020, representing an annualized growth of 0.7%. King County construction occupation unemployment claims are expected to reach 0.9% per year through 2020 (**Exhibit 5.1**).[11,12]

Exhibit 5.1 UI Claims in Construction, Three-County Region and King County, Forecast 2015-2020



Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015;

[11] The breakdown of the labor supply between King County and Snohomish and Pierce counties is slightly arbitrary as the labor supply of construction is fairly fluid. For example, a construction job in King County might not necessarily be filled by a construction worker who resides in King County.

[12] Note that although unemployment claims are projected to grow slightly, this is in part a function of the size of the construction workforce, and is not reflective or indicative of a growth in the unemployment *rate*.

Washington Office of Financial Management, 2015; U.S. Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

Apprenticeships are forecasted to average between 480 and 500 new positions between 2016 and 2020. Completions in construction-related training programs are expected to hold constant at a pace of 300 graduates per year.[13] *The overall supply of construction workers in King County is projected to grow 2.3% per year through 2020* (**Exhibit 5.2**).

Exhibit 5.2 Construction Occupations in Construction Supply Forecast in King County, 2015–2020

Source of Employment Supply	2015	2016	2017	2018	2019	2020
Retained Construction Workforce	45,300	46,100	47,600	48,800	49,700	50,800
Unemployment Claimants	2,760	2,750	2,760	2,750	2,850	2,890
Completions (est. of prior year)	300	300	300	300	300	300
New Apprenticeship Openings	270	500	670	480	480	480
Total	**48,630**	**49,650**	**51,330**	**52,330**	**53,330**	**54,470**

Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; National Center for Education Statistics Integrated Postsecondary Education Data System, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; Washington State Department of Labor & Industries, 2015; United States Census Bureau, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

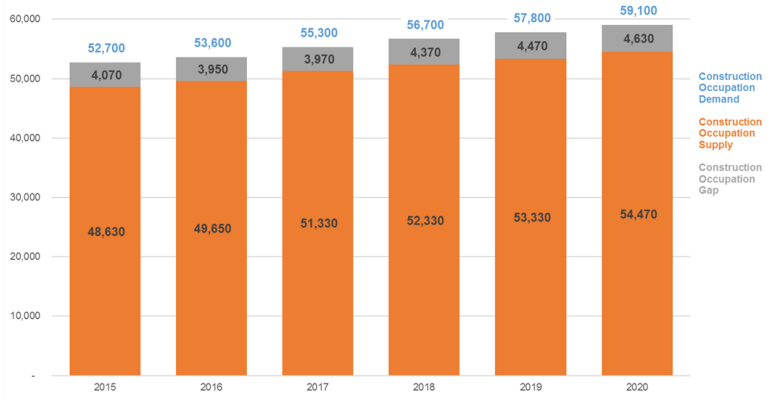
5.2 Projected Gaps between Supply and Demand

Potential shortfalls in regional construction workforce needs represent the gap between local construction demand and supply. Gaps presented in this section represent only the supply and demand of construction trades *within* the construction sector. Gaps illustrate the extent to which employers must search outside the region—in this case King County—to find needed workers in construction fields.

The projected shortfall between demand and supply in King County is estimated to be 4,070 construction occupations in 2015 and is forecasted to grow to 4,630 workers by 2020 (**Exhibit 5.3**).

[13] It is assumed that 300 is the current maximum number of seats local educational institutions are able to provide for new students. This represents one scenario to inform future planning.

Exhibit 5.3 King County Construction Occupation Demand and Supply Shortfall



Source: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; National Center for Education Statistics Integrated Postsecondary Education Data System, 2015 Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; Washington State Department of Labor & Industries, 2015; U.S. Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015

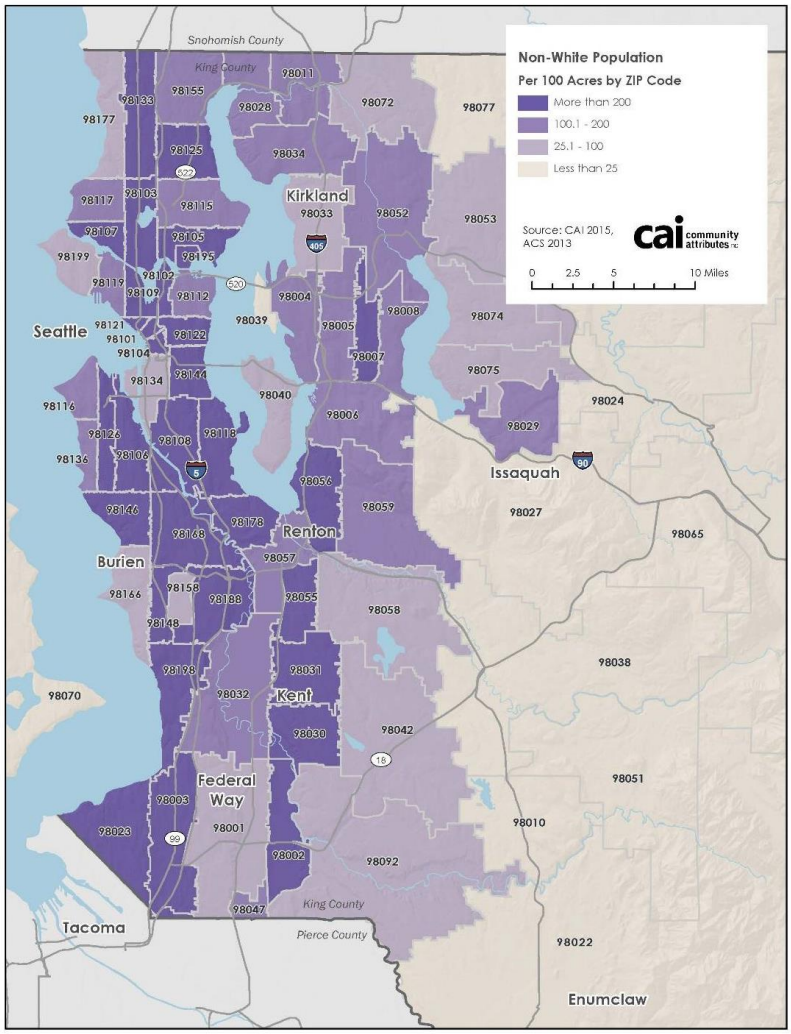
6.0 Priority Hires

King County's construction workforce is primarily composed of non-minority white males. Overall, 78% of King County's construction workers identified as white and 94% of all workers were male. The same trend is true of the larger three-county region, with 94% of all construction workers being male and 81% white.

The distribution of the non-white population across King County zip codes is shown in **Exhibit 6.1**.[14] King County's non-white population is distributed, to a large degree, in concert with population density; more urbanized neighborhoods are home to a larger number of non-white people. There are several notable exceptions, including Medina (98039), Burien (98158 and 98166), and Seattle's SoDo district (98134), three areas with relatively high population density but low numbers of non-white people. Medina is also one of the zip codes in the county with a high median income: $183,900 in 2013 according to the U.S. Census Bureau.

[14] The maps presented in the main body of this report show distribution by acreage. Naturally, these maps closely correlate with the population density of King County. Additional maps representing the same data by per capita is shown in the Appendix.

Exhibit 6.1 Non-White Population per 100 Acres by Zip Code, 2013

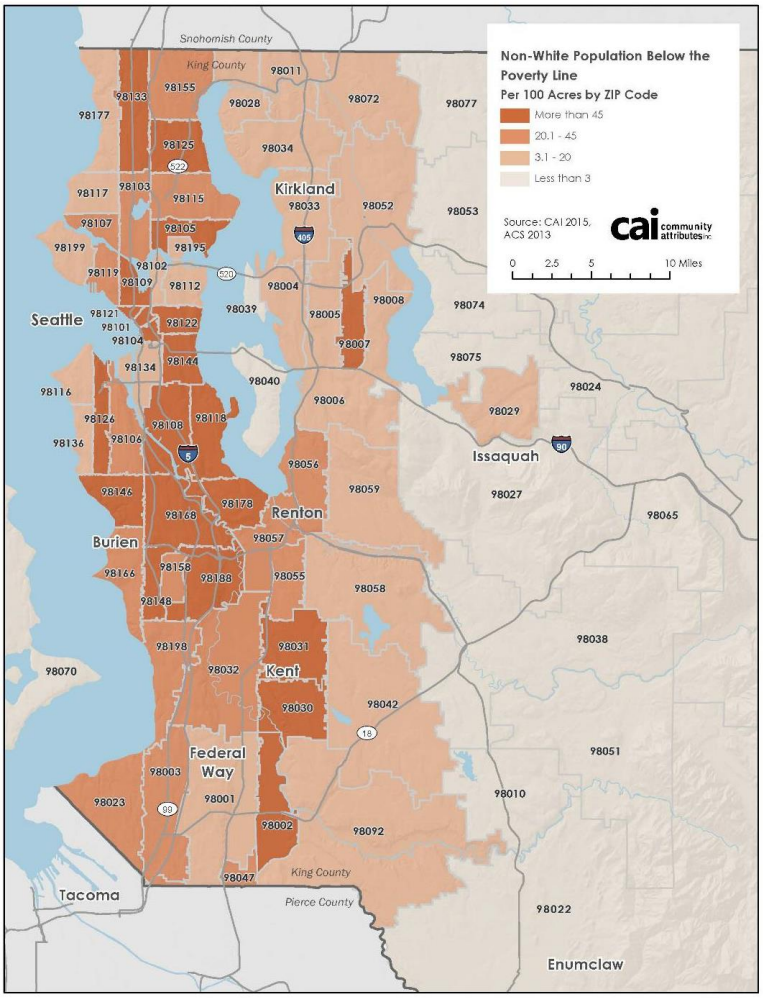


Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

The distribution of non-white residents of King County can also be represented by a share of how many non-white residents are below 200% of the poverty level (**Exhibit 6.2**). This data follows the same pattern as non-white population, with pockets of population below the poverty level and hotspots of population above the poverty line that largely match the pockets and hotspots visible in the non-white population per acre map.

One notable difference is the generally lower rates in Kirkland and Bellevue, with the exception of zip code 98007 in central Bellevue.

Exhibit 6.2 Non-White Population Below the Poverty Line per 100 acres by Zip Code, 2013

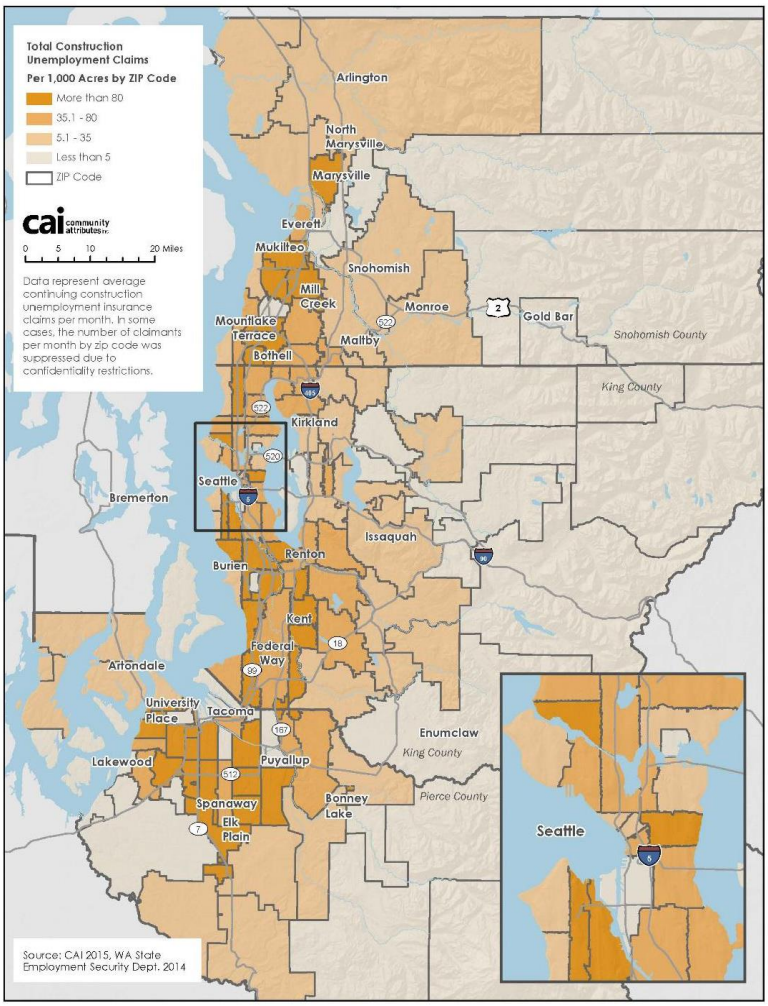


Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Data on unemployment insurance (UI) claimants whose last occupation was in construction was collected from across the three-county region. **Exhibit 6.2** shows continuing unemployment insurance claimants from construction per acre across the region by zip code. Normalizing total continuing claims according to each zip code's acreage illustrates the

geographic spread of claimants. Like the two preceding metrics, construction worker UI claimants per acre is largely consistent with population density. Of particular note is the relatively high number of claimants in Spanaway, Puyallup, Lakewood, and University Place.

Exhibit 6.2 Construction Worker UI Claims by Zip Code, Three-County Region, 2014



Sources: Washington State Employment Security Department, 2015; Community Attributes Inc., 2015.

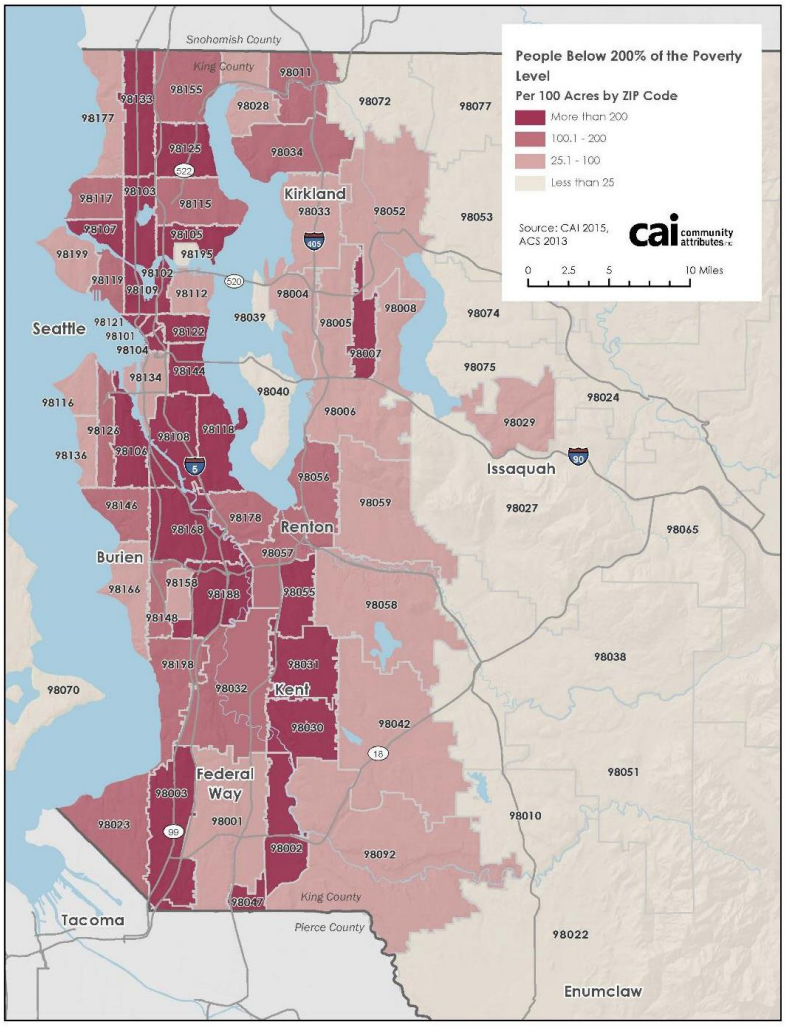
6.1 Priority Hire Zip Codes in King County

Priority hire zip codes are defined as those that rank among the top areas by unemployment, poverty, and population with no college degree. Out of 78 zip codes analyzed in King County, a total of 15 met the following three criteria:

- In the top 20% of zip codes by percent persons below two times the federal poverty rate or by persons below two times the federal poverty level per acre (**Exhibit 6.3**)
- In the top 20% of zip codes by percent unemployed or by unemployed persons per acre (**Exhibit 6.4**)
- In the top 20% of zip codes by percent persons over 25 with no college degree or by persons over 25 with no college degree per acre (**Exhibit 6.5**)

The first metric is illustrated visually in **Exhibit 6.3**, which displays people below two times the federal poverty level per 100 acres. While this does not capture the other measure in this category—share of persons below two times the federal poverty level—it valuable in assessing the distribution of people in this category normalized by acreage. Notable concentrations appear in central Bellevue (98007), Kent, the western portion of Federal Way, and much of Seattle.

Exhibit 6.3 People Below 200% of the Poverty Level per 100 Acres by Zip Code, 2013

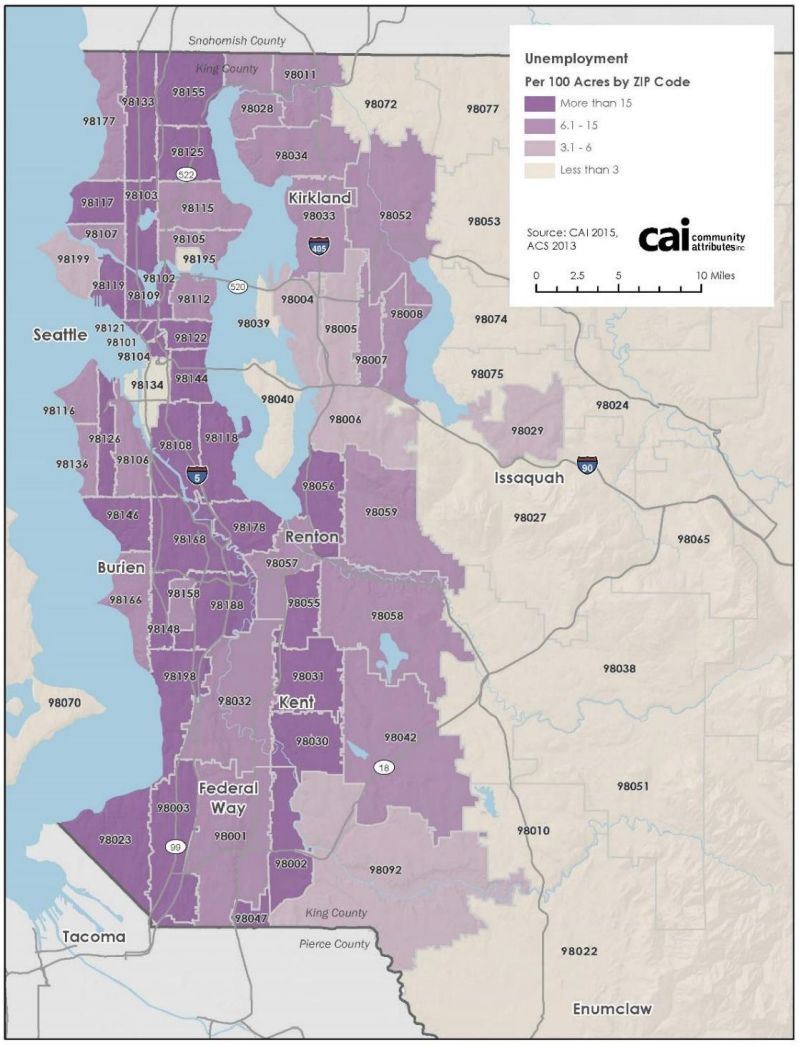


Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Unemployment per 100 acres in another useful metric for assessing how unemployment is geographically distributed in King County. **Exhibit 6.4** shows that unemployment is centered in the county's employment centers, with concentrations and gaps in areas that largely match the metrics previously discussed. Of particular interest is zip code 98134 in downtown Seattle. With fewer than three unemployed persons per acre, the area has one of the lowest rates in the county. This is primarily due to

the area being an employment center, but not a housing center. Other areas with very low unemployment include areas with higher median incomes like Mercer Island (98040) and Medina (98039).

Exhibit 6.4 Unemployment per 100 Acres by Zip Code, 2013

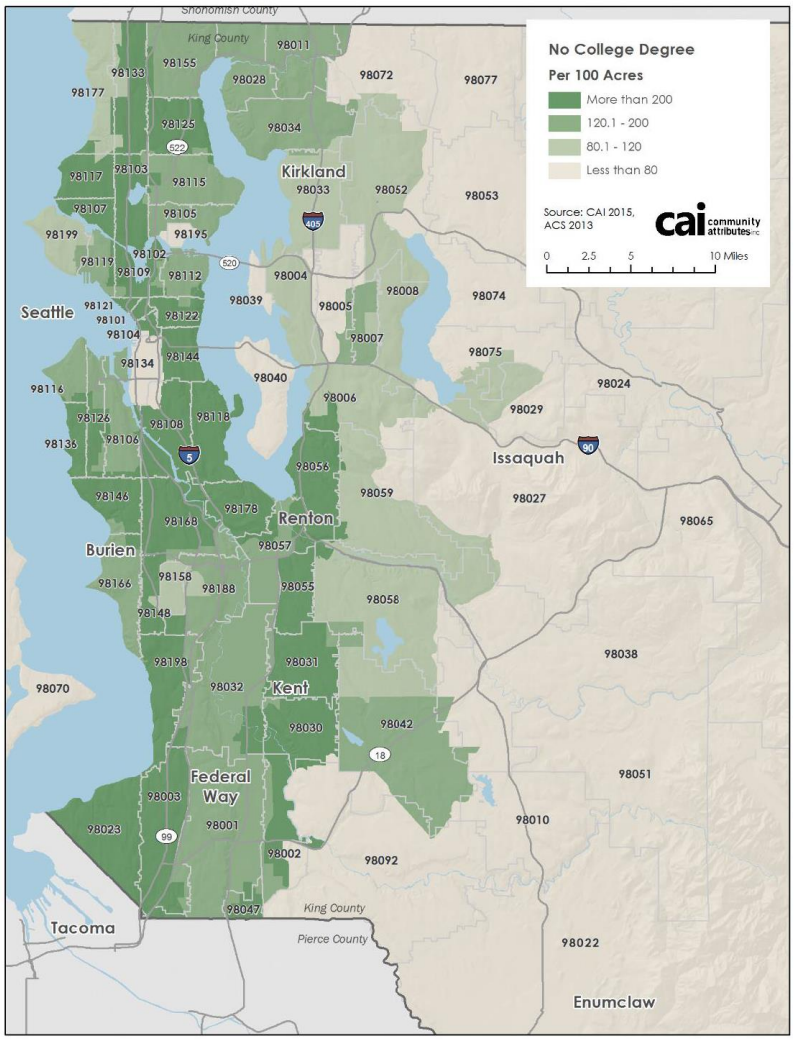


Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Understanding how education relates to unemployment and the poverty line is an important aspect of the priority hire worker analysis. College degrees per 100 acres illustrates which zip codes have populations with

lower levels of educational attainment relative to other, more affluent zip codes (**Exhibit 6.5**).

Exhibit 6.5 No College Degrees per 100 Acres



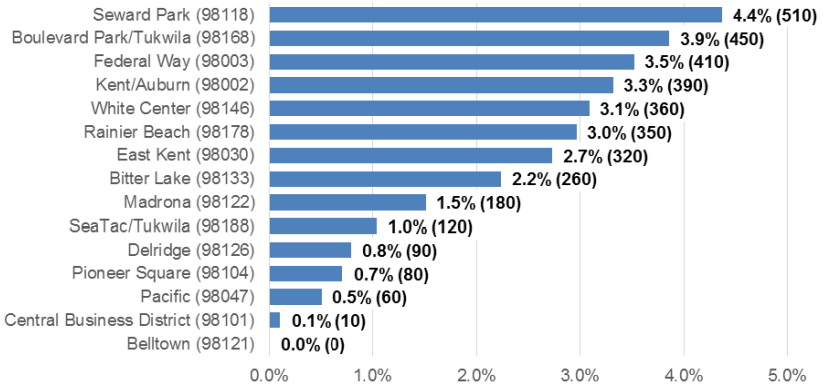
Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Combined, these three criteria describe which areas have the lowest educational attainment, highest poverty rate, and highest unemployment rate. The 15 distressed zip codes are ranked by their respective shares of total King County women or minority construction employment in **Exhibit 6.6**. The distribution of women and minority owned construction

businesses also represented on a map of King County (**Exhibit 6.7**). Seward Park is the most diverse in terms of construction employment, followed by Boulevard Park/Tukwila. Belltown has the lowest construction employment occupational diversity out of the 15 distressed zip codes. Five of these zip codes are significantly above the county average in all three metrics (unemployment, poverty, and no college degree). Together, these 15 zip codes represent 30.7% of King County's minority or women construction employment, approximately 3,600 workers:[15]

- Kent/Auburn
- Pioneer Square
- Boulevard Park/Tukwila
- Central Business District
- Belltown

Exhibit 6.6 Priority Hire Zip Codes, Share of King County Women or Minority Construction Employment and Total (in parentheses), 2015

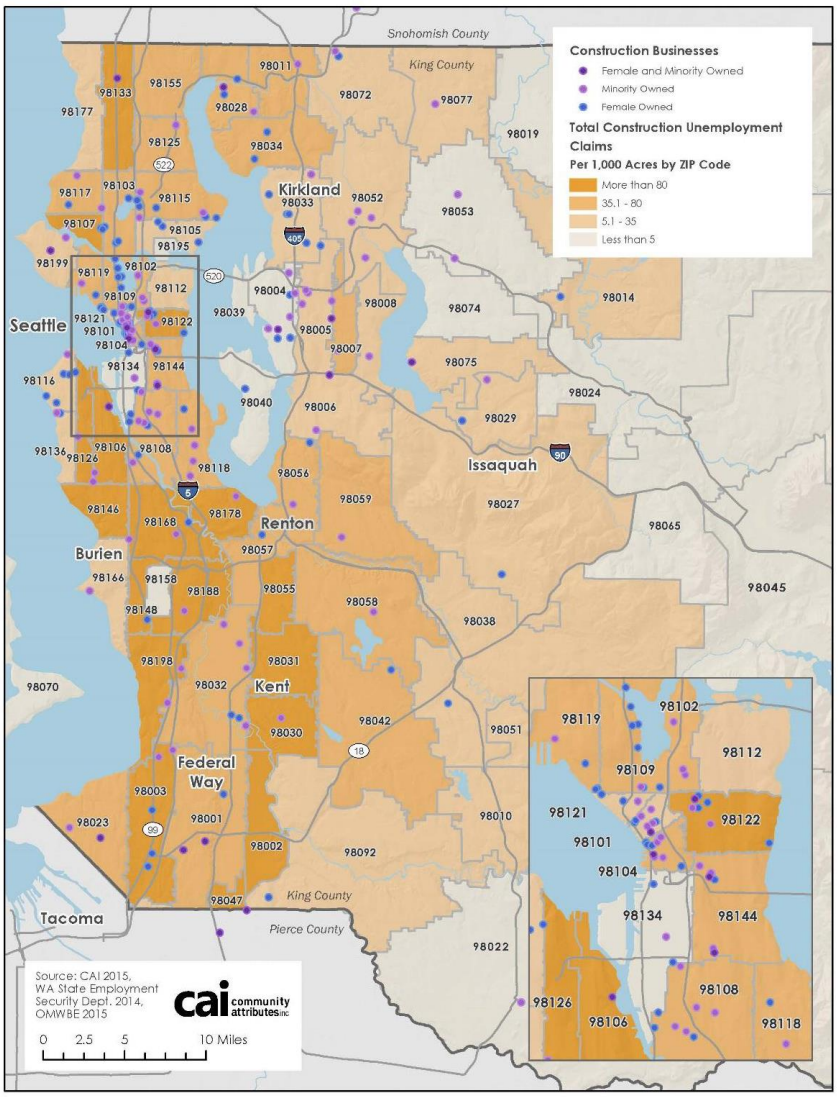


Sources: United States Census Bureau, 2015; Community Attributes Inc., 2015.

Overlaying female and minority-owned construction businesses onto total construction unemployment claimants by zip code suggests the two are very closely related. Businesses are largely located in the county's employment centers, with distribution across the county, and unemployment claims are largely distributed in close relation to population centers. The two metrics can be seen in **Exhibit 6.7** below.

[15] Each of these five zip codes are above one standard deviation from the mean in all three metrics. The means are: 0.13 unemployed persons per acre, 1.74 people below two times the federal poverty rate per acre, and 1.85 persons with no college degree per acre. The standard deviations are 0.13, 2.28, and 1.89, respectively. The respective percentiles are 90th, 92nd, and 92nd.

Exhibit 6.7 Construction Business owned by Women and Minorities and total Construction Unemployment Claims per 1,000 Acres by Zip Code, 2013



Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

The 15 zip codes are outlined in **Exhibit 6.8** along with contextual information describing each zip code's metrics in relation to King County. The Kent/Auburn area, zip code 98002, for example, has 0.4 unemployed persons per acre, 30% higher than the state and county averages.

The distressed zip codes are each presented with the occupational diversity in construction occupations.[16] This measure refers to each zip code's share of all women or minority construction workers out of all construction workers in that zip code. In the Pioneer Square area, for example, 83% of all construction workers identified as a minority or woman. Some of the most distressed areas have some of the highest rates of construction occupational diversity. (**Exhibit 6.8**)

Exhibit 6.8 Priority Hire Zip Codes, King County, 2013

Rank	City / Neighborhood	Distressed Zip Codes	Share Unemployed	Share Under 200% Federal Poverty Line	Share with No College Degree	Share of Minority and Women Construction Workers out of Construction Workers	Minority and Women Construction Workers
1	Kent/Auburn	98002	8%	44%	87%	43%	390
2	Pioneer Square	98104	4%	56%	73%	83%	80
3	Pacific	98047	9%	41%	90%	29%	60
4	White Center	98146	6%	38%	73%	56%	360
5	East Kent	98030	7%	42%	78%	46%	320
6	Rainier Beach	98178	5%	33%	72%	72%	350
7	Boulevard Park/Tukwila	98168	8%	44%	83%	56%	450
8	Seward Park	98118	5%	41%	63%	80%	510
9	SeaTac/Tukwila	98188	7%	44%	80%	55%	120
10	Federal Way	98003	6%	39%	80%	54%	410
11	Bitter Lake	98133	5%	29%	58%	35%	260
12	Central Business District	98101	3%	36%	43%	26%	10
13	Belltown	98121	3%	33%	41%	0%	0
14	Delridge	98126	3%	25%	60%	30%	90
15	Madrona	98122	2%	34%	38%	43%	180

Sources: United States Census Bureau, 2015; Community Attributes Inc., 2015.

6.2 Detailed Assessment of Identified Priority Hire Zip Codes

The county's distressed zip codes are composed of a larger share of working age persons of color with low income than the county as a whole. In King County, approximately 24,200 residents out of just under 2 million are in the intersection of low income, non-white or Hispanic, and working age groups, 1.2% of the total county population. The 15 priority hire zip codes are significantly higher, ranging from a low of 2.8% of residents in Delridge to a high or 18.3% of residents in Rainier Beach. **Exhibit 6.9** outlines the priority hire population characteristics of the 15 distressed areas ranked from most to least distressed.

[16] "Construction occupations" includes all occupations in the Census Bureau's Construction, Extraction, and Natural Resources category.

Exhibit 6.9 Priority Hire Recruitment Demographic Population Countywide and by Distressed Zip Codes, King County, 2013

Rank	City / Neighborhood	Distressed Zip Codes	Total Population	People of Color	Low Income People of Color	Low Income People of Color are 25-64	Share of Total Population
	King County Total	**All**	**1,974,567**	**707,773**	**81,063**	**24,238**	**1.2%**
1	Kent/Auburn	98002	31,853	12,727	5,640	2,104	6.6%
2	Pioneer Square	98104	12,247	6,846	3,810	1,720	14.0%
3	Pacific	98047	5,743	2,242	909	529	9.2%
4	White Center	98146	28,500	15,566	5,841	3,897	13.7%
5	East Kent	98030	32,343	16,159	6,714	3,638	11.2%
6	Rainier Beach	98178	20,588	14,957	4,932	3,771	18.3%
7	Boulevard Park/Tukwila	98168	32,105	18,729	8,192	3,865	12.0%
8	Seward Park	98118	43,414	30,533	12,462	7,060	16.3%
9	SeaTac/Tukwila	98188	26,503	15,533	6,813	3,359	12.7%
10	Federal Way	98003	42,729	21,328	8,409	4,014	9.4%
11	Bitter Lake	98133	45,045	16,530	4,851	2,807	6.2%
12	Central Business District	98101	10,347	3,053	1,092	783	7.6%
13	Belltown	98121	11,272	4,338	1,421	812	7.2%
14	Delridge	98126	19,571	6,594	1,637	555	2.8%
15	Madrona	98122	34,562	12,600	4,271	3,282	9.5%

Sources: United States Census Bureau, 2015; Community Attributes Inc., 2015.

7.0 SUMMARY AND CONCLUSION

Construction occupations are often well paying, family wage jobs that offer opportunities for economic advancement. Analytics presented in this report show there is both a relative lack of diversity within the construction workforce, but also that these jobs are in high demand across the region and King County, currently and into the near future.

Between 2015 and 2020, demand for construction workers in King County is projected to grow 2.3% per year. Much of this demand will come from private sector development, such as major ongoing or planned projects in the Seattle downtown corridor. Many other jobs and opportunities arise through public sector capital improvement projects, including building and infrastructure projects funded by cities, Sound Transit, King County, and state and federal departments of transportation.

Projections of future construction labor supply, as defined in this report, will be less than construction demand through 2020, yielding an annual shortfall in required construction workers. Employers will need to recruit from outside King County unless there is an increase in the supply of new workers.

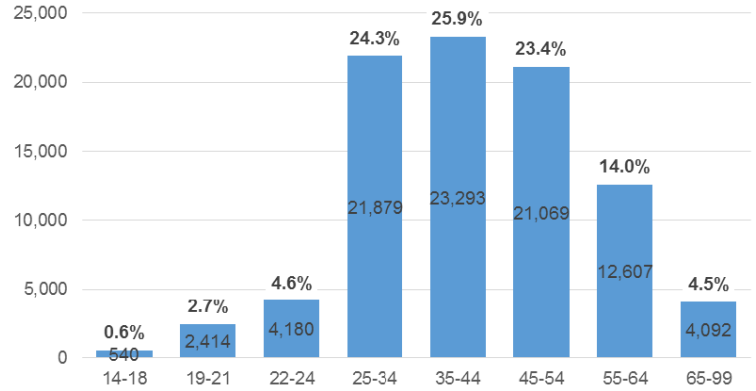
The employment and spatial analysis presented in this report identifies potential populations for recruitment to the construction industry, and provides insight into the opportunities for workforce growth. Individuals of economically disadvantaged backgrounds constitute an important source of new workers who are able to meet the requirements of the construction industry. Serving these segments will help address equity, and help disadvantaged populations capitalize on the economic benefits of this growing industry.

APPENDIX

Three-County Construction Employment Demographics

Within the three-county region, the majority of people employed in the construction industry are 25 to 54 years of age.[17] This accounts for 66,241 workers in total and 73.5% of all workers employed in the construction industry (**Appendix A.1**).

Appendix A.1 Age Distribution of the Construction Industry in Three-County Region, 2014



Sources: United States Bureau of Labor Statistics, 2015; United States Census Bureau, 2015; Community Attributes Inc., 2015

In 2013 there were a total of 482 education completions from accredited training programs relating to construction occupations in the three-county region.[18] Of these 482 completions, 282 completions were construction managers and 148 completions were first-line supervisors of construction trade and extraction workers. Together, these two fields accounted for 89.2% of all education completions from construction related training programs in the three-county region (**Appendix A.2**).

[17] This refers to construction industry code NAICS code 23 not construction occupations in SOC code 47.

[18] 2013 is the latest year for available IPEDS completions data

Appendix A.2 Completions in Accredited Training Programs Related to Construction in the Three-County Region, 2013

Occupation	Completions
Construction Managers	282
First-Line Supervisors of Construction Trades and Extraction Workers	148
Carpenters	39
Pile-Driver Operators	3
Earth Drillers, Except Oil and Gas	3
Operating Engineers and Other Construction Equipment Operators	2
Highway Maintenance Workers	2
Electricians	1
Sheet Metal Workers	1
Elevator Installers and Repairers	1
Total	**482**

Sources: National Center for Education Statistics Integrated Postsecondary Education Data System, 2015; Washington Employment Security Department, 2015; Community Attributes Inc., 2015.

There were 2,994 active construction apprenticeships. The top five active construction apprenticeships were Electricians (686), Carpenters (499), Construction Laborers (425), Structural Iron and Steel Workers (241) and Plumbers, Pipefitters, and Steamfitters (223). All other active construction apprenticeships sum to 920 (**Appendix A.3**).

Appendix A.3 Top Five Active Construction Apprenticeships in the Three-County Region, 2014

1. Electricians	686
2. Carpenters	499
3. Construction Laborers	425
4. Structural Iron and Steel Workers	241
5. Plumbers, Pipefitters, and Steamfitters	223
All Other Apprenticeships	920
Total	**2,994**

Source: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

There were 641 completed construction apprenticeships in the three-county region. The top five completed construction apprenticeships were Electricians (157), Plumbers, Pipefitters and Steam Fitters (116), Sheet Metal Workers (75), Construction Laborers (72) and Carpenters (66). All other completed construction apprenticeships sum to a total of 641 (**Appendix A.4**).

Appendix A.4 Top Five Completed Construction Apprenticeships in Three-County Region, 2014

1. Electricians	157
2. Plumbers, Pipefitters and Steam Fitters	116
3. Sheet Metal Workers	75
4. Construction Laborers	72
5. Carpenters	66
All Other Apprenticeships	155
Total	**641**

Source: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

In 2014 across the three-county region, there were 3,635 construction apprenticeships in both active and completed construction apprenticeship programs. The top five apprenticeship occupations are Electricians (843), Carpenters (565), Construction Laborers (497), Plumbers, Pipefitters and Steamfitters, Sheetmetal Workers and Structural Iron and Steel Workers (both 257 apprentices). All other construction apprenticeships total 877 apprentices (**Appendix A.5**).

Appendix A.5 Top Five Total Construction Apprenticeships in Three-County Region, 2014

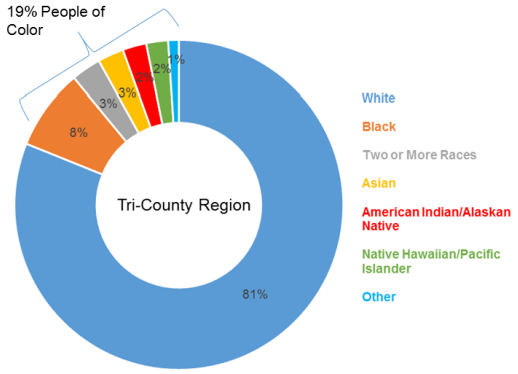
1. Electricians	843
2. Carpenters	565
3. Construction Labrorers	497
4. Plumbers, Pipefitters and Steamfitters	339
5. Sheetmetal Workers*	257
5. Structural Iron and Steel Workers*	257
All Other Apprenticeships	877
Total	**3,635**

* Both Sheetmetal Worker Apprenticeships and Structural Iron and Steel Worker Apprenticeships are tied as the 5th most popular apprenticeship program.

Source: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

The majority of people in construction apprenticeships in the three-county region identify as white (81%). People of color as a whole account for 19% of all construction apprenticeships. The largest minorities are black (8%), people who identify as two or more races (3%) and Asians (3%). Native American/Alaskan Natives and Native Hawaiian/Pacific Islanders each account for 2% of all construction apprenticeships (**Appendix A.6**).

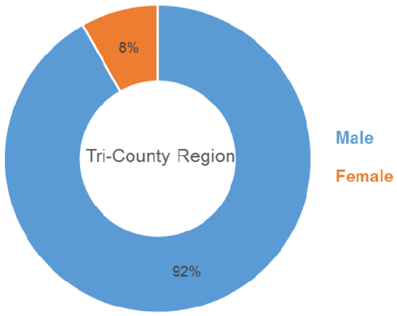
Appendix A.6 Racial Composition of Construction Apprenticeships in Three-County Region, 2014



Source: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

Within the three-county region, construction apprentices are mostly male (92%). Females only account for 8% of all construction apprenticeships (**Appendix A.7**).

Appendix A.7 Gender Composition of Construction Apprenticeships in Three-County Region, 2014



Source: Washington State Department of Labor & Industries, 2015; Community Attributes Inc., 2015

Three-County Construction Employment Forecasts

Total construction employment for the three-county region is forecasted to reach 137,300 workers by 2020 from the current 2105 figure of 122,300 workers. The largest share of construction demand is from the private sector, with public works and household demand for construction accounting for the second and third largest sources. Looking deeper into the breakout of public sector construction demand, total construction demand is forecasted to grow from 16,500 workers in 2015 to 18,600 in 2020. Within the public works demand for construction, state and local governments account for 12,100 workers in 2015 and 13,600 in 2020. County construction demand was estimated at 1,390 workers in 2015 and is expected to reach 1,570 workers in 2020. Lastly, federal demand for construction employment is expected to increase from 4,400 workers in 2015 to 5,000 workers in 2020 (**Appendix A.8**).

Private sector demand for construction workers accounts for the largest share of construction demand. It is estimated to be at 101,200 workers in 2015 and by 2020 it is expected to grow to 113,600 workers. Household demand for construction is the smallest source of construction demand. It was estimated to account for 4,600 workers in 2015 and is forecasted to grow to 5,100 in 2020 (**Appendix A.8**).

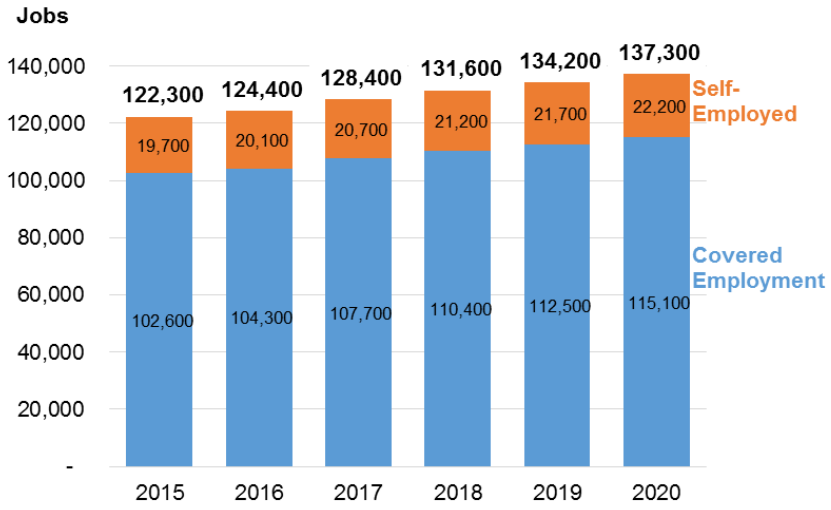
Appendix A.8 Three-County Region Construction Demand, 2015-2020

Source of Employment Demand	2015	2016	2017	2018	2019	2020
Public Works	16,500	16,800	17,400	17,800	18,100	18,600
State and Local Government	12,100	12,300	12,700	13,000	13,300	13,600
Counties	1,390	1,410	1,460	1,500	1,530	1,570
King County	960	980	1,010	1,030	1,060	1,080
Pierce County	220	220	230	240	240	250
Snohomish County	210	210	220	230	230	240
Federal Government	4,400	4,500	4,700	4,800	4,900	5,000
Private Sector	101,200	102,900	106,200	108,900	111,000	113,600
Households	4,600	4,700	4,800	4,900	5,000	5,100
Total Construction Employment	**122,300**	**124,400**	**128,400**	**131,600**	**134,200**	**137,300**

Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

Forecasted covered employment is estimated to grow form 102,600 workers in 2015 to 115,100 in 2020. Over the same time period, self-employed construction workers are estimated to grow form 19,700 workers in 2015 to 22,200 in 2020. The share of covered construction employment to self-employed construction workers is expected to remain consistent from 2015 through 2020 (**Appendix A.9**).

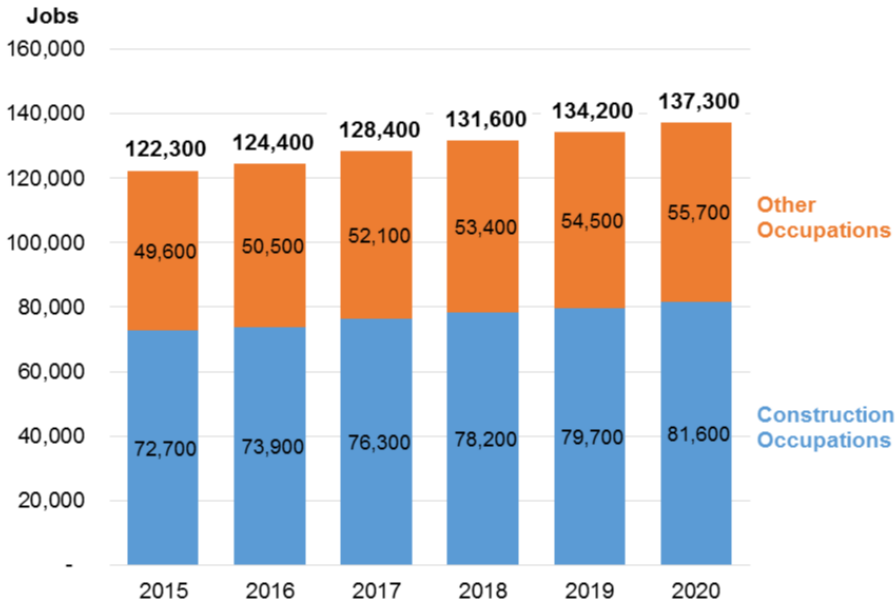
Appendix A.9 Three-County Region Covered and Self Employed Construction Employment, 2015-2020



Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

In the three-county region, non-construction occupations within construction were estimated to be at 49,600 workers in 2015 and is forecasted to grow to 55,700 workers in 2020. Construction occupations within construction in the three-county region are forecasted to grow from 72,700 workers in 2015 to a total of 81,600 in 2020 (**Appendix A.10**).

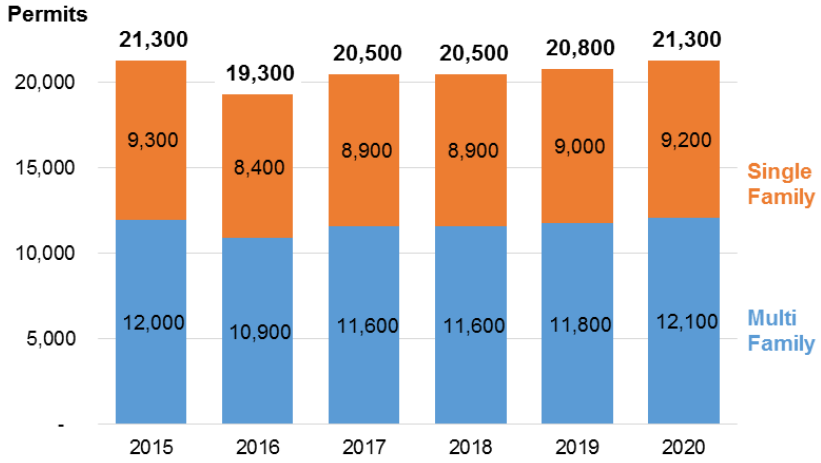
Appendix A.10 Three-County Region Total Construction and Total Construction Occupations, 2015-2020



Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

Within the three-county region, residential construction permits were estimated at 21,300 in 2015 and forecasted to remain at 21,300 in 2020. Single family permits were estimated at 9,300 permits in 2015, and forecasted to slightly drop to 9,200 permits in 2020. Multi-family permits were estimated to be 12,000 in 2015 and reach 12,100 in 2020. In both single and multi-family permits, there is a forecasted fall in issued residential permits (**Appendix A.11**).

Appendix A.11 Three-County Region Single and Multi-Family Housing Permits, 2015-2020



Sources: Conway Pedersen, 2015; Washington Employment Security Department, 2015; United States Census, 2015; Community Attributes Inc., 2015.

Looking at individual occupations in the construction industry revealed that carpenters were the largest construction occupation, and it is forecasted to grow from 23,200 workers in 2015 to 27,600 workers in 2020. Construction laborers are estimated to be at 15,600 in 2015 and is estimated to grow to 18,500 workers in 2020. Painters, construction and maintenance workers are estimated to be 10,500 in 2015 and in 12,400 workers in 2020. Construction managers are estimated to be 10,300 in 2015 and are forecasted to grow to 11,900. Lastly, first-line supervisors of construction trades and extraction workers are estimated to be 9,500 workers in 2015 and are estimated to grow to 11,200 workers in 2020 (**Appendix A.12**).

Appendix A.12 Top Five Construction Occupations in Three-County Region, 2015-2020

Occupations	2015	2016	2017	2018	2019	2020
1. Carpenters	23,200	24,200	25,400	26,600	27,000	27,600
2. Construction Laborers	15,600	16,300	17,000	17,800	18,200	18,500
3. Painters, Construction and Maintenance	10,500	11,000	11,400	11,900	12,200	12,400
4. Construction Managers	10,300	10,700	11,100	11,500	11,700	11,900
5. First-Line Supervisors of Construction Trades and Extraction Workers	9,500	9,900	10,300	10,800	11,000	11,200

Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

In the three-county region, carpenters are the largest construction occupation group overall and are estimated to have 10,500 workers in

2015, growing to 11,800 workers by 2020. Construction laborers are estimated to total 9,300 workers in 2015 and 10,400 workers in 2020. Electricians are estimated at 7,900 workers in 2015 and are forecasted to reach 8,900 workers in 2020. First-line supervisors of construction trades and extraction had 6,600 workers in 2015 and 7,400 workers in 2020. Lastly, painters, constructions and maintenance occupations had an estimated 5,900 workers in 2015 and an estimated 6,600 workers in 2020 (**Appendix A.13**).

Appendix A.13 Top Five Construction Occupations in Construction in Three-County Region, 2015-2020

Occupations	2015	2016	2017	2018	2019	2020
1. Carpenters	10,500	10,700	11,100	11,300	11,600	11,800
2. Construction Laborers	9,300	9,500	9,800	10,000	10,200	10,400
3. Electricians	7,900	8,000	8,300	8,500	8,700	8,900
4. First-Line Supervisors of Construction Trades and Extraction Workers	6,600	6,700	6,900	7,100	7,200	7,400
5. Painters, Construction and Maintenance	5,900	6,000	6,200	6,400	6,500	6,600

Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

Looking at the wider three-county region, the supply of construction occupation labor in construction in 2015 is expected to be 69,710 workers and is forecasted to grow to 77,690 in 2020. There are an expected 180 apprenticeship openings in 2015 growing to 430 openings in 2017. Apprenticeships are then forecasted to average 310 apprenticeship openings per year from 2018 through 2020. Total educational completions in construction-related training programs is expected to stay constant at 480 total graduates per year[19] (**Appendix A.14**).

[19] Completions and apprenticeships are assumed to be at institutions operating at full capacity. As such there is no predicted change in the number of construction related educational completions or new apprenticeship openings in the future without larger training capacity. See Appendix.

Appendix A.14 Construction Occupations in Construction Supply Forecast in Three-County Region, 2015–2020

Source of Employment Supply	2015	2016	2017	2018	2019	2020
Retained Construction Workforce	61,800	62,900	64,900	66,500	67,800	69,400
Unemployment Claimants	7,250	7,220	7,230	7,190	7,420	7,500
Completions (est. of prior year)	480	480	480	480	480	480
New Apprenticeship Openings	180	320	430	310	310	310
Total	**69,710**	**70,920**	**73,040**	**74,480**	**76,010**	**77,690**

Sources: Puget Sound Regional Council, 2015; Conway Pedersen, 2015; National Center for Education Statistics Integrated Postsecondary Education Data System, 2015; Washington Department of Revenue, 2015; Washington Employment Security Department, 2015; Washington Office of Financial Management, 2015; Washington State Department of Labor & Industries, 2015; United States Census Bureau, 2015; United States Bureau of Labor Statistics, 2015; Community Attributes Inc., 2015.

Construction Employment Forecast

The construction employment forecast creates a future equilibrium that informs sources of final construction demand. The construction workforce is generated by collecting 2014 data on all construction occupations in NAICS code 23 and construction occupations in NAICS code 2373 specifically[20]. However, the data provided only accounts for covered employment. To correct for this, covered employment is scaled to total using the average scalar of covered to total construction employment from the Puget Sound Regional Council. These new employment totals are then forecasted using Conway Pedersen Economics construction forecasted growth rates through 2020.

Construction Demand Forecast

The construction demand forecast is generated using the forecasted construction employment for NAICS code 23 minus 2373 employment and employment for NAICS code 2373 separately. Then using Washington Department of Revenue gross business income (GBI) for NAICS code 23 and NAICS 2373 to get an estimated output across construction minus highway and street construction and highway and street construction separately. These two GBI figures are then used to find GBI to worker ratios, which allow forecasting future construction output based on forecasted construction employment.

With these estimates of construction output, it is then possible to use the Washington State Input-Output Model to decompose estimated future output across Personal Consumption Expenditure (households), Private Investment, State and Local Government Expenditure, Federal Government Expenditure and All Other Expenditure for Highway and

[20] This is because the construction demand forecast uses the Washington I/O ratio for Highway and Street Construction and Other Construction. See Construction Demand section in Appendix.

Street Construction (NAICS 2373) and Other Construction (NAICS 23 minus 2373). Using the previously calculated GBI to worker ratios, the decomposed future construction output estimates are transformed to find estimated sources of labor demand across the four macro categories as specified by the Washington Input-Output model.

Within State and Local Government expenditure specifically, county level sources of construction demand are found using capital investment plans for King, Snohomish and Pierce counties. Further conversations with King County planning officials suggested that these capital investment plans account for a relatively stable share of total construction demand into the future.

Construction Occupation Forecast

Construction occupation forecasts are generated in two distinct ways. One forecast deals with all construction occupations across all industries. Conversely, the other forecast focuses on construction occupations tied to the construction industry specifically. To find the occupational forecast of all construction occupations, the Washington Employment Security Department's (ESD) occupational projections. Using ESD's projections, occupational estimates are generated for all of the intervening years from 2015 through 2020.

To find the construction occupations within the construction industry is created using the ESD's estimations of construction industries across King, Snohomish and Pierce counties. With this data, a matrix containing the distribution of construction occupations as a percentage of total construction employment. These percentages are then applied to the construction employment forecasts to find construction occupations in construction into the future.

Construction Unemployment Claims Forecast

Unemployment claims data was obtained through the Washington Employment Security Department by SOC code. The data was then isolated to just include construction related SOC codes (codes 47 and 11-9021) across King, Pierce and Snohomish Counties. Unemployment claims forecasts were generated by applying Conway Pedersen's forecasted unemployment growth rates from 2015 to 2020 to each county individually.

Construction Occupation Supply Forecasts

Construction occupation workforce supply includes both those who are currently employed in construction and those actively seeking work in the construction sector. The supply of construction workers is defined as the sum of the following sources:

- Retained construction workers in from the previous year, net of retirements, career changers, and out-migration—what is referred to as "churn and attrition";
- Forecast unemployment claims made by construction workers; and
- New entrants to the workforce, which includes new apprentices in construction occupations as well as the previous year's graduates from construction-specific post-secondary education programs from institutions within the three-county region.

Retained construction workers represent those workers who were employed the year before and remain in the construction employment base in the current year, while accounting for movement across businesses in the construction sector. This was found by looking at the average separation rate for all construction occupations (generally SOC code 47[21]) in King, Snohomish and Pierce counties.

Unemployment claims for all construction occupations across all three counties are also integrated as a possible source of construction supply. Apprenticeships in construction are calculated by looking at when individuals started their apprentice training and looking at average completion rates to find when those apprentices would enter the construction occupation labor supply. Apprenticeship data is only available through an expected completion date of 2017. As such apprenticeship completed from 2018 through 2020 are an average of the previous three years estimated apprenticeships completions.

The last input of construction occupation supply is graduates of accredited training programs related to construction occupations. This is found using educational attainment data from the National Center of Education Statistics Integrated Postsecondary Education System (IPEDS). IPEDS provides the number of graduates by educational program, defined according to the Classification of Instructional Programs (CIP) for higher education programs across King, Snohomish and Peirce counties.

Each CIP code maps to multiple SOC codes because graduates of the same program may go onto be employed in a wide range of occupations. Similarly, each occupation may draw graduates from several relevant CIP codes. Therefore, programs matching to one or more construction occupation must be summarized across educational institutions in the three-county region in order to determine the number of graduates that

[21] SOC code 11-9021 is also included as it represents Construction Managers, which otherwise wouldn't be covered by SOC code 47)

will be able to fill forecasted annual construction openings within King, Snohomish and Pierce counties.

Single and Multi-Family Housing Permit Forecast

Single and multi-family housing forecasts are generated by collecting housing permit construction data from the United States Census for King, Pierce and Snohomish Counties. Then, using Conway Pedersen Economics housing permit forecasts for each of these counties, the housing permits are forecasted from 2015 to 2020 for each of these counties.

Distressed Zip-Code Selection

Appendix A.15 is complete list of King County ZIP codes ranked by how distressed they are. Ranking is done by combining each ZIP Code's rank in:

- Percent unemployed
- Percent persons below two times the federal poverty rate
- Percent persons over 25 with no college degree

For context, each ZIP Code's occupational diversity in construction is also presented. This number is a sum of female and minority construction workers divided by total construction workers by ZIP Code.

Appendix A.15 Complete Distressed ZIP Code Ranking of King County ZIP Codes, 2013

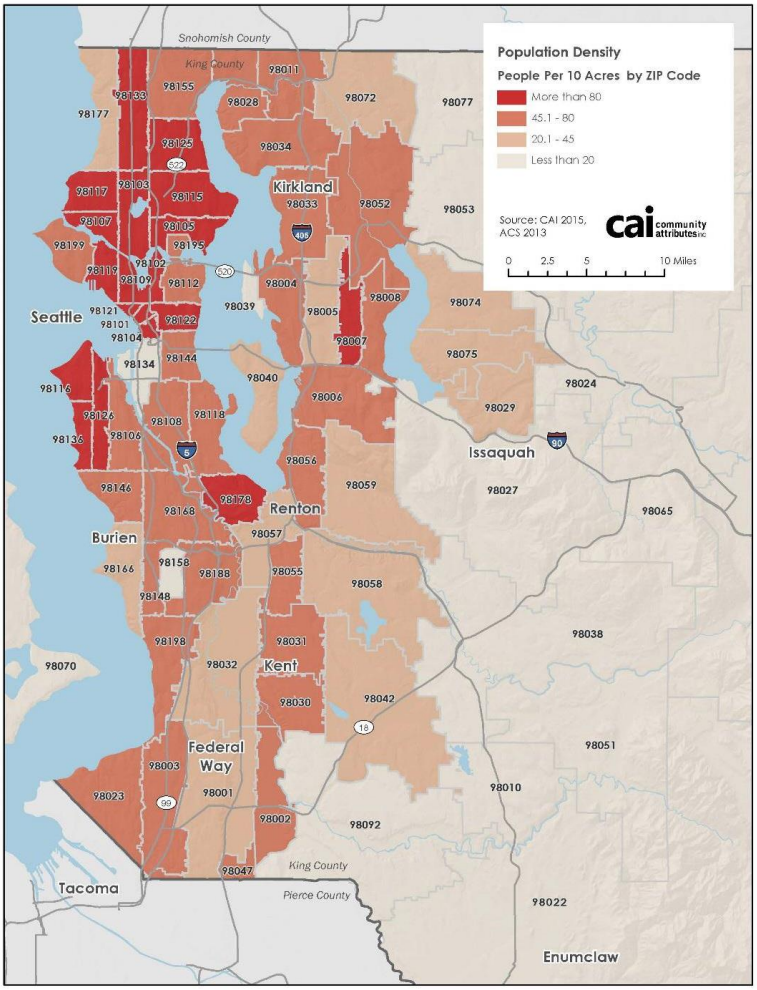
Rank	City / Neighborhood	Distressed Zip Codes	Share Unemployed	Share Under 200% Federal Poverty Line	Share with No College Degree	Share of Minority and Women Construction Workers out of Construction Workers
1	Kent/Auburn	98002	8%	44%	87%	43%
2	Pioneer Square	98104	4%	56%	73%	83%
3	Pacific	98047	9%	41%	90%	29%
4	White Center	98146	6%	38%	73%	56%
5	East Kent	98030	7%	42%	78%	46%
6	Rainier Beach	98178	5%	33%	72%	72%
7	Boulevard Park/Tukwila	98168	8%	44%	83%	56%
8	Seward Park	98118	5%	41%	63%	80%
9	Georgetown	98108	6%	41%	68%	68%
10	SeaTac/Tukwila	98188	7%	44%	80%	55%
11	Federal Way	98003	6%	39%	80%	54%
12	Bitter Lake	98133	5%	29%	58%	35%
13	Des Moins	98198	5%	36%	79%	45%
14	Burien	98148	5%	35%	85%	26%
15	Northeast Kent	98031	5%	29%	73%	55%
16	Belltown	98121	3%	33%	41%	0%
17	Central Business District	98101	3%	36%	43%	26%
18	Federal Way	98023	5%	30%	71%	39%
19	Delridge	98126	3%	25%	60%	30%
20	South Renton	98055	5%	30%	68%	41%
21	Lake City	98125	5%	28%	48%	45%
22	Delridge	98106	4%	35%	61%	47%
23	Madrona	98122	2%	34%	38%	43%
24	Auburn	98001	7%	28%	80%	32%
25	Lake Forest Park	98155	6%	22%	53%	19%
26	West Kent	98032	5%	38%	75%	57%
27	Central Renton	98057	5%	39%	72%	56%
28	Mount Baker	98144	4%	31%	45%	63%
29	Northeast Renton	98056	4%	23%	63%	43%
30	Broadway	98102	3%	20%	26%	39%
31	Bothell	98011	4%	22%	52%	16%
32	Burien	98166	4%	24%	63%	33%
33	Queen Anne	98109	2%	18%	32%	6%
34	East Bellevue	98007	2%	25%	40%	55%
35	North Kirkland	98034	3%	18%	51%	30%
36	Southeast Renton	98058	5%	22%	63%	48%
37	Auburn	98092	5%	24%	74%	28%
38	Ballard	98117	3%	14%	35%	10%
39	West Queen Anne	98119	3%	20%	32%	16%
40	Kenmore	98028	3%	19%	47%	19%
41	Green Lake	98103	2%	18%	26%	14%
42	Ballard	98107	1%	17%	32%	5%
43	West Seattle	98136	2%	16%	41%	19%
44	Kent	98042	4%	15%	69%	20%
45	Laurelhurst/University District	98105	2%	46%	23%	13%
46	East Renton	98059	4%	18%	54%	31%
47	West Seattle	98116	2%	17%	36%	10%
48	Enumclaw	98022	5%	25%	79%	18%
49	Industrial District	98134	4%	32%	51%	81%
50	Broadview	98177	4%	16%	38%	25%
51	West Lake Sammamish	98008	3%	17%	44%	31%
52	Ravensdale	98051	9%	10%	87%	13%
53	Skykomish	98288	4%	56%	67%	0%
54	Wedgwood	98115	2%	17%	28%	22%
55	Black Diamond	98010	3%	13%	69%	30%
56	South Kirkland	98033	2%	13%	36%	4%
57	Redmond	98052	2%	15%	33%	35%
58	Maple Valley	98038	3%	10%	65%	11%
59	Madison Park	98112	2%	14%	25%	5%
60	Fall City	98024	2%	20%	67%	29%
61	East-Central Bellevue	98005	2%	19%	31%	53%
62	Vashon	98070	3%	14%	48%	3%
63	Central Bellevue	98004	2%	14%	28%	17%
64	Woodinville	98072	1%	11%	46%	11%
65	Magnolia	98199	2%	13%	31%	4%
66	South Bellevue	98006	2%	13%	31%	51%
67	Duvall	98019	2%	13%	60%	14%
68	Northeast Issaquah	98029	2%	9%	34%	22%
69	Snoqualmie	98065	2%	7%	45%	12%
70	North Bend	98045	1%	16%	59%	1%
71	Central Redmond	98053	2%	7%	35%	3%
72	Woodinville	98077	2%	7%	40%	0%
73	Central Issaquah	98027	2%	14%	38%	8%
74	Carnation	98014	2%	11%	39%	17%
75	Sammamish	98075	1%	7%	31%	13%
76	Mercer Island	98040	0%	6%	18%	21%
77	Sammamish	98074	1%	6%	23%	4%
78	Medina	98039	0%	9%	15%	0%

Sources: United States Census Bureau, 2015; Community Attributes Inc., 2015.

Additional Maps

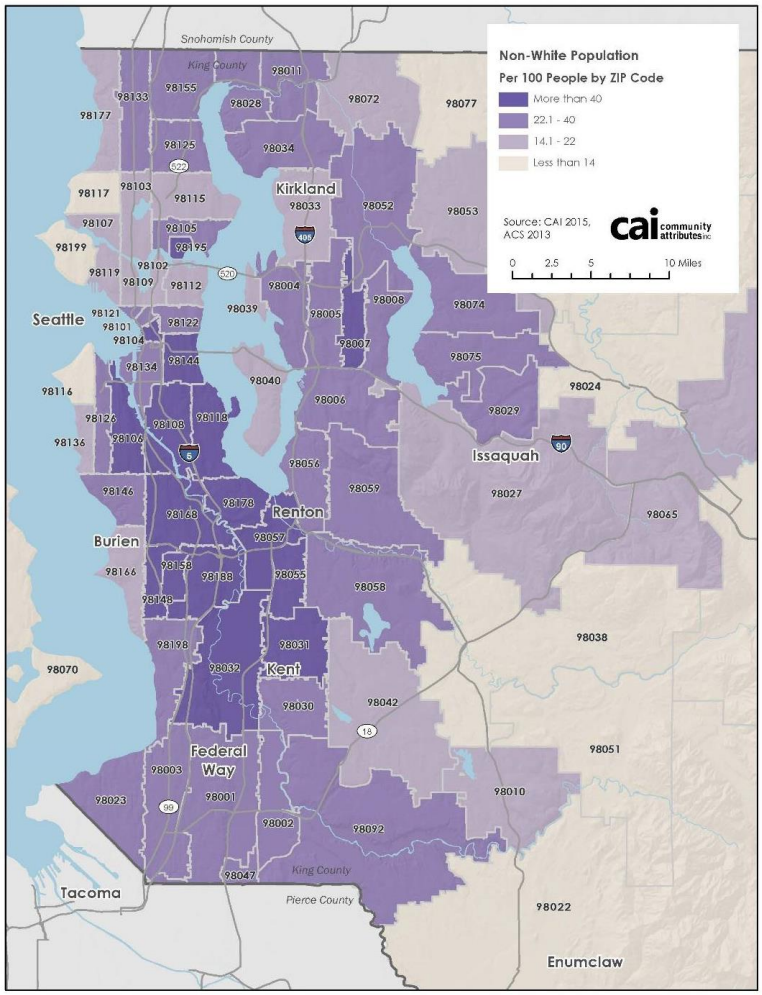
All the maps presented in the main body of the report show demographic data by acreage across King County. As such, the distribution of maps is highly influenced by the population density of King County (**Appendix A.16**). Other demographic maps are shown by per capita.

Appendix A.16 Population Density



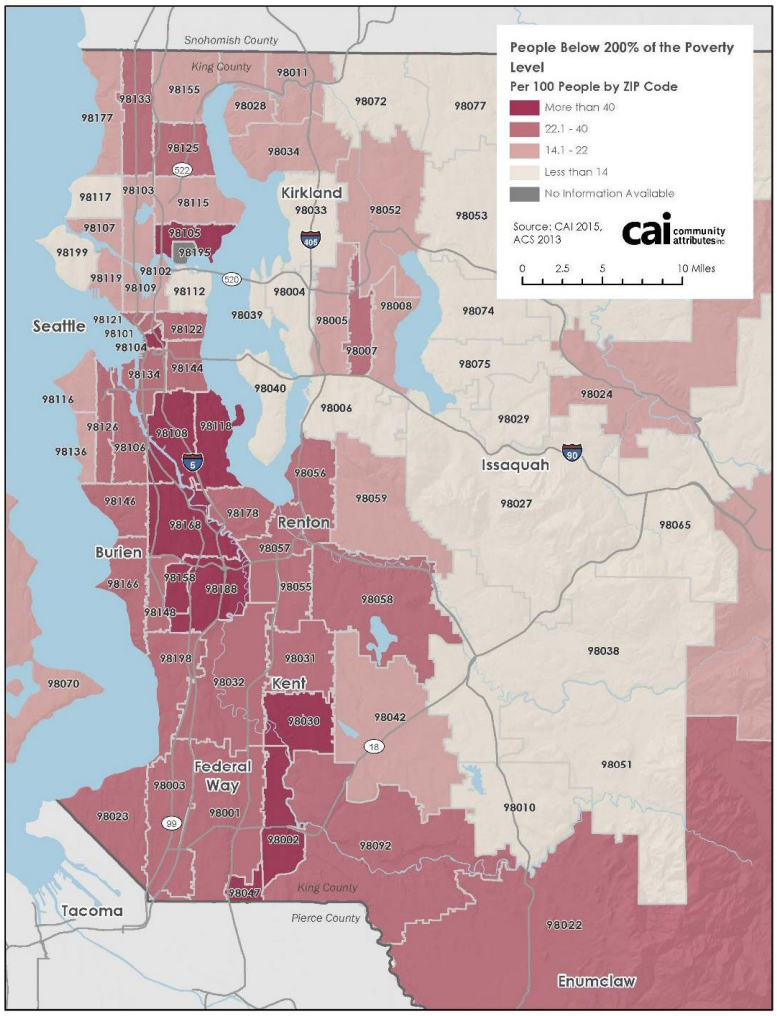
Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Appendix A.17 Non-White Population per 100 People by ZIP Code



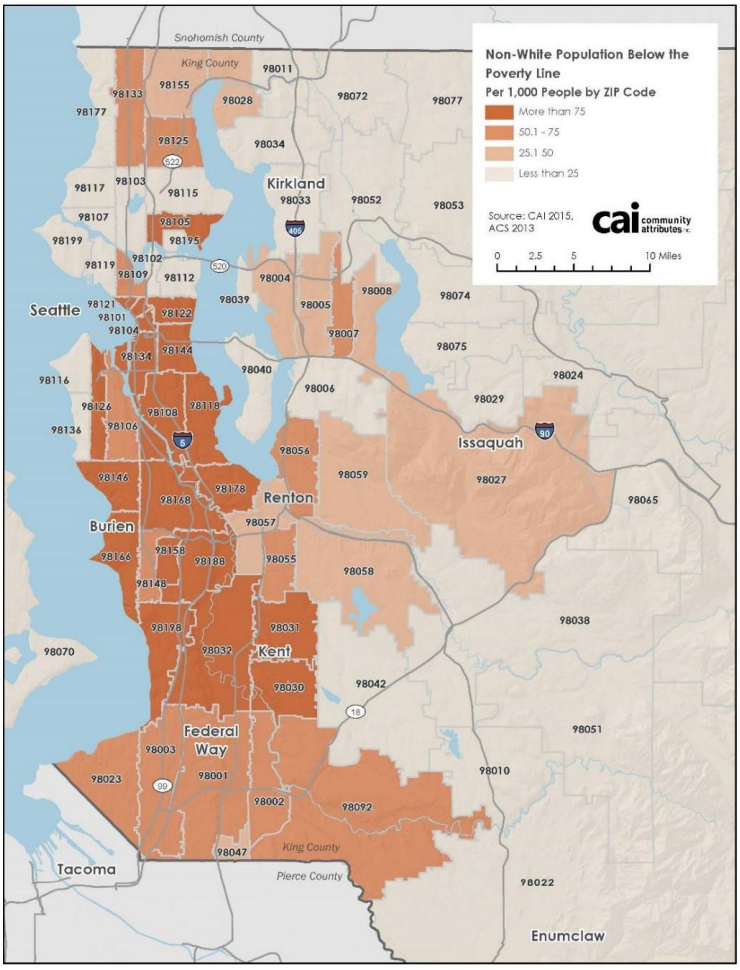
Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Appendix A.18 People Below 200% of the Poverty Level per 100 people by ZIP Code



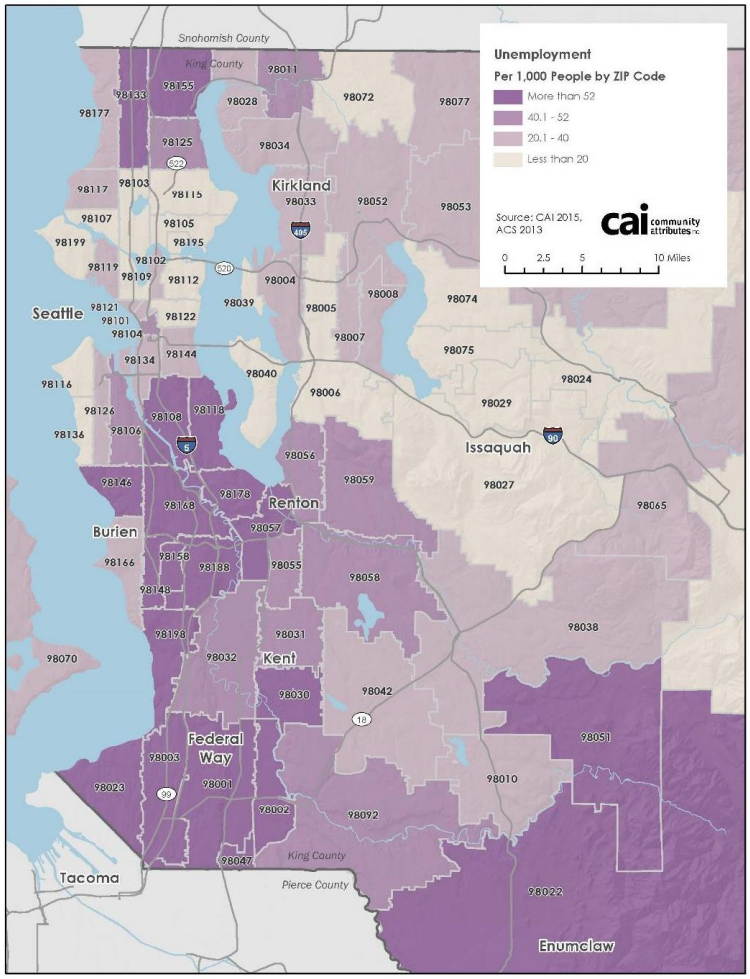
Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Appendix A.19 Non-White Population Below the Poverty Line per 1,000 people by ZIP Code



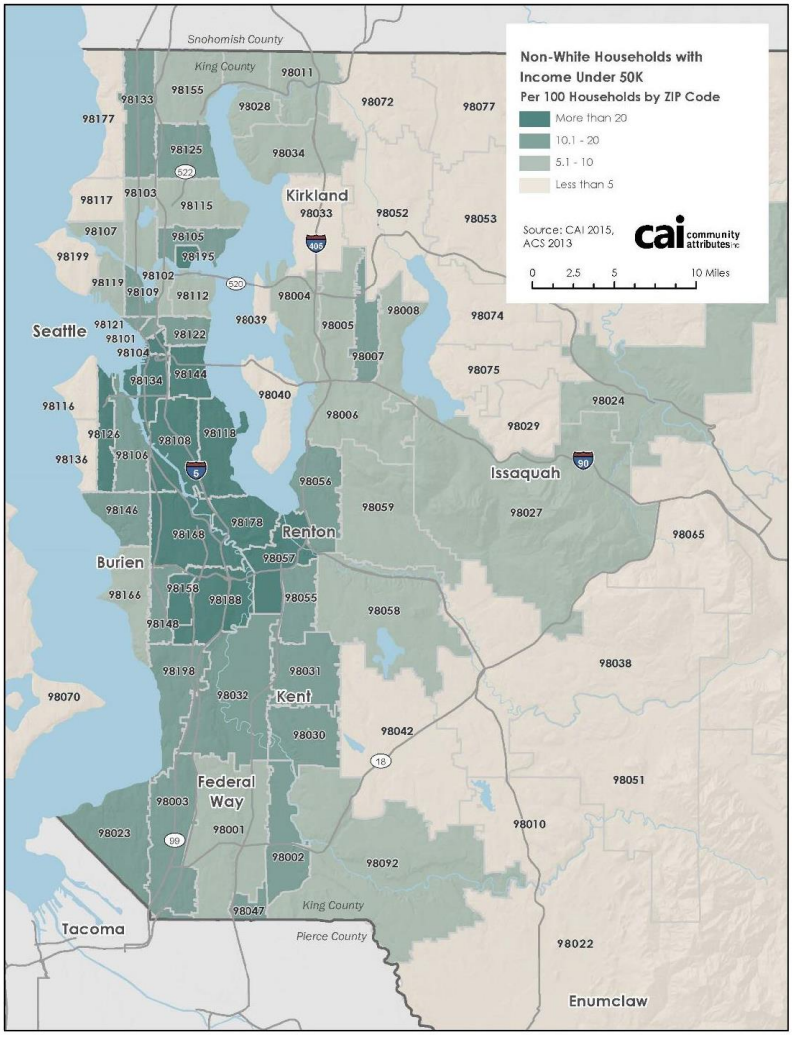
Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Appendix A.20 Unemployment per 1,000 people by ZIP Code



Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Appendix A.21 Non-White Households with Income Under $50,000 per 100 households by ZIP Code



Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Appendix A.22 No College Degree per 100 people by ZIP Code

Sources: American Community Survey, 2015; Community Attributes Inc., 2015.

Appendix B:

City of Seattle Ordinance #124690

City of Seattle, 2014

City of Seattle Legislative Information Service

Information retrieved on January 28, 2016 12:18 PM

Council Bill Number: 118282

Ordinance Number: 124690

AN ORDINANCE relating to City public works; providing findings regarding priority hire; establishing a policy to promote training and career opportunities for individuals in the construction trades; establishing priorities for the hiring of residents in economically distressed areas with particular priority for Seattle and King County; directing the Department of Finance and Administrative Services to execute a project labor agreement for public works projects estimated to cost $5 million or more; directing that the program be evaluated and reported on annually; adding a new Chapter 20.37 to the Seattle Municipal Code, which includes Sections 20.37.010, 20.37.020, 20.37.030, 20.37.040, 20.37.050, 20.37.060, 20.37.070, and amending Seattle Municipal Code Sections 20.38.005 and 20.38.010 in connection thereto.

Status: Passed
Date passed by Full Council: January 20, 2015
Vote: 9-0
Date filed with the City Clerk: February 2, 2015
Date of Mayor's signature: January 29, 2015
(about the signature date)

Note: Pursuant to SMC 1.04.020.C, this Bill shall be in effect 45 days after passage by the City Council.

Date introduced/referred to committee: December 1, 2014
Committee: Housing Affordability, Human Services, and Economic Resiliency
Sponsor: CLARK, HARRELL, LICATA, O'BRIEN
Committee Recommendation:
Date of Committee Recommendation:
Committee Vote:

Index Terms: FINANCE-AND-ADMINISTRATIVE-SERVICES, LABOR, EQUAL-OPPORTUNITIES, JOB-TRAINING, EMPLOYMENT, CONTRACT

Fiscal Note: Fiscal Note to Council Bill No. 118282

Electronic Copy: PDF scan of Ordinance No. 124690

Text

CITY OF SEATTLE

ORDINANCE _____

COUNCIL BILL _____

AN ORDINANCE relating to City public works; providing findings regarding priority hire; establishing a policy to promote training and career opportunities for individuals in the construction trades; establishing priorities for the hiring of residents in economically distressed areas with particular priority for Seattle and King County; directing the Department of Finance and Administrative Services to execute a project labor agreement for public works projects estimated to cost $5 million or more; directing that the program be evaluated and reported on annually; adding a new Chapter 20.37 to the Seattle Municipal Code, which includes Sections 20.37.010, 20.37.020, 20.37.030, 20.37.040, 20.37.050, 20.37.060, 20.37.070, and amending Seattle Municipal Code Sections 20.38.005 and 20.38.010 in connection thereto.

WHEREAS, the City of Seattle funds and contracts for construction projects to construct, repair and maintain municipal facilities and infrastructure; and

WHEREAS, the City of Seattle protects the City and public interest by ensuring all such projects under its purview are constructed and administered in accordance with plans, specifications, contract provisions, and provisions protecting the social and economic justice policies of the City; and

WHEREAS in 2013 the City of Seattle spent approximately $219 million on public work contracts through payments to private construction companies; and

WHEREAS, the City's capital investment dollars create the equivalent work hours of two jobs per million dollars spent, providing enough total hours to equal approximately 438 full time construction jobs in 2013, with a similar number of total hours in most years; and

WHEREAS, the City of Seattle will continue major construction project bids and awards in future years;

WHEREAS, the City of Seattle is a strong supporter of and has found construction job training programs, including apprentice and pre-apprenticeship programs, to be an effective way to prepare individuals for entry into construction jobs, and to ensure women, people of color, and otherwise disadvantaged individuals, particularly those who are Seattle residents, can acquire the necessary job skills and be prepared to successfully pursue construction careers; and

WHEREAS, under Seattle Municipal Code Chapter 20.38, the City requires a percentage of contract labor hours on public works to be performed by apprentices enrolled in registered apprentice training programs, and pre-apprentice and apprentice training programs have successfully established a meaningful diversity of apprentice workers; and

WHEREAS, apprentices on City projects in 2013 include 38 percent people of color and more than 14 percent women representing a greater percentage of worker hours on City projects than the percentage of people of color and women in journey level craft hours; and

WHEREAS, since 2002 the City of Seattle has pursued aspirational programs for women and minority business participation in City funded construction work, and established pursuit of aspirational goals for such businesses beginning in 2005 through Seattle Municipal Code Chapter 20.42; and

WHEREAS, the City's Women and Minority Business (WMBE) aspirational goals have increased the share of dollars spent with underutilized women and minority businesses for construction of City funded projects; and

WHEREAS, the City's progress in WMBE business utilization evidences the opportunity to develop similar improvements for women and minority workers in construction, and also recognizes that the gains made by WMBE

firms need to be specifically considered, protected and not harmed by any new City contracting policies for construction firms performing public works for the City; and

WHEREAS, the City has executed a Community Workforce Agreement on the Alaskan Way Seawall Replacement Project with aspirational goals and successful outcomes to increase employment of women, racial minorities and those from economically distressed areas as defined by zip code; and

WHEREAS, the City Council and the Mayor seek to increase and enhance the skilled construction labor force for City public works, utilizing a Project Labor Agreement (PLA) and strategies to recruit individuals who are underrepresented in the construction trades into training and job placements, especially those individuals residing in economically distressed areas of Seattle and King County; and

WHEREAS, on September 23, 2013, the Council adopted joint Resolution 31485, which established a Construction Careers Advisory Committee (CCAC) and asked CCAC members to recommend to the Mayor and City Council policies, programs and resources to increase career opportunities for underrepresented workers on public works projects funded by the City of Seattle; and

WHEREAS, the City commissioned professional studies and analyses to guide the CCAC and the City, including the Construction Industry Labor Market Assessment, Community Attributes Inc., March 2014; Worker Profile in City of Seattle Construction Projects, UCLA Labor Center, February 2014; and Exploring Targeted Hire: An Assessment of Best Practices in the Construction Industry, UCLA Labor Center, March 2014; and

WHEREAS, the CCAC delivered its report to the Mayor and City Council on July 30, 2014, and recommended the City adopt an ordinance to require a PLA for all city funded projects at or above a construction budget of $5 million; and

WHEREAS, the CCAC recommended that the PLA also provide accommodations for non-union contractors, include resources for training programs, and require higher rates for hiring pre-apprentice and apprentice workers as well as mandating the hiring of residents in economically distressed areas, particularly in Seattle and King County, and encouraging aspirational goals for the hiring of women and racial minorities; and

WHEREAS, the Mayor and City Council considered the CCAC's recommendations, other jurisdictions' experiences, the City's experience under the Alaskan Way Seawall Replacement Project Community Workforce Agreement that was executed on September 7, 2012, and input from contractors, labor union representatives, community advocates, women and minority businesses, training providers and policy experts;

NOW, THEREFORE,

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. The City Council makes the following legislative findings of fact and declarations of intent:

A. Based on studies commissioned by the City of Seattle, recommendations of the Construction Careers Advisory Committee, and numerous public discussions, the Mayor and City Council find that it is in the City's and public's best interest to increase the supply of qualified construction workers, particularly those historically underrepresented in the construction industry, including women, racial minorities, and those who live in economically distressed areas of Seattle and King County.

B. The Mayor and City Council have a commitment to ensuring equity in the public works workforce where disparities exist between underrepresented workers' availability to work and their opportunity to be hired and establish a career in the construction trades.

1. Chapter 20.42 of the Seattle Municipal Code requires contractors to actively solicit employment of women and minority group members, and authorizes the Director of Finance and Administrative Services to assist contractors awarded or bidding on City projects in such efforts.

2. The City commissioned the Construction Industry Labor Market Assessment, which found that women, irrespective of race, are underrepresented in the construction industry. Between 2009 and 2013, 10 percent fewer women finished their apprentice training program than males (p.35).

3. The Construction Industry Labor Market Assessment also found that between 2009 and 2013, 14 percent fewer racial minority apprentices finished their apprentice training program than white apprentices (p.36).

4. The Construction Industry Labor Market Assessment also found that underrepresented workers face barriers to completing apprentice training. Between 2009 and 2013, 65 percent of the racial minorities exiting apprenticeships did not complete the programs compared to 51 percent of the white apprentices who failed to complete the program. During that same time period, 65 percent of all women, irrespective of race, failed to complete their programs compared to 55 percent of all men (p.35-36).

5. According to American Community Survey data, the County's average unemployment rate in 2012 was 6.7 percent; however, the unemployment rate was greater for certain portions of the County's population: Latinos were at 8.4 percent, headof-household women were at 7.6 percent; and African-Americans were at 12.9 percent.

C. The Mayor and City Council find that Seattle has geographic areas of economic distress as evidenced by poverty indicators; including poverty levels, concentrated unemployment, and gaps in educational attainment. Additionally, areas in King County, outside of the City, have similar areas of economic distress that affect workforce availability and Seattle's neighboring communities in the County. The City seeks to act effectively and expeditiously to encourage solutions toward economic growth and job creation in areas of the City that are economically distressed as evidenced by comparatively high levels of poverty, unemployment rates and education attainment.

1. The City finds that these geographic areas in Seattle and King County that have high levels of poverty, unemployment, and low-educational attainment rates may be defined by zip codes, and the City finds that these areas require measures to encourage economic growth, job creation and/or job retention for residents of these areas.

2. The Seawall CWA has an aspirational goal to hire 15% of the workforce from economically distressed zip codes as defined and prioritized by the City. Seawall Article IX. The City compared zip codes in King County using the following criteria;1) number of people living under 200% of the Federal Poverty Level, 2) number of unemployed individuals, and 3) number of individuals without a college degree. Zip codes with a high concentration, i.e. density per acre of at least 2 out of the 3 criteria, were identified as Economically Distressed Areas. For the Seawall project the City identified 15 zip codes in Seattle and 11 zip codes in King County.

D. The Mayor and City Council find that a Project Labor Agreement ("PLA") is an effective tool to manage public works projects, reduce risk of project delays, reduce schedule interruptions, and reduce labor disruptions and labor shortages. A PLA is also an effective tool to improve job-site safety and overall working conditions.

1. The Exploring Targeted Hire: An Assessment of Best Practices in the Construction Industry study reports that PLAs are an effective tool to increase access to qualified labor, assure labor harmony and prioritize employment of targeted disadvantaged workers (p.24).

2. In September 2012, the City executed a PLA entitled the "Alaskan Way Seawall Replacement Project Community Workforce Agreement" (the "Seawall PLA"). In addition to provisions to avoid project delays and achieve labor harmony, the Seawall PLA includes aspirational goals to promote employment opportunities on the project for women, racial minorities and those from economically distressed areas as defined by zip code, and the Seawall PLA is successfully achieving these goals.

3. The City's experience with the Seawall PLA offers evidence that PLAs may be negotiated in a manner that allows non-union ("open-shop") contractors to successfully bid, compete and win contract awards. City data shows that as of August 22, 2014, the percentage of open-shop subcontracts is 56.9 percent in the Alaskan Way Seawall Replacement Project whereas traditional city roadway projects have a rate of 56.4 percent open-shop subcontracts.

4. The City has a commitment to providing education, training and technical assistance to open shop contractors unfamiliar with a union environment and those unaffiliated with a labor union.

5. The City's experience with the Seawall PLA also provides evidence that PLAs are consistent with the utilization of Women and Minority Businesses; as of July 31, 2014, 23 percent of total construction payments on the project went to Women and Minority Businesses as compared to the typical 14 percent the City has historically experienced on roadway projects when considering all such projects within the past three calendar years.

E. The City commissioned the Construction Industry Labor Market Assessment, which found that the City may reasonably anticipate a reduced surplus of qualified labor and possible labor shortages in certain construction trades by 2019. The City is concerned that these labor shortages may increase construction costs on the City's public works projects unless the City supports efforts to increase the supply of trained apprentices and journey-level workers for local public works projects. Other pertinent findings from this study that support the City's need to minimize the risk of anticipated labor shortages are as follows:

1. The demand for construction trade workers is calculated to increase through 2019, leaving only a 5.8 percent marginal surplus of workers by 2019 (pg. ii), such that the City may expect worker shortages in certain construction trades needed to execute the City's public works projects.

2. Workers likely to respond to new training and employment opportunities are those who (i) live in a local region that promotes new training and employment opportunities, (ii) can travel to a jobsite located in the local region a worker lives in without significant advance notice and (iii) are unemployed or living in poverty.

3. The Washington Legislature has found, in RCW 39.04.300, that a trained and qualified workforce is critical to accomplish public works and that qualified apprentice training programs are essential to, and effective in, assuring an adequate supply of trained workers. RCW 39.04.320 (1)(a) provides that for all public works estimated to cost $1 million or more, the contract specification shall require that no less than 15 percent of labor hours be performed by an apprentice, absent statutory exceptions or adjustments for specific projects for specific reasons. Under Seattle Municipal Code Chapter 20.38 titled "Apprenticeship Program," the Department of Finance and Administrative Services and its Director are responsible for implementation of these requirements on City of Seattle public works contracts.

4. Exploring Targeted Hire: An Assessment of Best Practices in the Construction Industry, a study commissioned by the City, found that policies in Milwaukee, Cleveland, the City of Los Angeles, and San Francisco and other jurisdictions are effective for recruiting those individuals that are available, but not fully represented in the construction labor supply (p.27, p.32).

F. The City has a commitment to reduce environmental impacts by promoting environmentally sustainable practices that reduce commuting distances, lower transportation costs, lower greenhouse gas emissions and brake dust emissions, thereby fulfilling the goals of Council Resolution 31447 that adopted the Seattle Climate Action Plan in June 2013.

1. City public works projects employ construction workers living throughout the tri-county region, and beyond, who travel to construction job sites located within the City and King County. A City-commissioned study, The Worker Profile in City of Seattle Construction Projects found that among the construction trade workers employed on City public work projects, 69 percent of the workforce travel into King County from other regions, resulting in negative impact to the environment.

2. City data indicates the City could reduce more than 80,000 miles driven by prioritizing those residing closer to City public works job sites. The Worker Profile in City of Seattle Construction Projects study shows that in a review of 33 City-funded projects, 6% of the workers lived in Seattle; with 25% being from King County.

Section 2. A new Chapter 20.37 "Priority Hire" is added to the Seattle Municipal Code as follows:

Chapter 20.37 -Priority hire

20.37.010 Definitions

When used in this Chapter 20.37, the following words and phrases shall have the meanings given below unless the context in which they are included clearly indicates otherwise:

"Apprentice" means any worker enrolled in an Apprentice Training Program.

"Apprentice Training Program" means a program registered and in compliance with the Washington State Apprenticeship and Training Council as defined by RCW 49.04 and WAC 296-05-011 and WAC 296-05-013.

"City" means The City of Seattle.

"Contractor" means any person, firm, partnership, owner operator, limited liability company, corporation, joint venture, proprietorship, trust, association or other legal entity that employs individuals to perform work on Covered Projects, including general contractors, subcontractors of all tiers, and both union and non-union entities.

"Core Employee" means an employee of an Open-Shop Contractor that meets the Core Employee criteria established under a PLA.

"Covered Project" means a City public works project with a project budget at or above $5 million.

"Department" means The Department of Finance and Administrative Services or any successor department.

"Director" means The Director of Finance and Administrative Services or his or her designee or successor.

"Dispatch" is the process by which a union refers workers for employment to contractors under the authority of a collective bargaining agreement. The process typically mandates the distribution of work via a "first in, first out" priority but can legally be adjusted via special agreements to allow for out of order dispatching and priority worker hiring.

"Economically Distressed Area" means a geographic area defined by zip code and found by the Director to have a high concentration of individuals; 1) living at or below 200% of the Federal Poverty Level, 2) unemployed, and or 3) without a college degree, compared to other zip codes. King County zip codes, with a high density per acre of at least two out of the three criteria, will be identified as Economically Distressed Areas. There shall be two classes of such zip codes: tier one zip codes located within the City of Seattle and tier two zip codes located within King County and outside of the City of Seattle.

"Helmets to Hardhats" means a nonprofit program that connects National Guard, Reserve, retired and transitioning active-duty military service members with skilled training and quality career opportunities in the construction industry.

"Jobs Coordinator" means a City Employee or third party entity that facilitates the hiring of Priority Workers in collaboration with Contractors and Union Dispatch.

"Journey-level" means an individual who has sufficient skills and knowledge of an occupation, either through a formal Apprentice Training Program or through practical on-the-job work experience, to be recognized by a state or federal registration agency and/or an industry as being fully qualified to perform the work of the occupation. Practical experience must be equal to or greater than the term of apprenticeship.

"Labor Hours" means hours performed on Covered Projects by workers who are subject to prevailing wages under RCW 39.12.

"Non-manual Position" means a job position on a public works project that is not primarily for the purpose of performing physical construction work, including but not limited to, superintendents, supervisors, staff engineers, quality control and quality assurance personnel, time keepers, mail carriers, clerks, office workers, messengers, guards, safety personnel, emergency medical and first aid technicians and other engineering, administrative, supervisory and management employees.

"Open-Shop Contractor" means a Contractor that is not a signatory to a collective bargaining agreement with a Union representing the trade(s) of the Contractor’s workers, also known as non-union Contractors.

"Pre-apprentice" means a student enrolled in a construction Pre-apprentice Training Program recognized by the Washington State Apprenticeship and Training Council.

"Pre-apprentice Graduate" means an individual who completed a Pre-apprentice Training Program and has been accepted into an Apprentice Training Program, including those who are still completing their first year of Apprentice training.

"Pre-apprentice Training Program" means an education-based program, recognized by the State of Washington Apprenticeship and Training Council and endorsed by one or more registered apprenticeship sponsors, with a focus on educating and training students to meet or exceed minimum qualifications for entry into an Apprentice Training Program upon graduation.

"Preferred Entry" means an agreement provided by a PLA that allows Pre-apprentice Graduates and Helmets to Hardhats veterans, who are also Priority Workers, entry into an Apprentice Training Program ahead of other applicants.

"Priority Worker(s)" means an individual prioritized for recruitment, training, and employment opportunities because the individual is a Resident in an Economically Distressed Area.

"Project Budget" means the construction budget for the project that includes all costs estimated to be paid to Contractors, including contingency funds, as estimated at the time of bid or, if absent a bid, at the time of the contract award.

"Project Labor Agreement (PLA)" means an agreement executed between the Director, on behalf of the City, and Labor Unions that represent workers who typically perform on City public works projects.

"Resident" means a person who provides evidence to the satisfaction of the Director demonstrating that the person lives at a particular address.

"Training Programs" are pre-apprenticeship and/or registered apprenticeship programs.

"Union" is a representative labor organization whose members collectively bargain with employers to set the wages and working conditions in their respective trade or covered scope of work.

"Women and Minority Business (WMBE)" has the same meaning as given under Chapter 20.42, as may be amended from time to time.

20.37.020 Director powers

A. The Director shall implement and administer this Chapter 20.37 and may develop and adopt rules consistent with the requirements of this Chapter 20.37.

B. The Director may reduce or waive requirements or goals of this Chapter 20.37 when impracticable for a Covered Project for one or more of the following reasons: when work is required due to an emergency, when work is subject to limitations of a sole source, when requirements or goals would be inconsistent with a grant or agreement with a public agency, when requirements or goals are inconsistent with federal funding or other funding sources, when the project is in a remote location, when superseded by safety or other legal requirements, or absent an executed Project Labor Agreement.

20.37.030 Training assistance

The Director may assist local Pre-apprentice or Apprentice Training Programs to encourage additional programs, classes and curriculum that may increase graduation, retention and employment rates of women, racial minorities, other preapprentice program participants, and or Priority Workers.

20.37.040 Priority Hire

A. For Covered Projects which are not found impracticable under Section 20.37.020, the Director shall establish in the bid documents the required percentage of Labor Hours to be performed by Priority Workers. The Director

shall establish the percentages separately for Apprentices and for Journey-level workers. Contractors and Dispatch under a PLA shall seek to first hire and dispatch Priority Workers so as to meet or exceed the required percentages.

B. For each Covered Project, the Director shall establish the greatest practicable required percentage of Labor Hours to be performed by Priority Workers by using past utilization percentages on similar public works projects from the previous three calendar years, and shall increase that percentage by no less than two full percentage points above past performance. The Director shall calibrate these required percentages annually and shall consult with the Priority Hire Implementation and Advisory Committee regarding these requirements.

C. In order to maximize the impact of this program in Economically Distressed Areas, the Director shall set projectspecific requirements with the intent of achieving a total percentage of no less than 20% for all Labor Hours performed annually by Priority Workers on the combined total of Covered Projects by 2016, and shall strive to achieve 40% of Labor Hours performed by Priority Workers by 2025. Annual percentage rates will be measured January 1December 31 of each applicable year.

D. In order to meet the percentage of Labor Hours to be performed by Priority Workers, the Director shall require Contractors and Dispatch under a PLA to first seek to employ a Priority Worker who is a Resident in an Economically Distressed Area within Seattle City limits. The second priority shall be workers from Economically Distressed Areas within King County, and then workers from any other Economically Distressed Area as needed to meet the percentage of Labor Hours to be performed by Priority Workers. The Director shall establish in consultation with the Advisory and Implementation Committee, by Director's Rule the specific process by which Contractors, Union Dispatch and the Jobs Coordinator will collaborate in order to facilitate the hiring of Priority Workers.

E. For Covered Projects, the Director shall ensure the availability of a Jobs Coordinator to perform the following functions: maintain a database of pre-qualified Priority Workers for referral to work on a Covered Project; network with various work source centers, community, non-profit and faith-based organizations to facilitate the identification of Priority Workers; and facilitate referral and coordination around training and employment of Priority Workers between contractors, Unions and Training Programs.

F. The Director shall enforce the requirements in this Chapter 20.37 and may use actions such as withholding invoice payments or debarment to the extent allowed by contract as authorized by Seattle Municipal Code Chapter 20.70.

G. Public works bidders shall evidence good faith efforts to achieve aspirational goals for a percentage of Labor Hours performed by women and racial minorities. The Director shall establish the greatest practicable aspirational goals, using the average of past utilization on similar projects in the previous three calendar years and increasing that percentage by no less than two full percentage points beyond past performance. The Director shall calibrate such goals annually.

H. In determining compliance with the percentage hiring requirements of sections 20.37.050 (A) and (B), the Director shall exclude from the calculation Labor Hours performed by Residents of states other than the State of Washington. The Director shall track Labor Hours performed by Residents of states other than the State of Washington and shall review this percentage annually together with the Priority Hire Implementation and Advisory Committee.

I. If approved by the Director, Contractors may receive a credit of up to 10% applied to their required Priority Worker hours by 1) hiring Priority Workers to fill Non-manual Positions; and 2) continuing to employ workers in these positions for the duration of the Contractor's work on the Covered Project.

I. The Director shall establish a Priority Hire Implementation and Advisory Committee that includes representatives of the following groups; 1) Labor Unions, 2) community organizations, 3) Contractors, including at least one WMBE firm, and 4), Apprentice and Pre-apprentice Training Programs. The Committee shall provide an advisory role to the City regarding the implementation and effectiveness of the Priority Hire policy. Each of the four named groups above shall make nominations from among themselves for Committee representatives to the Mayor. The Mayor shall appoint no less than two and no more than three persons from each group to the Committee. The Department will convene the Committee on a regular basis, at least once every quarter, and will provide the Committee with information about program performance. The Director shall assign at least one staff member from FAS to

support the work of the Committee. The Committee shall submit an annual report in writing to the Mayor and City Council, and may submit recommendations, findings or other reports to the Director, Mayor or City Council, for consideration as appropriate. The Committee shall establish rules for its procedure.

20.37.050 Project labor agreement

A. The Director shall negotiate and execute a Project Labor Agreement that applies to all Covered Projects other than projects deemed impracticable under Section 20.37.020. The PLA shall comply with and include the applicable terms of this ordinance and any applicable rules and standards developed by the Director. The PLA shall require that all Contractors agree to abide by the terms of the PLA in order to compete and serve on the Covered Project.

B. The Director shall include a requirement in the PLA that one of every five Apprentices employed on a Covered Project be Preferred Entry candidates.

C. The Director shall establish provisions within the PLA that encourage Open-Shop subcontractors to compete and participate in Covered Projects, including reimbursing existing employer sponsored dual-benefit health and pension costs paid by OpenShop Contractors, which are determined by the City to be compliant with usual benefits as defined in WAC 296-127-014.

D. The PLA shall permit an Open-Shop Contractor to employ as many as five Core Employees on each contract in a Covered Project, provided the Core Employees meet the Core Employee criteria set forth in the PLA. Open-Shop Contractors are allowed to select and hire up to 5 Core Employees before filling any further hiring needs through Dispatch. Open-Shop Contractors must notify the Union and identify their Core Employees. FAS has authority, at any time, to verify that the employees meet the definition of Core Employee as established in the PLA.

E. No worker shall be required to become a member of a Union to be eligible for employment on a project under a PLA with the City of Seattle. No Contractor shall be required to become affiliated with a Union to be eligible for work on a project under a PLA with the City of Seattle.

F. The Department may provide technical assistance to WMBE and Open-Shop Contractors in transitioning to a PLA environment.

20.37.060 Program evaluation

A. The Department shall establish benchmarks and metrics to evaluate the program, such as project costs; completion times; workplace safety; utilization rates and graduation rates of Priority Workers, women and racial minorities from Preapprentice and Apprentice Training Programs; and changes in the percentage of dollars paid to WMBE Contractors working on Covered Projects.

B. The Department shall report findings to the Mayor and City Council annually.

C. The Mayor and City Council will review program results during 2016 to determine if the program should be expanded or amended by increasing or decreasing thresholds. Consideration should also be given to imposing a small fee on non-complian t contractors to help fund the program.

20.37.070 Severability

Any term or provision prohibited by law shall be ineffective to the extent of such prohibition without invalidating the remainder of this Chapter 20.37.

Section 3. Section 20.38.005 of the Seattle Municipal Code, as last amended by Ordinance 120794, is amended as follows:

20.38.005 Apprentice requirements ((utilization.))

A. On public works contracts with an estimated construction cost of $1 million ((One Million Dollars ($1,000,000))) or more, the Director ((is authorized to))((is authorized to)) require that ((up to fifteen((15) percent)) no less than 15% and no more than 20% of the contract L((l)) abor H ((h))ours be performed by A ((a))pprentices((enrolled in training programs approved or recognized by the Washington State Apprenticeship and Training Council (SAC). Furthermore, it is the City's intent that, on public works projects with an apprentice utilization requirement, there shall be a goal that twenty-one (21) percent of the apprentice labor hours be performed by minorities and twenty (20) percent of the apprentice labor hours be performed by women)).

B. In determining the percentage for each project, the Director may consider such factors as project size, project duration, Labor Hours anticipated for the project, skills required, the likely crafts required for the project, historic utilization rates and Apprentice availability.

C. The Director shall establish aspirational percentage goals for Apprentices who are women and those who are racial minorities using similar factors. Contractors may be allowed to offer utilization below the aspirational percentage goals by substituting other efforts to meet the intent of building a trained construction workforce for a portion of the utilization percentages for women and minorities.

Section 4. Section 20.38.010 of the Seattle Municipal Code, as last amended by Ordinance 123361, is amended as follows:

20.38.010 Definitions((.))

((When used in this chapter:)) The following words and phrases shall have the meanings hereinafter described unless the context in which they are included clearly indicates otherwise :

"Apprentice" shall have the same meaning as given under Section 20.37.010, as may be amended from time to time.

((A.)) "Apprentice ((l)) L abor ((h)) H ours" means the total hours required to be worked by ((a)) A pprentices on a public works project.

((B.)) "Director" means the Director of Finance and Administrative Services or his or her designee , or any successor .

((C.)) "Labor ((h)) H ours" means((the total)) hours ((of)) performed by ((of)) workers who are subject to prevailing wages under RCW 39.12. ((receiv ing an hourly wage who are directly employed on the site of the public works project. "Labor hours" shall include hours performed by workers employed by the contractor and all subcontractors working on the project. "Labor H ours" shall exclude hours worked by foremen, superintendents, owners and workers who are not subject to prevailing wage requirements.))

Section 5. Severability. The provisions of this ordinance are declared to be separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section or portion of this ordinance, or the invalidity of its application to any person or circumstance, shall not affect the validity of the remainder of this ordinance, or the validity of its application to other persons or circumstances.

Section 6. This ordinance shall take effect and be in force 30 days after its approval by the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it shall take effect as provided by Seattle Municipal Code Section 1.04.020.

Passed by the City Council the ____ day of _____, 2015, and signed by me in open session in authentication of its passage this

_____ day of _____, 2015.

_____

President _____of the City Council

Approved by me this ____ day of _____, 2015.

_____

Edward B. Murray, Mayor

Filed by me this ____ day of _____, 2015.

_____

Monica Martinez Simmons, City Clerk

(Seal)

Patricia Lee LEG Priority Hire ORD January 15, 2015 Version #4 final

Appendix C:

SAMPLE Contractor Education Model

Intelligent Partnerships

Los Angeles Unified School District's Small Business Bootcamp Program[1]

LAUSD Small Business Bootcamp is based on 8-week web based learning tools that lead to an agency certification. The process was recognized as a critical component to successful minority contracting and diverse workforce inclusion by a comprehensive UCLA analysis and is contained in their 2011 issue brief. (www.labor.ucla.edu)

Seminar Descriptions

The Small Business Boot Camp will provide a definitive curriculum on the following topics:

"The LAUSD example demonstrates the importance of committing resources, time, staff, and leadership for successfully implementing a new policy, such as a PLA or PSA." UCLA Research Brief 11

- **Bonding & Certification** - Learn how to increase your company's bonding capacity through the U.S. SBA's Surety Bond Guarantee Program, and participate in Contractor BondWorks, the District's bond and finance assistance program. Contractors will also apply for the LAUSD Small Business Enterprise (SBE) certification for future recognition in the District's 25% SBE goal.
- **Public Contract Law** - An LAUSD attorney will walk contractors through a contract and explain its components to familiarize and better prepare their company to comply with contract performance requirements, and to understand both short and long-term expectations. A thorough overview of the General Conditions will also be conducted to acquaint contractors with common public sector contracting terms and conditions. This seminar includes a briefing on the District's Owner Controlled Insurance Program (OCIP), the Field Act and the processes for stop notices, change orders, and subcontractor substitution.
- **Principles of Scheduling** - A seasoned construction scheduler will show contractors the principals of developing a project schedule using Primavera software as required by LAUSD contract specifications.
- **How to bid on LAUSD Informal and Formal Contracts** - Capture new contracting opportunities by learning how to prepare a bid and manage informal (under $76,700) and formal competitive contracts (above $76,700). Acquire up-to-date information on LAUSD's bidding policies to successfully compete and meet contract performance requirements. Get an overview of the contract process, from the pre-bid phase, through the bid and award phase, and project completion.
- **How to develop Safety Plan** - Cal OSHA Consultation Service will guide you through the process of developing an Injury & Illness Prevention Program (IIPP) and Hazard Communication Program to facilitate compliance with the California Occupational Safety and Health Act (Cal/OSHA). Cal OSHA requires all California employers to provide and maintain a safe and healthful workplace for its employees.
- **Access to Capital** - Public and private sector financial services professionals will guide contractors through eligibility criteria, loan options, and lending terms for small business loans. Also, learn how to comply with State and Federal Government tax laws regulated by the Employment Development Department (EDD) and the Internal Revenue Service(IRS).

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- **LAUSD Contractor Prequalification** - LAUSD will guide you through the Contractor Pre-Qualification Questionnaire (including Safety Pre-qualification) in a hands-on workshop environment. Safety and Contractor Prequalification is required to bid on informal and formal contracts, respectively.
- **Labor Compliance and Project Stabilization Agreement (PSA)** - Avoid Labor Code violations that can adversely affect your bottom line. Obtain clear and easy access to compliance tools to ensure that your business adheres to Department of Labor laws and regulations, specifically certified payroll and prevailing wage requirements. This seminar also includes a briefing on the Project Stabilization Agreement (PSA), and the "We Build" Program.
- **10 Hour Construction Safety and Health Outreach Program Training** - This training session introduces OSHA policies, procedures, and standards as well as construction safety and health principles. The course will review the scope and application of the Occupational Safety and Health Act and General Duty Clause, as well as examine areas that are most hazardous. Upon successful completion of the course, participants will receive an OSHA construction safety and health 10-hour course completion card.

Promissory Commitment

Contractors enrolled in the program must attend and actively participate in the eight (8) seminars in order to graduate from the Small Business Boot Camp. Each seminar is approximately three hours in the evening, one seminar per week, and will require homework. There is no enrollment cost to participate, however, there is a significant investment of time that is required of each contractor and contractors must possess a valid contractor's license.

Construction Contractor Safety Prequalification

The Los Angeles Unified School District is committed to the safety of its contractors on project job sites. LAUSD requires its contractors to submit a **Safety Prequalification Questionnaire** prior to bidding on informal contracts. The application requests that contractors demonstrate their past safety performance, including incidence rates and OSHA citations, contractor's safety policy and procedures, and show proof of Workers Compensation insurance.

Training Program & Labor Resource

- **The "We Build" Program**

In recognition of the size and complexity of the District's school construction program, the Board of Education entered into a Project Stabilization Agreement (PSA) to ensure labor stability and to maximize local economic benefits through a 50% Local Worker participation goal. This ambitious Local Worker participation objective is the guiding principle for the "We Build" Program.

The "We Build" Program provides local District residents with an opportunity to enroll in a comprehensive, ten-week pre-apprenticeship training offered at seven LAUSD Division of Adult and Career

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Education Occupational/Skills Centers and through its partnership with the Century Community Training Program (CCTP) and other community-based training programs. Upon completion "We Build" graduates will be competitively positioned to enroll in Union Apprenticeship Training Programs and placement on LAUSD construction projects. Go to LASUD.net learn more about the "We Build" Program.

Disabled Veteran Business Enterprise (DVBE)

The LAUSD supports the State of California's DVBE participation goal of 3%. To be certified as a DVBE, a business must be at least 51% owned by one or more disabled veterans, have its daily operations managed and controlled by one or more disabled veterans, and have its home office located in the United States. The LAUSD will accept the State of California, Department of General Services DVBE certification for participation as an SBE contractor for District construction bids. Please visit **http://www.pd.dgs.ca.gov/smbus/default.htm** to search for DVBE firms, or to learn how to become certified as a DVBE.

Bonding & Financial Services

Bonding and access to working capital are of significant concern to small businesses, specifically in their effort to grow their companies. Please visit the following resource sites for information on these topics.

- **Small Business Loans - U.S. Small Business Administration**
- **Surety Bond Guarantee Program - U.S. Small Business Administration**

Technical Assistance Providers and Business Organizations

The Small Business Program works in partnership with a cross-section of agencies and business organizations to provide contractors with access to technical assistance and capacity-building resources.

[1]*Downloaded from the web athttp://www.laschools.org/new-site/small-business/bootcamp*

Appendix D:

UCLA Research Brief #11

UCLA Institute for Research on Labor and Employment

Research & Policy Brief

Number 11 – December 2011

Project Labor Agreements in Los Angeles

The Example of the Los Angeles Unified School District

Uyen Le, UCLA Labor Center, California Construction Academy
Lauren D. Appelbaum, Institute for Research on Labor and Employment

Introduction

Construction industry jobs fall into two camps – either "high-road" or "low-road." High road construction jobs and contracting opportunities are regulated, safe, pay wages that can support a family, provide benefits, and create middle-class careers. Low-road construction jobs on the other hand are unregulated, dangerous, low-paying and offer few opportunities for career advancement. Many public agencies and private companies are using Project Labor Agreements (PLAs) or Project Stabilization Agreements (PSAs) as a tool to ensure that construction work follows the high-road. These agreements, which help to improve economic opportunity within local communities, provide standards for quality, safety, and cost on construction projects.

One major provider of construction projects in the Los Angeles region is the Los Angeles Unified School District (LAUSD). The LAUSD has spent nearly $8.7 billion over the past 7 years on new construction and renovation projects. The LAUSD has signed a PSA and provides a good case study of PSAs in action as utilized by a large, urban employer. PLAs or PSAs are generally created with the intention of meeting certain goals around local hiring and diversity. The LAUSD PSA established employment goals for small, local, emerging, and disabled business enterprises as well as small and minority contractors. This Research & Policy Brief will draw on a larger report published by the UCLA Labor Center's California Construction Academy[1] to discuss the role of PLAs or PSAs in creating high-road construction industry employment and whether the LAUSD met the goals laid out in its PSA.

[1] This Research Brief is drawn from the larger report: Le, U. (2011, November). Project labor agreements: Pathways to business ownership and workforce development in Los Angeles. Los Angeles: UCLA Labor Center, California Construction Academy.

The UCLA Institute for Research on Labor and Employment supports faculty and graduate student research on employment and labor topics in a variety of academic disciplines.

The Institute also sponsors colloquia, conferences and other public programming, is home to the undergraduate minor in Labor and Workplace Studies at UCLA, and carries out educational outreach on workplace issues to constituencies outside the university.

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Project Labor Agreements – Defined

A Project Labor Agreement or Project Stabilization Agreement is a contract between two parties involved in a construction project, the owner or managing entity of the project (or several associated projects) and a consortium of labor unions. Through a PLA, the different craft unions working on a construction project come together to create one agreement with the owner or managing entity, rather than several agreements being created through a separate negotiation with each union. In fact, all contractors and subcontractors involved in the project or projects covered by the PLA need to sign on to the PLA and then are bound by the requirements of the contract. Because all workers on a project are bound by one agreement, PLAs or PSAs have the ability to streamline the negotiation process and increase efficiency through a set of standardized expectations, logistics, wages and benefits, policies, and processes for the negotiation of labor issues.

PLAs or PSAs have been used on a variety of projects and involve a variety of policies and goals. PLAs have been employed in publicly as well as privately funded projects, as well as construction projects that are large, small, urban, rural, technical or standard. All PLAS are negotiated between the owners and the consortium of unions, so that common interests will be addressed. Therefore, they all have a "no-strike" clause and an agreed upon arbitration process for disputes that may arise during the length of the contract. In addition, many PLAs include particular policies such as setting goals for local hiring or diversity. These targeted community workforce policies may serve to increase the employment of groups such as women, people of color, or veterans who have been historically underrepresented in construction work. Furthermore, local hire programs set expectations for the percentage of workers on a project who must reside within a particular area near the work site.[2] When followed, these programs may make union apprenticeship and journey-level programs more accessible to local workers.

In addition to local hiring goals, PLAs may create goals for the number of small business enterprises to be involved in the construction project. A small business enterprise (SBE) in the construction industry may be larger than in other industries because contractors spend much of what they bring in on equipment, materials, and workers, so the profit margin is smaller than for other industries. Thus, a general contractor or heavy construction contractor is considered an SBE if average annual receipts do not total more than $33.5 million. Similarly, specialty trade contractors may be classified as an SBE if their average annual receipts are limited to $14 million. Table 1 gives examples of PLAs or PSAs that have agreed upon hiring and SBE goals.

[2] Workers are considered local when they reside in particular zip codes or some other geographic boundary that has been determined to represent an area close to the work site.

Table 1. Typical workforce requirements of recent PLAs/PSAs in Southern California

Project	% Local Hire	% Apprentices	% Small Business Participation
LAUSD	50%	30% of total workforce 40% of apprentices 1st year apprentices	25%
Los Angeles Community College District	30%	30% of total workforce 50% of apprentices 1st year apprentices	28% Small, Emerging, Disabled Veteran Business Enterprise
San Diego Unified School District	35% in Targeted Zip Codes 70% Residents of SDUSD Zip Codes 100% Residents of SD County	N/A	40% Small, Emerging, Disabled Veteran Women, Minority-Owned Enterprise

Los Angeles Unified School District PSA Requirements

The Los Angeles Unified School District was chosen as an employer to highlight because it is both the second largest school district in the country and employer in Los Angeles County. A number of ballot measures have provided funding for new building and modernization projects throughout the school district. Indeed, since 2004, 111 new schools have been built and many hundreds of repairs and modernizations have been completed.

In 2003, a five-year extension was granted for the Project Stabilization Agreement negotiated for construction projects contracted by the LAUSD. This PSA created a goal of 25% participation by small businesses. In addition, 50% of workers hired must be from local areas (i.e., living in a zip code that is within the LAUSD's eight sub-districts). Workers who are not "core workers" for a contractor will be referred through union hiring halls and 30% must be apprentices (40% of these must be first year apprentices). In an effort to achieve the apprentice level worker goals, the LAUSD runs the "We Build" program. This program provides pre-apprenticeship training that feeds into the apprenticeship programs that the LAUSD draws on to satisfy the hiring goals of its PSA. In addition, the "We Build" program provides placement and referral services to construction apprenticeship programs, and actively works with contractors and unions to ensure that local hire goals are being met. The local hire and apprenticeship requirements will help workers who desire to begin a career in construction to find work and on-the-job training on LAUSD projects.

Los Angeles Unified School District – Outcomes

The California Construction Academy (CCA) report looked at how well the LAUSD lived up to its hiring goals as laid out in the PSA. As with the larger CCA report, this Brief will examine hiring starting in May 2003. This date was chosen because it was when the PSA that included the 25% Small Business Participation goal was renewed.[3] The LAUSD PSA calls for an outside third-party to monitor adherence to the goals of the PSA. The LAUSD chose to use Parsons Construction, Inc.'s (PCI) data tracking server to assess how well they were meeting their goals.

Small Business Participation

The PSA enacted by the LAUSD called for 25% of businesses involved in construction projects for the school district to be classified as small business. Between 2003 and 2011, the LAUSD spent about $8.68 billion on construction. Nearly 48% of the businesses receiving construction contracts from the district were small business establishments. Thus, the LAUSD's use of small businesses in construction projects was almost double its agreed upon goal. Furthermore, 44% of prime contractors that signed on to LAUSD construction projects were small businesses. Finally, even subcontractors working under the LAUSD PSA met the goal of 25% SBE participation.

Table 2. Small Business Participation under LAUSD's Project Stabilization Agreement 2003-2011
Total Construction Contract Awards: $8,678,876,754.78
Total SBE Contract Awards: $4,149,527,603.75
SBE Participation Level: 47.8%

*Source: Le, U. (2011, November). Project labor agreements: Pathways to business ownership and workforce development in Los Angeles. Los Angeles: UCLA Labor Center, California Construction Academy.

Table 3. SBE Prime Contractor Participation Under LAUSD's Project Stabilization Agreement 2003-2011
Total Number of Prime Contractors: 496
Total Number of SBE Prime Contractors: 219
SBE Participation Level: 44%

*Source: Le, U. (2011, November). Project labor agreements: Pathways to business ownership and workforce development in Los Angeles. Los Angeles: UCLA Labor Center, California Construction Academy.

Table 4. SBE Subcontractor Participation Under LAUSD's Project Stabilization Agreement 2003-2011
Total Number of Subcontractors: 4,773
Total Number of SBE Prime Contractors: 219
SBE Participation Level: 44%

*Source: Le, U. (2011, November). Project labor agreements: Pathways to business ownership and workforce development in Los Angeles. Los Angeles: UCLA Labor Center, California Construction Academy.

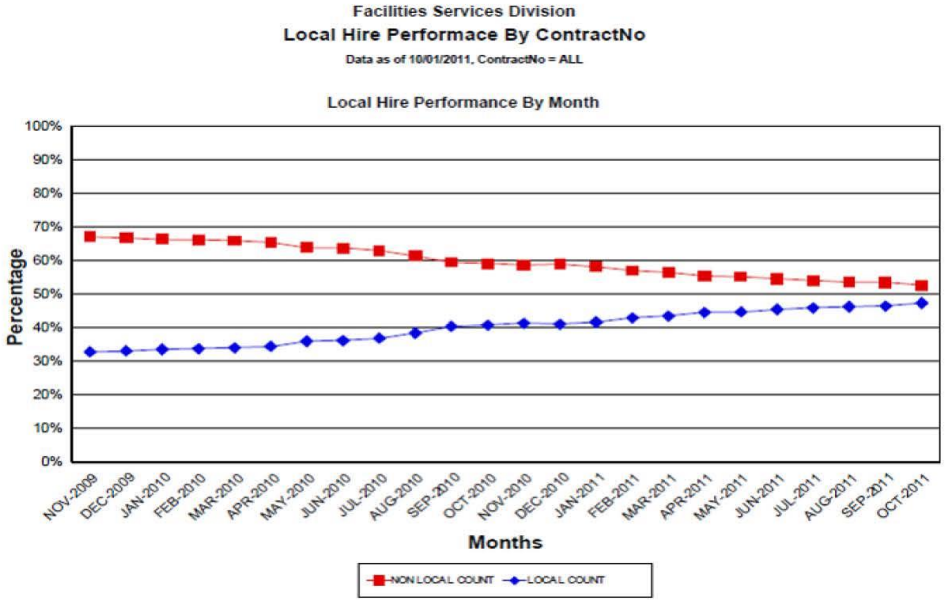
[3] The 25% Small Business Participation Goal was first adopted in February 2003.

Local Hire & Apprentices

As noted above, the LAUSD PSA calls for 50% of the individuals hired to work on district construction projects to be from the local area. In addition, 40% of workers should be apprentices and 30% of the apprentices are expected to be first-year apprentices. In order to meet these goals, the LAUSD drew from its "We Build" program. Local residents can enter "We Build" program in order to get pre-apprenticeship training. The LAUSD uses the program as a pipeline for hiring local residents as "We Build" then helps participants to find apprenticeship programs that work on LAUSD construction projects. As a result, between July 2004 and August 2011, 41% of the 96,052 people who worked on LAUSD PSA projects were local hires, almost 32% were apprentices, and 41.5% of those apprentices were first-year apprentices. Thus, the LAUSD met its apprentice goals. While the district did not meet its local hire goal of 50%, with 41% of workers on LAUSD PSA projects coming from the local area, the district seems to be on track to achieve its goal. In addition, the local hire percentage for new construction projects (instead of new construction and renovation projects combined) is at 48%, which is very close to LAUSD's goal of 50%.

Table 5. SBE Local Hire and Apprentice Participation Under LAUSD's PSA 2003-2011		
Total Number of Workers	96,052	
Percent Local Hire		41%
Total Number Apprentices	30,557	
Percent Apprentices		31.8%
Total Number First-Year Apprentices	12,678	
First-Year Apprentices as a Percent of all Apprentices		41.5%

5



*Source: Le, U. (2011, November). Project labor agreements: Pathways to business ownership and workforce development in Los Angeles. Los Angeles: UCLA Labor Center, California Construction Academy.

Diversity

While there was no specific diversity goal in the LAUSD PSA, along with the 50% local hire rate, there was an expectation that the workforce should reflect the local population. Between 2004 and 2011, among workers on LAUSD PSA projects, .38% were Native American, 1.45% were Asian/Pacific Islander, 3.8% were African-American/Black, 61.05% were Hispanic, 23.07% were white, 2.28% identified as other, and 7.97% declined to state. In addition .61% of these workers were veterans and 98.52% were male, while only 1.48% were female. It is not possible to make an exact comparison to local population statistics. However, looking at census data[4] for all people in Los Angeles County in 2010,[5] the workers on these projects seem to over-represent Hispanics, and particularly under-represent Asian/Pacific Islanders, African-American/Blacks, veterans, and women. These are workers who may continue to benefit from the efforts of the LAUSD to improve the percentage of local workers and "We Build" graduates hired to work on LAUSD PSA construction projects.

[4] http://quickfacts.census.gov/qfd/states/06/06037.html. Accessed December 7, 2011.

[5] It is important to note that the census data are for 2010, while the LAUSD data span the period from 2004 to 2011. In addition, the census data reported are for all of Los Angeles County, not just the area covered by the Los Angeles Unified School District. Finally, the census data reported are for all people in Los Angeles, not just the workforce.

Summary

The data provided above indicate that the LAUSD met or is on the way to meeting all of the goals laid out in its PSA. One reason for this success was the explicit support of the highest levels of LAUSD leadership. Furthermore, a clear mission was put forth by the Board of Education to improve facilities and decrease overcrowding in schools. The Board was also held accountable by the local communities, and the "We Build" program received support and became a strong partner in LAUSD's hiring for construction projects. "We Build" and Small Business Program staff ran workshops for LAUSD program and facilities managers to ensure that the leadership of the LAUSD were aware of, and working toward the PSA goals. The LAUSD also ensured that their projects would be extremely well-run and well-managed. Because of this, the district became the "Owner of Choice" for contractors, who then were happy to comply with LAUSD policies in order to get to work with the LAUSD. Finally, the LAUSD haired a third-party monitor to ensure transparency and compliance. The CCA finds that third-party monitors can increase the likelihood of meeting goals. However, there are multiple approaches to PSA program administration and monitoring, so local stakeholders should decide whether an internal administration process or a 3rd party administrator would be successful based on the local context. The LAUSD example demonstrates the importance of committing resources, time, staff, and leadership for successfully implementing a new policy, such as a PLA or PSA.

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