CITY & COUNTY OF SAN FRANCISCO

Office of the Controller

City Services Auditor

How Long Does it Take to Hire in the City and County of San Francisco?

Analysis and Recommendations

April 15, 2015

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1.0 Executive Summary

The City and County of San Francisco (City) Charter requires that the City Services Auditor (CSA) in the Office of the Controller conduct and publish a periodic review of management and employment practices that either promote or impede the effective and efficient operation of city government. CSA is fulfilling this mandate through a recently launched management and employment practices program. Among other work, the program is currently assisting the Department of Human Resources (DHR) in evaluating and improving upon the City's hiring practices. As San Francisco's largest employer with nearly 28,000 employees, the City's ability to attract and hire qualified people has implications not only for the organization itself, but also for the public services that it provides. The recruitment of new employees and advancement of existing talent is critical to maintain a high-quality, 21st century workforce capable of meeting the diverse needs of San Francisco residents. With a historically low unemployment rate of 3.8% (California Employment Development Department, 2015), the need to understand and continue to improve the City's hiring practices is as pressing as ever.

Similar to other municipalities, the City's hiring is governed by a complicated maze of regulations, laws, ordinances, policies, and negotiated labor agreements with many employee organizations. The California Public Employment Relations Board administers state laws regarding collective bargaining for all employees of local public agencies in California. The San Francisco City Charter mandates the Annual Appropriation Ordinance and the Annual Salary Ordinance, which authorize budgets and salaries. The City Charter also establishes the authority of the Civil Service Commission and the Department of Human Resources (DHR). The Civil Service Commission governs the Merit System, which provides rules on examinations, appointments, separation procedures, and other elements of employment to help ensure fair, competitive, and transparent processes. At the same time, the City is also subject to state oversight to ensure compliance with the merit system. Finally, the Department of Human Resources issues policies and procedures that interpret and implement Civil Service Rules, and guide hiring practices.

Within this context, this report surveys the current hiring landscape by reviewing the City's hiring procedures, assessing the systems it uses to track the process, and analyzing available data regarding the amount of time it takes to fill open positions. In analyzing the data, we measured hiring times across multiple dimensions, including classification series, city departments, and appointment types. To inform our interpretation of the data and understanding of hiring processes, we additionally conducted stakeholder interviews with human resources staff at DHR and multiple city departments. Based on this collective body of work, we offer recommendations for potential process and system improvements. Our work reveals that the City is making strides to improve its hiring processes, but continued efforts are needed to ensure that the City's hiring processes are as efficient and effective as possible, while maintaining our commitment to and compliance with the rules and principles of the merit system.

1.1 Time to Hire

Throughout this report, the terms "hire time" or "time to hire" represent the period of time beginning when a department formally initiates the hiring process by submitting a Request To Fill (RTF) form and ending when the employee starts work in his or her new position. The time to hire analysis presented here reflects a one-year snapshot in time: positions for which the RTF submission to start date occurred in its entirety between August 13, 2013 and August 27, 2014. While our analysis focuses on permanent civil service (PCS) positions, which comprise the largest share of all types of city positions, we have included hire times for permanent exempt (PEX) and temporary exempt (TEX) appointments to provide a comparison by appointment type.

Throughout the report we also frequently refer to "job classes" and "classification series." Job classes are individual positions such as 2320-Registered Nurse. Several related job classes comprise a classification series. For example, the nursing classification series includes several job classes, such as Registered Nurse, Licensed Vocational Nurse, Nursing Assistant and Patient Care Assistant.

Overall, the data show that the length of time to hire varies significantly by appointment type, position, and department:

A. **Across all appointment types, the citywide median hire time was 118 calendar days.** Excluding public safety job classification series, which have unique hiring processes, the citywide median hire time for PCS positions during the sampled time period was 137 calendar days, or 4.6 months. The median hire times for PEX and TEX positions – appointment types that were specifically designed to move through the hiring process more quickly and are exempt from the merit system – were 74 days and 84 days, respectively. The differences between PCS and exempt hiring timelines are not surprising, given the requirements for merit-based hiring that apply to PCS hires.

B. **Five classification series with 20 or more PCS hires had median hire times over 150 days.** The nursing, management, airport operation, information systems (IS), and community development classification series each had at least 20 PCS hires and the longest median hire times – over 150 days. The nursing classification series had the longest median time to hire (200 days) and the second largest number of PCS hires (91) in the dataset. The Human Services series had the most PCS hires (97), but at 112 days those hires took much less time than the nursing series (Table 1). The difference may be due to the rapid batched hiring of many Human Services Agency (HSA) Eligibility Workers, in which large numbers of candidates take frequently offered examinations and reachable candidates are hired in large groups at one time.

Table 1 – Median Hire Times for All Classification Series with 20 or more PCS Hires

Classification Series	Median Days to Hire	Number of PCS Hires
Nursing	200	91
Management	189	31
Airport Operation	179	20
Information Systems	179	28
Community Development	163	22
Journey-Level Trades	143	79
Library	141	50
Professional Engineering	133	77
Budget, Administrative & Statistical Analysts	119	80
Human Services	112	97
Clerical, Secretarial & Stenography	101	35
Personnel	100	41
Payroll, Billing & Accounting	85	66

Within these classification series, there was significant variance in hire times among individual job classes. For example, among the ten job classes that were hired within the IS series during the time period sampled, median hire times ranged from 144 days for the 1023-IS Administrator 3 position to 271 days for the 1053-IS Business Analyst-Senior position.

C. **There was significant variance in median hire times among individual PCS job classes.** Of all the job classes sampled, only three had median times of less than 90 days: Eligibility Worker (56 days); Accountant III (58 days); and Senior Personnel Analyst (78 days). At the other end of the spectrum, Patient Care Assistant, Manager II, Electronic Maintenance Technician, and Registered Nurse were among those that took the longest to fill.

Table 2 – Job Classes with 10 or more PCS Hires and Hire Times Above the Citywide PCS Median

Job Classification	Median Days to Hire	Number of PCS Hires
Patient Care Assistant	285	39
Manager II	185	12
Electronic Maintenance Technician	173	18
Registered Nurse	159	44
Employment and Training Specialist 3	150	11
Protective Services Worker	145	10
Senior Administrative Analyst	140	23

D. **The Department of Public Health (DPH) and the Recreation and Parks Department (REC) had the longest median hire times for PCS positions.** Of 12 City departments that filled at least 20 PCS positions during the time period sampled, DPH and REC had the longest median times at 193 and 169 days, respectively.

Table 3 – Median Hire Times for Departments with at least 20 PCS Hires

Department	Median Days to Hire	Number of PCS Hires
Public Health	193	158
Recreation and Parks	169	28
Library	141	55
Public Utilities Commission	140	70
Municipal Transportation Agency	139	83
Airport	135	50
Police	134	28
Public Works	134	52
Human Services	124	166
Human Resources	107	24
City Administrator	104	33
Controller	81	42

1.2 Data Systems and Tracking

The City manages its hiring process using two primary systems – eMerge PeopleSoft and JobAps. We found several challenges with respect to these systems:

A. **The City does not have the ability to track individual recruitment efforts through the entire hiring process in an automated manner.** There is no unique identifier for each recruitment effort to which all hiring data can be tied. The lack of such an identifier makes it impractical to track recruitment efforts throughout the entire process and across data systems. For example, out of 15 major steps in the hiring process that we identified as the most important to track (see Table 4, pg. 11), the City can easily report position-level data for only three. The inability to tie data across different systems or the absence of an integrated system that allows for tracking data at the individual position level makes it difficult to analyze why some positions take longer to fill than others and, importantly, which parts of the hiring process are most in need of improvement.

B. **JobAps data tracking and reporting limitations inhibit analysis.** Notwithstanding the current inability to follow position-level data across the two systems, JobAps itself is unable to provide information in large datasets, which also inhibits analysis. For example, when DHR staff attempts to run a report for a single large department for one year, the report fails.

C. **The City is pursuing numerous, potentially impactful improvements to its processes and systems that require robust change management practices.** In an effort to decrease hire times, the City is initiating a variety of innovative pilots and reforms discussed throughout this report; however our interviews with departmental HR staff suggest that HR staff and hiring managers are not always aware of recent policy or process changes. While DHR has developed important mechanisms for communicating with departmental staff such as its monthly HR professionals meetings, departments would likely benefit from a more robust change management process that includes training and support for front-line HR staff and hiring managers who are responsible for, or impacted by, process changes.

1.3 Recommendations

Our analysis points to several opportunities to improve the City's hiring processes and systems:

Time to Hire

1. **Focus hiring process improvements and streamlining efforts on the five classification series with the most number of PCS positions and the longest hire times.** Among DHR's innovative reform efforts are a pilot project that provides on-demand civil service examinations for IS positions, as well as a series of process reforms to reduce the hiring time for Registered Nurses. We recommend that DHR additionally focus process improvements on other high impact classification series that have a large number of PCS hires and the slowest hire times such as: management, airport operations, and community development. Further, DHR should develop a set of standard metrics to consistently evaluate the impact of its current and future process and systems improvements.

2. **Implement continuous, un-proctored civil service examinations on a broader scale for classes with a large number of vacancies or hard to fill classes.** The City's overall demand for a large number of RNs, coupled with a competitive labor market, presents numerous hiring challenges. The City currently employs over 1,200 PCS nurses across the City. Similarly, although the City does not routinely fill a large volume of IS positions, it faces significant competition for IS talent. While DHR is currently piloting process improvements that will address many of the challenges for IS positions within two city departments, the implementation of continuous, unproctored civil service examinations on a broader scale could yield benefits for other classes with a large number of vacancies, or those that are hard to fill.

3. **When implementing future system changes, replace manual "pull-based" workflow systems with automated "push-based" systems.** In "push-based" workflow systems, the system identifies the appropriate resources to which an outstanding work item should be routed and automatically notifies those individuals that tasks require action to move forward. In contrast, "pull-based" systems require staff to initiate outstanding work items

(Russell, ter Hofstede, Edmond & van der Aalst, n.d.). When making future systems improvements, the City should try to employ push-based work allocation strategies so that recruitment efforts move steadily through the process with as few back-logs as possible.

4. **Identify steps in the hiring process that can occur simultaneously, rather than sequentially.** Administering hiring process steps simultaneously and/or moving certain steps of the hiring process to an earlier point in the process could save significant time.

5. **Develop department-level annual hiring staffing plans, with specific start date targets for each quarter and associated workflow processes necessary to meet those targets.** For example, DPH and DHR have established a hiring plan with interim steps, a process workflow, and target dates in anticipation of the opening of San Francisco General Hospital. The Municipal Transit Agency (MTA) has a similar strategy. Creating staffing and hiring plans helps keep all of the relevant stakeholders informed and enables staff to identify when and where requisitions get "stuck" in the process.

Data Systems and Tracking

Without citywide data that provide adequate insight into hiring for each step of the process, it is difficult to either identify the parts of the hiring process that are most in need of improvement or make suggestions for specific improvements. Accordingly, we recommend the following changes to the City's systems and processes, which will enhance our ability to further analyze the challenges and identify possible solutions around hiring.

1. **Consider developing a single integrated hiring data management and workflow system.** Perhaps the greatest challenge with respect to analyzing the time it takes the City to fill vacant positions is the inability to track individual recruitment efforts through each stage of the hiring process in an automated fashion. To that end, we recommend developing a single integrated system that will provide greater visibility into the complete hiring process.

2. **In the absence of a single hiring data management system, create an interim solution to link eMerge PeopleSoft and JobAps data so the City has a clearer and more comprehensive view of each step of the hiring process.** A potential strategy for better systems integration would be to create a unique recruitment identifier that links position-level data across the two systems. While doing so, the City should also determine whether additional changes to JobAps are needed (or are possible), so that it is capable of reporting the volume of data that is routinely generated and needed for more in-depth citywide analysis.

3. **Following system improvements that allow for more comprehensive reporting, develop web-based human resource dashboards that provide HR staff and hiring managers with greater visibility into the hiring process.** Such dashboards could not only provide

information on time to hire and the interim steps involved, but they could also improve communications and transparency; ease monitoring of the hiring process for individual recruitment efforts; and enable managers to hold process owners accountable for their specific tasks.

4. **Develop and implement a change management program to support current and planned changes to hiring processes and systems across and within departments.** With so many improvements to hiring processes and systems planned or already underway, the City would benefit from the development and implementation of consistent and on-going change management practices.

To address these and other challenges, DHR launched a comprehensive project in 2015 called Project HIR^{2}E (Hiring Innovation through Redesign and Resource Efficiencies). Project HIR^{2}E seeks to identify, update, and implement a full range of innovative human resources processes to ensure effective and efficient hiring of City employees, the City's most valued asset. A description of Project HIR^{2}E is provided in Appendix A.

2.0 Introduction

Appendix F, Section 103 of the City Charter requires that the CSA in the Office of the Controller conduct and publish a periodic review of management and employment practices that either promote or impede the effective and efficient operation of city government. The Charter further requires that CSA provide analytical and technical support to assist departments in implementing its findings. To address this mandate, in Fiscal Year 2015, CSA launched an ongoing program, which is currently focused on improving City hiring practices among other issues.

With a workforce of nearly 28,000 employees, the City is San Francisco's largest employer (San Francisco Center for Economic Development, 2013). In Fiscal Year 2013-2014, personnel accounted for 46 percent of the City's general fund budget; and in that same year, 1,563 employees left City employment, and 1,114 new employees were hired (City and County of San Francisco, 2014). Effective and efficient hiring practices are critical to delivering timely public services and attracting high quality talent. The recruitment of new employees and advancement of existing talent is critical to maintain a 21st century workforce capable of meeting the diverse needs of San Francisco residents. Among other ramifications, lengthy hiring processes may discourage highly qualified applicants from applying for City jobs and if they do apply, they may accept other offers while waiting to hear from the City. During a time of economic growth and a tight labor supply, it is especially important to understand and address the challenges around our hiring practices. To that end, this report provides estimates of current times to hire across multiple departments and classification series, as well as an assessment of available data and systems to track the City's hiring processes. Our work in this area so far reveals that the City is making strides to improve its hiring processes but continued efforts are needed to ensure that the City's hiring processes are as efficient and effective as possible, while maintaining our commitment to fairness, competitiveness, and transparency.

2.1 Overview of the City's Hiring Process

The Civil Service Framework

Recruitment and hiring at the City and County of San Francisco is governed by a variety of state and federal laws, provisions in the City Charter, and rules set forth by the Civil Service Commission. These requirements are implemented through policies and procedures established by both the Civil Service Commission and DHR. Among other things, these policies and procedures pertain to the way that positions with the City are classified, the manner in which people are appointed to those positions, and the procedures used to evaluate candidates.

Position classification is the process of assigning the duties and responsibilities of a particular job to a defined job classification (or job class). This process occurs when a position is newly created or when there are significant changes to the duties of an existing job. Positions in the same class generally perform work of a similar nature and the employees in those positions are similarly

recruited, examined, and compensated. Each job classification established by DHR is given an identifier (usually four digits) and a title. Individual job classes are further grouped into job classification series, again based on similarities in the nature of the positions. For example, the nursing classification series consists of four job classes: 2302-Nursing Assistant, 2303-Patient Care Assistant, 2312-Licensed Vocational Nurse, and 2320-Registered Nurse.

With regard to the manner in which people are appointed to their positions, there are two main appointment types: PCS and exempt.

- **Permanent Civil Service** appointments are made through an open and competitive examination and selection process. Individuals appointed to a PCS position receive civil service job protections and benefits. PCS employees are appointed to their positions by an appointing officer, typically a department head. Most city employees are PCS employees.

- **Permanent Exempt and Temporary Exempt** (PEX and TEX) appointments do not require the same open and competitive examination and selection process as PCS positions but they also do not carry the same benefits as PCS positions. For example, employees in exempt positions typically are appointed by department heads, commissions, or the mayor, and they serve at the will of the appointing official. Exempt appointments are governed by the San Francisco Charter and are reviewed and approved by DHR. The Charter allows for 19 different categories of exemptions, ranging from department heads to temporary and seasonal employees. Since PEX and TEX appointments (purposefully) do not follow the same examination process as PCS positions, they generally take less time to fill.

With respect to civil service testing, positions are further divided by the type of recruitment examination that is used to identify eligible candidates:

- **Class Based Testing** (CBT) is routinely conducted for job classes that are utilized citywide. The exam process results in the creation of a list of eligible candidates from which any City department may hire.

- **Position Based Testing** (PBT) is conducted for specific positions. In these cases, the hiring department is responsible for conducting the examination and creating the eligible list.

- **Continuous Class Based Testing** (CCT) is conducted for job classes for which there is a continuous need of candidates. In these cases, recruitment announcements do not specify closing dates and candidates may apply at any time. Each time an exam for a class is given, the names of successful candidates are added to an existing list with an eligibility period. Names are removed from a continuous list at the end of the eligibility period. Examples of classes for which CCT is utilized include entry-level police officers, firefighters, and nurses.

Key Procedural Steps

The City's hiring process is partially decentralized, with most responsibilities split among DHR, human resources staff in individual departments, and hiring managers. Differences in responsibilities typically depend on the examination process used. In a CBT process, DHR often holds more responsibilities while the hiring department holds more responsibilities in the PBT process. Regardless of the appointment type or examination process used, all hiring is managed in two citywide data systems – eMerge PeopleSoft and JobAps.[1] eMerge PeopleSoft, an Oracle-developed system, serves as the City's unified human resources, payroll, and benefits administration system. JobAps is used by DHR and departmental HR staff to publicly post job announcements, intake and manage applications for employment, maintain examination scores, create eligible lists, issue referrals from eligible lists to hiring departments, and communicate with applicants.

Below is a simplified description of the key steps involved in filling a typical PCS position assuming there are no protests or other events that could alter the basic process.[2] The table notes the data systems used and their ability to report the date that each step is completed for an individual position in an automated manner.

Table 4 – Key Steps in the Hiring Process and Current Reporting Capability

Step	Data System	Position-level Reporting
1. **Departmental Budget Confirmation:** The hiring department reviews its budget and position authority in the Annual Salary Ordinance, and determines that it has the sufficient budget and authority to hire.	No Citywide system	NO
2. **Request to Fill (RTF) Submission:** The hiring department initiates the hiring process by submitting an electronic RTF form. The RTF includes key information about the position including: the requested appointment type, job class, recruitment type, and position-specific attributes. If a list of qualified and eligible candidates already exists, the department may also identify it at this point.	eMerge PeopleSoft	YES
3. **Approvals**: The RTF is reviewed and approved by DHR, the Controller's Office (CON), and the Mayor's Budget Office (MYR).	eMerge PeopleSoft	YES
4. **Job Analysis:** DHR and a group of subject matter experts identify the tasks performed on a job and the knowledge, skills, and abilities needed to perform that job. The results of the job analysis form the basis of the job description and examination plan.	No Citywide system	NO
5. **Exam Development:** With assistance from subject matter experts, DHR uses the job-related knowledge, skills, and abilities contained in the examination plan to develop and validate the content of the examination.	No Citywide system	NO
6. **Job Posting:** To solicit applications and (if necessary) create a new eligible list, the position announcement is posted on the City's jobs website.	JobAps	NO

[1] In addition to these citywide systems, departments may also use their own internal systems throughout the process.

[2] For more information regarding the City's hiring process see DHR's website at http://www.sfdhr.org/index.aspx?page=5 and http://www.sfdhr.org/index.aspx?page=20.

7.	**Minimum Qualifications Check**: After the job announcement closes, each applicant is evaluated to determine if he or she meets the minimum qualifications listed in the job announcement.	No Citywide System	**NO**
8.	**Qualified Candidates Take Examination**: Applicants who meet the minimum qualifications continue to the civil service exam. The exams must be based on a job analysis that defines the knowledge, skills, and abilities required to perform the functions.	JobAps	**NO**
9.	**Eligible List Adoption**: Exams are scored and a ranked list of applicants is created, verified by DHR, posted for public review, and then adopted.	JobAps	**NO**
10.	**Referral**: Individuals from the eligible list are "referred" to the hiring department by DHR for further consideration. The number of individuals referred is determined by the "certification rule" governed by the Civil Service Commission. Typically, individuals in the top three ranks are referred.[3]	JobAps	**NO**
11.	**Departmental Selection**: The hiring department conducts its selection process to identify the finalist(s) from the eligible list.	No Citywide system	**NO**
12.	**Pre-Employment Vetting**: It is mandatory for new civil service appointees to be fingerprinted. The fingerprints are used to obtain conviction records from the California Department of Justice and the Federal Bureau of Investigation in order to verify conviction information provided by candidates. When candidates have a conviction history, DHR conducts a position nexus review to determine suitability for employment. Finalists for certain positions may also be required at this stage to pass medical or physical exams and obtain security clearance. The finalists' minimum qualifications are also verified in greater detail.	No Citywide system[4]	**NO**
13.	**Job Offer and Acceptance:** Once a finalist clears the pre-employment vetting process, the hiring department extends an offer of employment.	No Citywide system	**NO**
14.	**Resolving and Returning the Referral**: Once the hiring department makes its hiring decision, the referral must be completed, or "resolved," to identify the person(s) selected for appointment. Once the selection is made, the referral documents are then returned electronically to DHR. Civil Service Rules require that the referral be returned within 60 calendar days of when the initial referral was made.	JobAps	**NO**
15.	**Employee starts in new position**	eMerge PeopleSoft	**YES**

It is important to note that there is no unique identifier for each recruitment effort to which all hiring data can be tied; the lack of such an identifier makes it impractical to track recruitment efforts throughout the entire process and across data systems in particular. For example, out of the 15 major steps in the hiring process identified above, the City can easily report position-level data for only three – RTF submittal, RTF approvals, and employee start date. The inability to monitor individual recruitment efforts from end to end throughout the process makes it difficult to analyze why some positions take longer to fill than others and, importantly, which parts of the hiring process are most in need of improvement.

[3] The rule that refers individuals in the top three ranks is called the Rule of 3. Expanded certifications require advance approval from the union representing the classification. The maximum certification is the Rule of 10, which is typically applied to management positions.

[4] Efforts are currently underway to enable tracking of the pre-employment vetting process in eMerge PeopleSoft.

3.0 Analysis of Existing Hiring Data

3.1 Data Sources

For this analysis, the Controller's Office extracted hiring data from eMerge PeopleSoft, the City's payroll system. This system contains data on the RTF approval processes, the candidate selection date, and the employee's hire date. The hire date is the employee's actual start date rather than the day on which the final offer was extended or accepted. The dataset contains data on positions in all City departments that recorded an RTF submission after August 13, 2013 *and* that were filled by August 27, 2014 for new hires, rehires, and existing employees who changed job classes.[5] The dataset does not include positions in which the RTF was submitted prior to August 13, 2013, even if that RTF resulted in a hire during the timeframe sampled. A total of 1,551 positions across 382 job classes met these criteria. The analysis sought to include both the beginning and end of the hiring process primarily because data on the interim steps are not readily available.

3.2 Positions by Appointment Type

Across all appointment types (PCS, PEX, TEX, and temporary provisional), the median hire time during the period studied was 118 calendar days – just under four months. Over the same period, the citywide median hire time for PCS positions (the main focus of our analysis) was 137 calendar days. Three quarters of these PCS positions took more than 90 days, and more than one quarter took over 180 days. The median hire times for PEX and TEX positions were 74 days and 84 days, respectively.

3.3 Permanent Civil Service Hiring by Department

Table 5 (next page) shows the time from RTF submission to hire date for the 12 departments with 20 or more PCS hires during the year time period sampled. These departments account for approximately 92 percent of all PCS hires.

[5] For this analysis, the data from eMerge PeopleSoft were filtered to exclude positions in public safety job classifications because the hiring processes used for those positions are substantially different from the processes used in other cases. The data were also filtered to exclude positions that were backdated (e.g. when an RTF is actually submitted a*fter* a hire is made). eMerge PeopleSoft Action-Reasons reflected in the data include: job code change, new hire, rehire, and rehire with status rights.

Table 5 – Median Hire Times for Departments with at least 20 PCS Hires

Department	Median Days to Hire	Number of PCS Hires
Public Health	193	158
Recreation and Parks	169	28
Library	141	55
Public Utilities Commission	140	70
Municipal Transportation Agency	139	83
Airport	135	50
Police	134	28
Public Works	134	52
Human Services	124	166
Human Resources	107	24
City Administrator	104	33
Controller	81	42

The DPH and REC departments had the longest median hire times at 193 and 169 days respectively. For DPH, only 14% of the vacancies were filled in less than 4 months, and nearly 37% of the vacancies took more than 8 months to fill, excluding any of the department's internal approval processes prior to the RTF submission date.

As mentioned, the lack of readily available data for the interim steps between the RTF submittal and the hire date (see Table 4) makes it difficult to pinpoint where the greatest delays occur for different departments. Conversations with human resources staff in many of the departments listed above suggest that delays can arise anywhere in the process for a variety of reasons. One potential reason for the slower hire times at DPH may be insufficient HR staff capacity to administer its highly specialized, department-specific examinations. Of the over 250 classes that DPH hires, its internal HR department is responsible for conducting examinations for about 50%. In January 2015, DPH had five exam analysts that can each conduct approximately 12 examinations per year. At that time, the department had 98 examinations in progress but there were over 139 job classes without an eligible list or with lists that were close to expiring. Furthermore, many of the examinations given by DPH are administered in hard copy form and must be manually rated and ranked. Efforts to automate the examination process, an increase in HR staffing levels, and standardization of the exams (where appropriate) across its many job classes are a few strategies that may help DPH reduce its time to hire, some of which are already underway.

The HR staff in another department indicated that the eligible lists for some of its positions are not refreshed frequently enough to maintain pools of qualified, interested, and available candidates from which to hire. As a consequence, managers may be forced to delay hiring for extended periods of time until a new and more current list is referred to them. Staff in another

department explained that when canvassing a list, it is not uncommon for them to encounter applicants who are not available or interested in a position, or who are altogether unresponsive. In one instance, a department HR representative reported that it had to re-canvass a list five times to find eight people who were interested in a position.[6] Multiple departments explained that under these circumstances, they sometimes had to wait extended periods of time for DHR staff to refer alternate candidates to them. These comments are notable in that at the time of our interviews, DHR had already implemented changes that made the entire eligible list available to departmental human resources staff when the list was initially referred to them, so they did not actually need to return to DHR for the names of alternates. It is unclear why the staff were not aware of the revised policy.

Even after a candidate has been selected, departments noted that delays can occur in the pre-employment verification process. In particular, multiple departments reported frequent delays of two to three weeks when *scheduling* fingerprinting appointments at DHR, and medical exams at DPH. However, data from DHR on fingerprinting appointment times do not support the perception that scheduling substantially delays the hiring process. According to data collected by DHR between July and December 2014, the average *total* time between DHR's receipt of the fingerprinting appointment request to departments' receipt of fingerprinting clearance was 12 days. Once fingerprinted, the Department of Justice returned the results within the same day 58% of the time and it returned the results within five days 83% of the time. With respect to delays associated with the fingerprinting process, DHR noted several factors that may impact the total time, including the following:

- Delays in scheduling the fingerprint appointment resulting from delays with the hiring department or candidate.
- Multiple candidates can be included on one Conviction History Electronic Service Request (ESR). A department may receive clearances for any number of those candidates before the ESR completion date because, in DHR's system, an ESR is only noted as "complete" when *all* candidate clearances have been completed.
- Fingerprint rejections, which happen several times per week, require candidates to be re-fingerprinted.

DHR further explained that the conviction history review may take longer when there is a "nexus" between the nature of the applicant's conviction and the attributes of the position for which he or she has applied. When such a nexus exists, DHR considers factors such as the recency of the conviction, the relevancy of the conviction to the position, and the rehabilitation of the individual to determine whether the candidate is suitable for the position despite the conviction. In order to prevent bias against hiring people with prior convictions, DHR intentionally does not inform hiring departments that this analysis has been performed unless it is determined that the person is not suitable for the position. Thus in some cases, departments may have the impression that

[6] As a result of a recent Civil Service Rule Change, departments no longer need to canvass the list to verity that the candidates are still interested in the job.

the fingerprinting process has been delayed due to DOJ or DHR inaction, when in fact a confidential issue has arisen that must be examined more closely.

Other issues raised by departmental HR staff that could contribute to delays in hiring include:

- duplicate data entry across multiple systems,
- delays in RTF approval and greater scrutiny from DHR before approving management positions in particular, and
- HR staff turnover and shortages (both in DHR and individual departments).

With regard to the RTF approval process, in February 2015 the Mayor's Budget Office amended its procedures for review to streamline and expedite hiring. Previously, the Mayor's Budget Office reviewed RTFs for nearly every City department after approval of the request by DHR. Under the new procedures, most RTFs will be automatically approved by the Mayor's Budget Office except under limited circumstances. For example, RTFs submitted by departments that are at risk for overspending their budgets will not be automatically approved.

With regard to the approval of management positions, DHR disbanded the Management Classification and Compensation Plan (MCCP) review committee as of February 4, 2015 and presented a new MCCP allocation program to HR professionals on February 18, 2015. DHR believes the new program will significantly expedite the DHR approval process for management classes.

Moving beyond anecdotal reports to pinpoint where the greatest delays occur and determining the reasons for those delays will require a more intensive (and manual) review of records for individual cases, and could serve as next steps for the Controller's Office's management and employment practices program work. In addition to the Controller's Office's efforts, DHR is conducting deeper analysis of nursing and other DPH hires, along with pursuing many other process and systems improvements, as noted in Appendix A.

3.4 PCS Hiring by Classification Series and Job Class

As described above in Section 2.1, DHR categorizes functionally related job classifications into groups called classification series. The nursing, management, airport operation, IS, and community development classification series each had at least 20 PCS hires and the longest median hire times – over 150 days. Table 6 (next page) shows the median hire times and number of PCS hires for all classification series that had 20 or more PCS hires during the period sampled.

Table 6 – Median Hire Times for Classification Series with 20 or more PCS Hires

Classification Series	Median Days to Hire	Number of PCS Hires
Nursing	200	91
Management	189	31
Airport Operation	179	20
Information Systems	179	28
Community Development	163	22
Journey-Level Trades	143	79
Library	141	50
Professional Engineering	133	77
Budget, Administrative & Statistical Analysts	119	80
Human Services	112	97
Clerical, Secretarial & Stenography	101	35
Personnel	100	41
Payroll, Billing & Accounting	85	66

The data provides several insights into current hiring dynamics:

- Seven classification series had median hire times above the citywide median of 137 days for PCS positions.
- The nursing series had the longest median hire time at 200 days and had the second greatest number of PCS hires (91) among the classes with median hire times above the citywide median (see section 3.4.1 for further detail on nurse hiring).
- Management positions were the second-slowest series to hire at a median of 189 days (section 3.4.2). This could in part reflect the MCCP committee review process in place prior to February 2015. Hire times for management positions may improve as a result of this recent change.
- While the City made only 20 PCS hires within the Airport Operations series and only 28 PCS IS hires, these hires each took a median of 179 days (6 months). Both series are discussed further in sections 3.4.3 and 3.4.4 respectively.
- The Human Services series had the most PCS hires (97), but those hires took much less time than the nursing series, which hired a similar number of positions. The difference is likely due in part to an adequate supply of candidates who meet the minimum job qualifications and rapid batched hiring of many HSA Eligibility Workers, in which large numbers of candidates take frequently offered examinations and reachable candidates are hired in large groups at one time.

Table 7 shows the time to hire for the individual job classes with the most number of PCS hires in the dataset. These ten job classes accounted for 41% of all filled PCS positions. Notably, the nursing and analyst classification series each have two positions in this list.

Table 7 – Median Hire Times for Job Classes with at least 10 PCS Hires

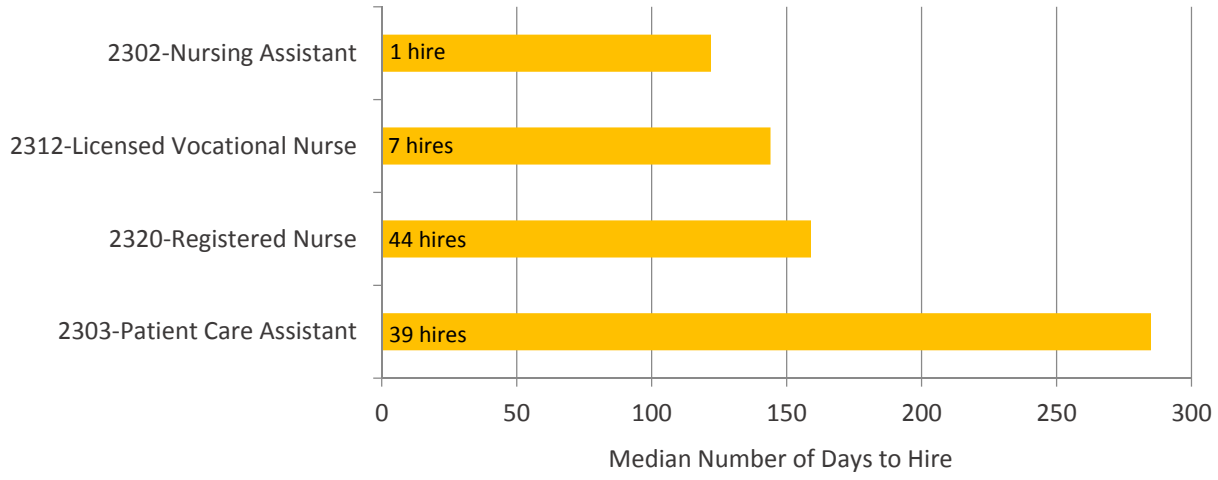
Job Classification	Median Days to Hire	Number of PCS Hires
Patient Care Assistant	285	39
Manager II	185	12
Electronic Maintenance Technician	173	18
Registered Nurse	159	44
Employment and Training Specialist 3	150	11
Protective Services Worker	145	10
Senior Administrative Analyst	140	18
Library Page	125	23
Clerk	118	14
Administrative Analyst	116	15

With regard to library pages, Library HR staff suggested in our interviews that the relatively longer time to hire Pages likely reflects an internal decision to bundle those positions for processing rather than filling them as the vacancies arise.

3.4.1 Nursing Classification Series

Nurses are one of the City's largest classifications, with 1,243 PCS nurses employed across the City. As shown in Chart 1, the nursing position with the longest median hire time was the 2303 Patient Care Assistant at 285 days – over nine months. Based on our interviews with DPH staff, this longer hire time was due to a number of factors. First, 462 candidates reached the examination stage; this large number of candidates necessitated ten separate examination sessions. In addition, contestation of the hiring process resulted in arbitration and significantly delayed any hiring.

Chart 1 – Median Hire Times and Numbers of PCS Hires in the Nursing Classification Series



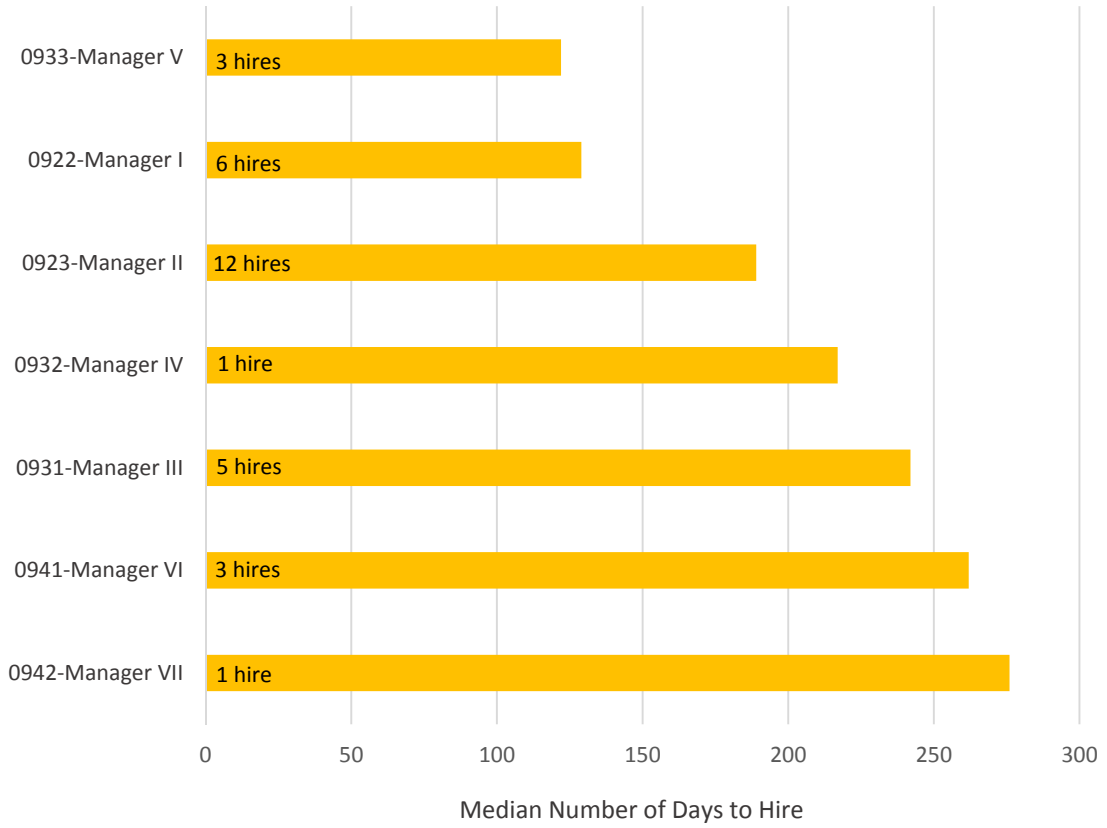
The fastest median hire time within the nurse series was the 2302 Nursing Assistant position at 122 days. However, only one Nursing Assistant hire was included in the dataset that we sampled. Registered Nurses (RNs) had the most PCS hires within the series at 44 and a median hire time of 159 days (5.3 months), three weeks longer than the citywide median for PCS hires. Of the 44 RN hires, 16% were hired in less than 90 days and 43% were hired between 91 and 180 days. Forty-one percent of RN hires required more than 180 days.

It is important to note that DPH and DHR have implemented significant process reforms to reduce hire times for RNs, with a new goal of hiring nurses in 90 days or less. The two departments have collaborated in many ways, including initiation of a Lean process to optimize its hiring operations. A more detailed description of improvements that DHR is pursuing can be found in Appendix A.

3.4.2 Management Classification Series

The Management Classification Series was the second slowest to hire, with an overall median time to hire of 189 days for PCS position – just over six months. Chart 2 below shows the median times to hire for individual job classes within this series.

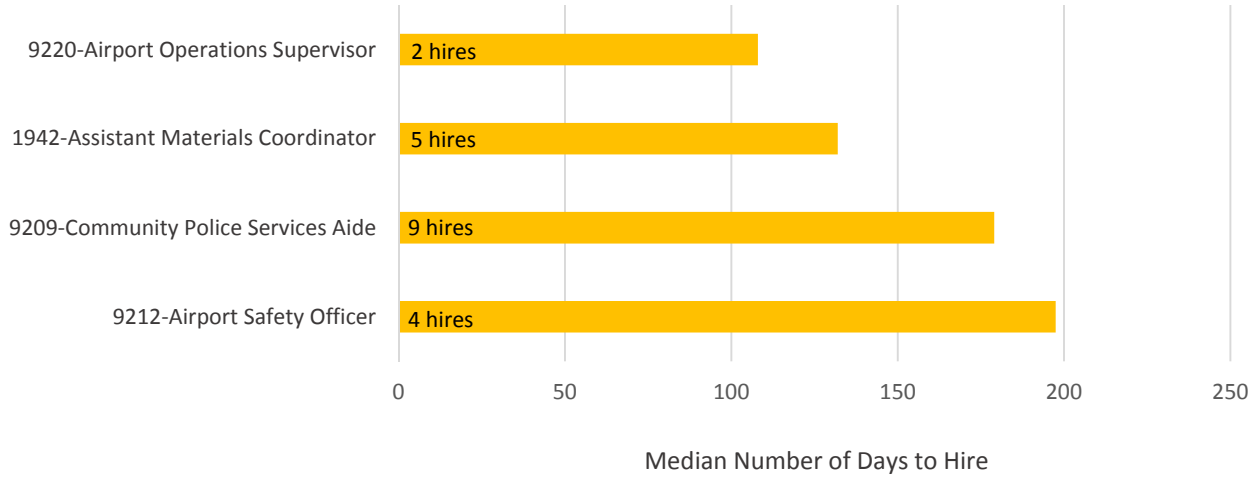
Chart 2 – Median Hire Times and Number of PCS Hires in the Management Classification Series



3.4.3 Airport Operation Classification Series

With 20 PCS hires in the dataset, the Airport Operation classification series had a median time to hire of 179 days. Chart 3 below shows the median time to hire for individual job classes within this series that appeared in the sample data. Airport Safety Officers required the most time to hire at 198 days – over six months. The two Airport Operations Supervisor positions were hired in almost half the time at a median of 108 days. One of the hires was made in just 69 days.

Chart 3 – Median Hire Times and Number of PCS Hires in the Airport Operation Classification Series

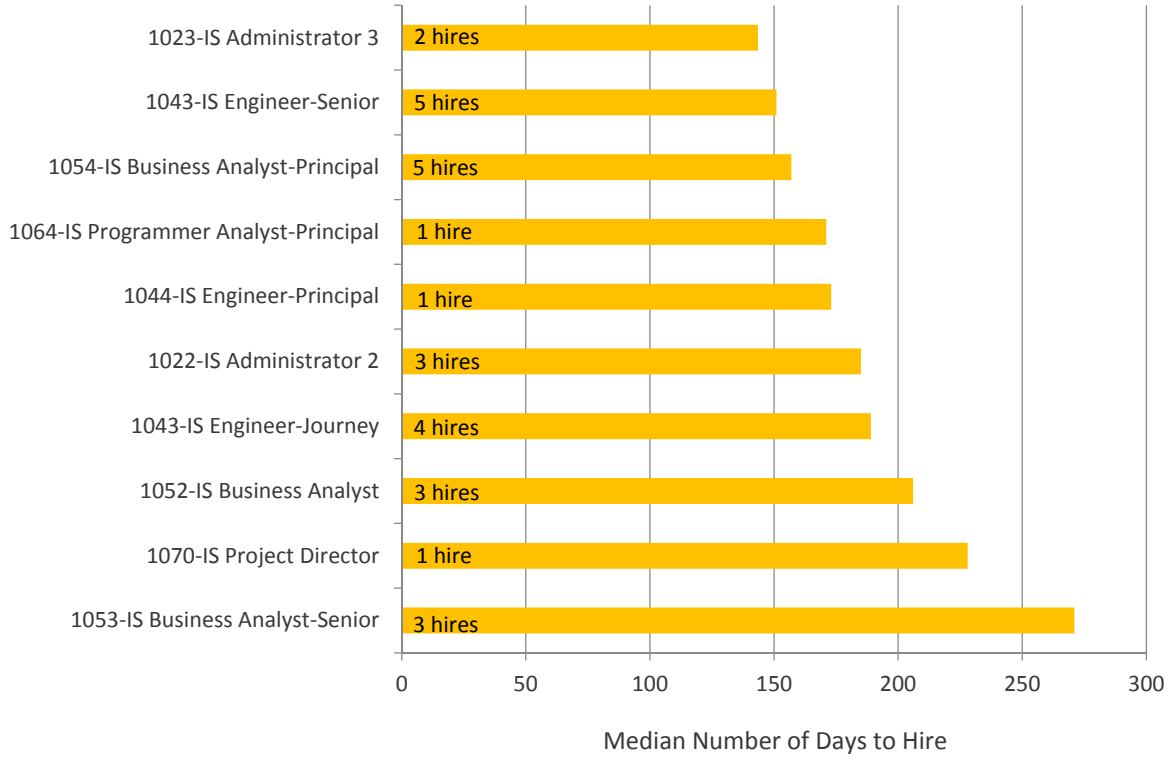


3.4.4 Information Systems Classification Series

Anecdotally, jobs in the IS series are considered by many to be among the most difficult to fill and the data support this perception: nine of the ten positions hired during the period sampled had a median hire time of 150 days or more, and half took more 180 days. Across all of these positions, the median hire time was 179 days.

Chart 4 shows the median hire time for each of the PCS IS positions included in our data sample. Stakeholder interviews revealed several challenges in filling IS positions: required expertise with specific software applications used only by the City; poor branding of positions such as job titles that do not match industry standards; and limited recruitment efforts. The City's very low unemployment rate of 3.8% also contributes to hiring difficulties. In response to these challenges, DHR launched an IS hiring pilot in two City departments in February, 2015 that uses technology solutions to deliver on-demand, un-proctored, online core exams and a video-based technical online interview designed to significantly expedite the process. DHR has also convened an IT hiring group to address other challenges, such as branding the City as a desirable employer, and improving the effectiveness of our recruitment efforts.

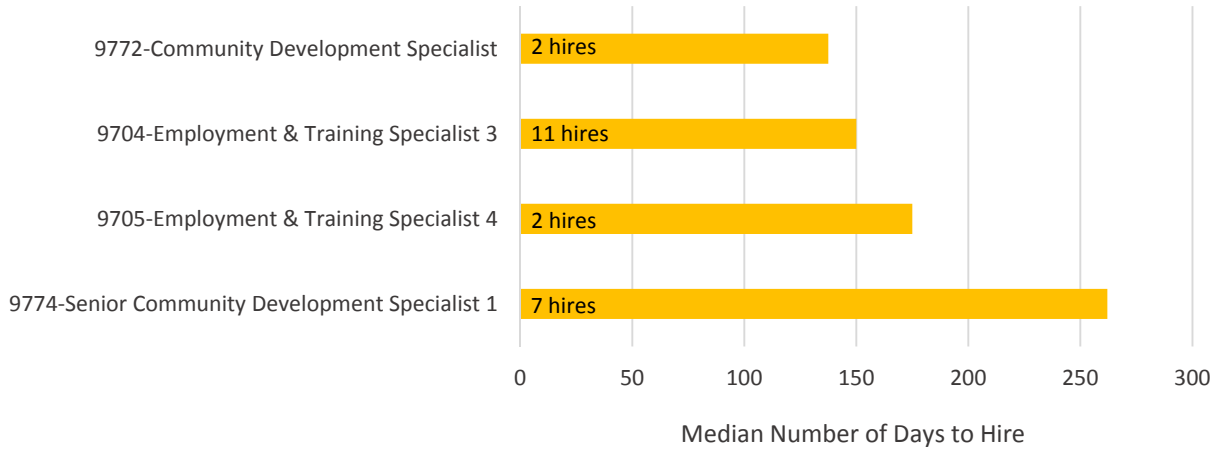
Chart 4 – Median Hire Times and Number of PCS Hires in the Information Systems Hires



3.4.5 Community Development Classification Series

The Community Development series included 22 PCS hires across four positions. The median hire time across the series was 163 days. Chart 5 shows the median hire times and number of PCS hires for the series.

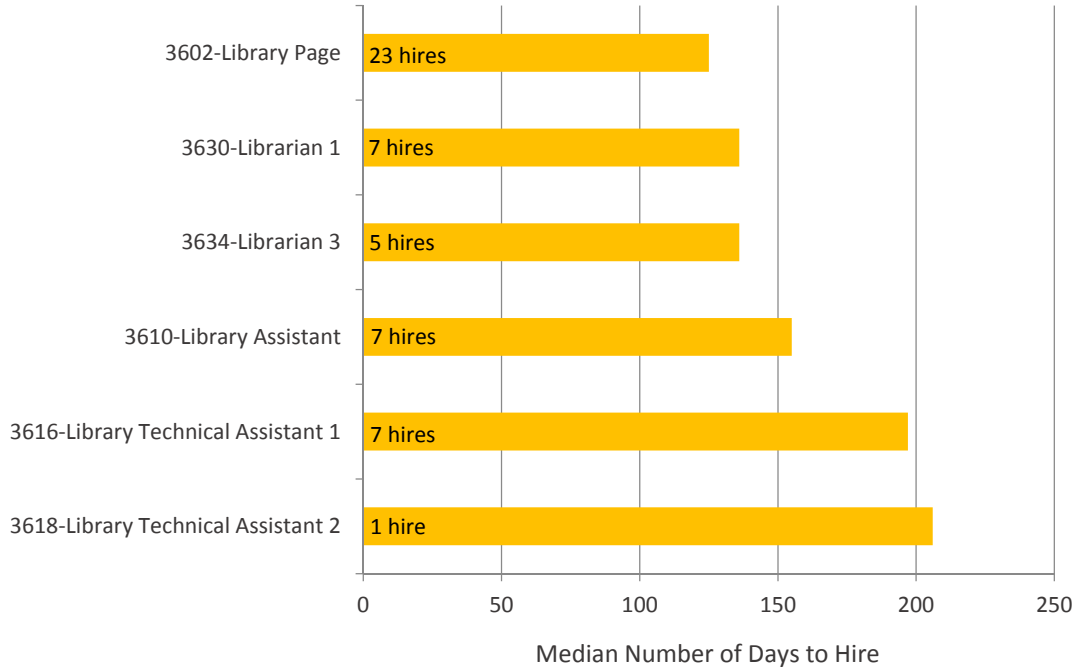
Chart 5 – Median Hire Times and Number of PCS Hires in the Community Development Classification Series



3.4.6 Library Classification Series

The City made 50 PCS hires in the Library classification series during the time period sampled with a median time to hire of 141 days, slightly longer than the citywide median. Chart 6 shows median hire times and number of PCS hires for the Library series. All of the positions had a median hire time of at least 125 days – about four months. Almost half of the positions hired during the time period sampled were Library Pages, with a median hire time of 125 days – about four months. One quarter of hires were Librarians, with a median hire time of 136 days.

Chart 6 –Median Hire times and Number of PCS Hires in the Library Classification Series

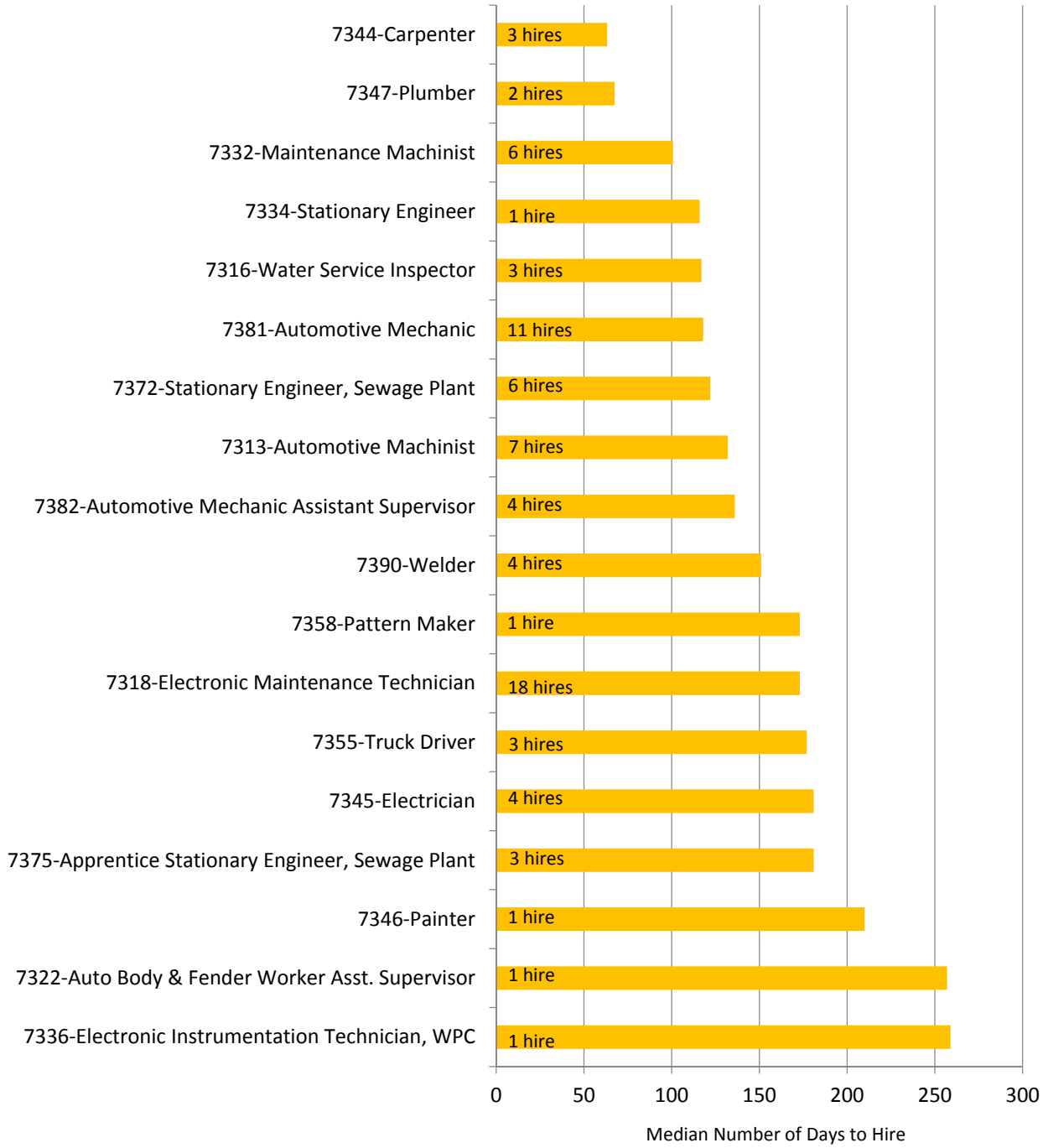


3.4.7 Journey-Level Trades Classification Series

The Journey-Level Trades series included 79 PCS hires at a median of 143 days, slightly longer than the citywide median. Chart 7 (next page) shows the median hire times and numbers of PCS hires for each job class included in the dataset. Electronic Maintenance Technicians and Automotive Mechanics accounted for 37 percent of all Journey-Level Trades hires. Electronic Maintenance Technicians were the most frequently hired and took a median of 173 days to hire. Electronic Instrumentation Technicians for water and pollution control took the longest time to hire at 259 days – 8.5 months.

Staff at DPW indicated that hiring journey-level trades is challenging because the City is competing with private sector employers for many positions during a time of booming construction. This challenge is reflected in the City's unusually low unemployment rate.

Chart 7 – Median Hire Times and Number of PCS Hires in the Journey-Level Trades Series



4.0 Challenges and Recommendations

As described throughout the report, our analysis points to several key challenges:

Time to Hire

1. The Citywide median hire time in the sample dataset was 137 calendar days for PCS positions.

2. There was significant variance in median hire times for PCS positions among departments, job classification series, and individual job classifications:

    a. The DPH and REC departments had the longest median hire times for PCS positions at 193 and 169 days, respectively;

    b. Five classification series (Nursing, Management, Airport Operation, Information Systems, and Community Development) had median hire times over 150 days; and

    c. Four job classes (Patient Care Assistant, Manager II, Electronic Maintenance Technician, and Registered Nurses) had median hire times over 150 days.

3. To promote effective and efficient hiring, DHR is initiating a number of process and systems reforms, which will be monitored and tracked over time.

Data Systems and Tracking

4. Currently, there is no way to link all hiring data captured for each recruitment effort throughout the hiring process; of the 15 major steps we identified in the process, the City can easily report position-level data for only three. The absence of a way to link data across and within systems, or a unified integrated system that allows for tracking data at the individual position level, makes it difficult to understand why some positions take longer to fill than others and which parts of the hiring process are most in need of improvement.

5. Notwithstanding the current inability to track position-level data across different systems, JobAps itself is unable to provide information in large datasets, and this inability also inhibits analysis.

6. The City is already pursuing numerous improvements to its processes and systems that require robust data tracking and change management practices.

The data obtained for this analysis reveal that in many cases the hiring process can take a considerable amount of time. However, the data do not explain the causes of the delays. As the City's data systems are currently configured, the City must conduct an extensive manual review

of the records for individual recruitment efforts in order to pinpoint where the longest delays occur and why. While this is feasible for a limited number of job classifications, it is impractical on a larger scale, or on an on-going basis.

Recommendations

Our analysis points to several opportunities for the City to improve its hiring processes and data systems.

Table 8 – Key Recommendations for Improving the City's Hiring Times

Hiring Processes

Recommendation	*Lead Dept(s)*
1. Focus hiring process improvements and streamlining efforts on the five classification series with the most number of PCS positions and the longest hire times.	DHR
2. Implement continuous, un-proctored civil service examinations on a broader scale for classes with a large number vacancies or hard to fill classes.	DHR, Hiring Departments
3. When implementing future system changes, replace manual "pull-based" workflow systems with automated "push-based" systems.	DHR, CON
4. Identify steps in the hiring process that can occur simultaneously, rather than sequentially.	DHR
5. Develop department-level annual hiring staffing plans, with specific start date targets for each quarter and associated workflow processes necessary to meet those targets.	Hiring Departments

Data Systems and Tracking

Recommendation	*Lead Dept(s)*
1. Consider developing a single integrated hiring data management and workflow system.	DHR, CON
2. In the absence of a single hiring data management system, create an interim solution to link eMerge PeopleSoft and JobAps data so the City has a clearer and more comprehensive view of each step of the hiring process.	DHR, CON
3. Following system improvements that allow for more comprehensive reporting, develop web-based human resource dashboards that provide HR staff and hiring managers with greater visibility into the hiring process.	DHR, CON
4. Develop and implement a change management program to support current and planned changes to hiring processes and systems across and within departments.	DHR

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Russell, N., ter Hofstede, A.H.M., Edmond, D., & van der Aalst, W.M.P. (n.d.). *Workflow Resource Patterns*. Retrieved from http://www.workflowpatterns.com/documentation/.

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Appendix A: Current DHR Time to Hire Reform Projects

DHR has launch a comprehensive project – Project HIR^{2}E (Hiring Innovation through Redesign and Resource Efficiencies) to identify, update, and implement a full range of innovative human resources processes to ensure effective and efficient hiring of City employees.

Project HIR^{2}E uses an evidence-based approach to identify current process inefficiencies that result in hiring delays. Relying on Lean principles and values, the objective of Project HIR^{2}E is to identify policy, process, procedural, and practice waste(s) that result in delays and develop creative solutions to address them.

Project HIR^{2}E focuses on four (4) hiring-related project components:

- Component 1 - Vacancy to Request To Fill (RTF) Approval
- Component 2 - Examination and Eligible List Development
- Component 3 - Post Referral Selection Processes to Identification of Finalist
- Component 4 - Pre-Employment Vetting and Appointment Processing.

In collaboration with other agencies, DHR is working on a number of projects that align with the recommendations contained in this report and are designed to increase hiring efficiency:

- **Component 1 - Vacancy to Request to Fill:** DHR will interview human resources staff at ten departments to understand how they are currently managing approval of positions prior to the submission of an RTF. DHR will use these interviews to develop a set of best practices for departments.

- **Component 2 - Examination and Eligible List Development:** DHR has established pilot expedited examinations using an on-demand, online, un-proctored examination process. In addition, DHR has developed and implemented a pilot continuous, class-based examination process.

  - **Registered Nurse Hiring:** DHR is working in collaboration with DPH to improve the hiring processes for Registered Nurses. This has included participation in DPH's Lean processes and reorganizing the department's examination and referral processes for this classification. DHR and DPH have designed and delivered a continuous class-based examination program based in 17 specialty nurse areas.

  - **Expedited IT Hiring Pilot:** DHR is working with the Mayor's Office, Controllers Office, Committee on Information Technology (COIT), Department of Technology, and others on a pilot program to increase the speed of eligible list creation for the IS Business Analyst positions (1053 and

1054). The online, on-demand, un-proctored continuous testing program launched with two departments on February 4, 2015.

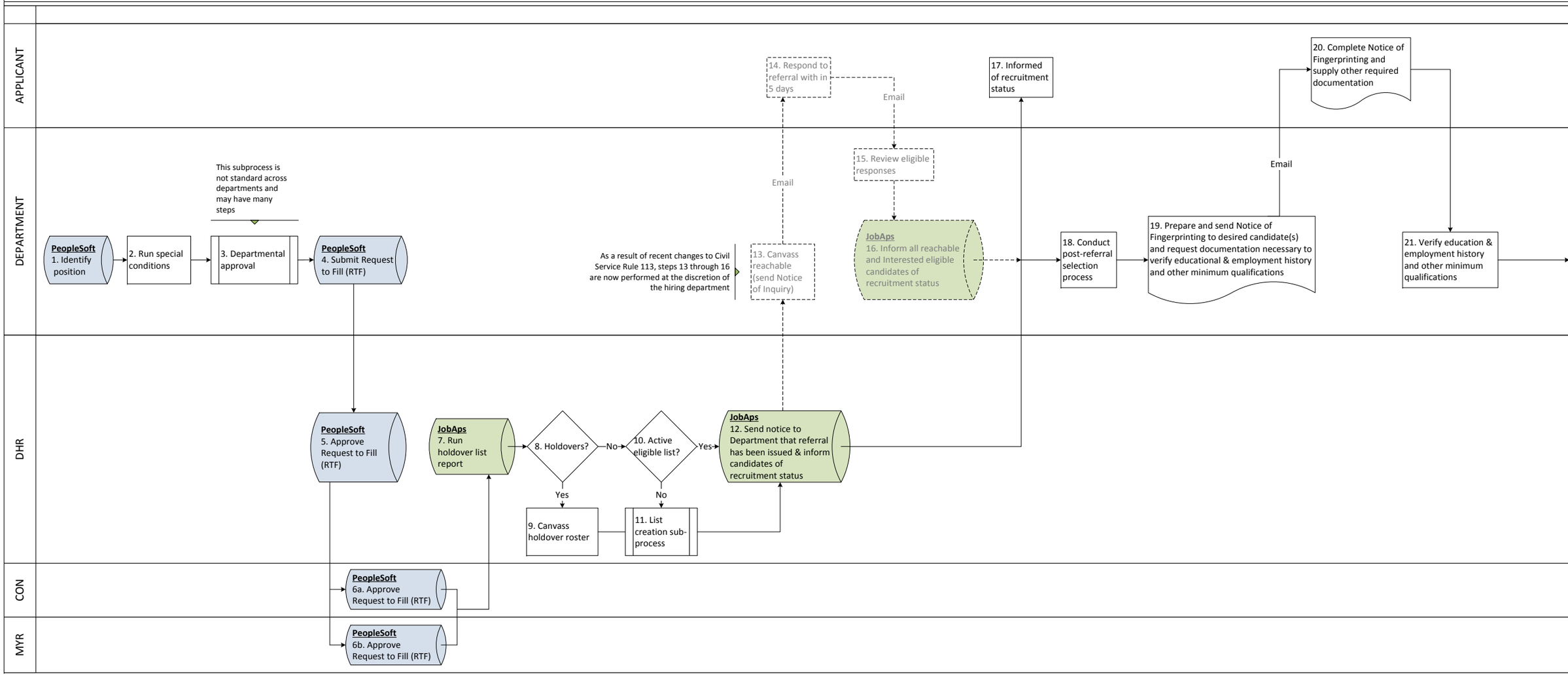
- DHR is also implementing an expedited, system-delivered referral process once an eligible list is adopted. These changes include a position table in the JobAps system that will allow for data to move dynamically between eMerge PeopleSoft and JobAps. This project will also allow DHR to group positions awaiting referral based on the characteristics of each position. Proposed groups include positions waiting for a list to be established and positions where a list is available.

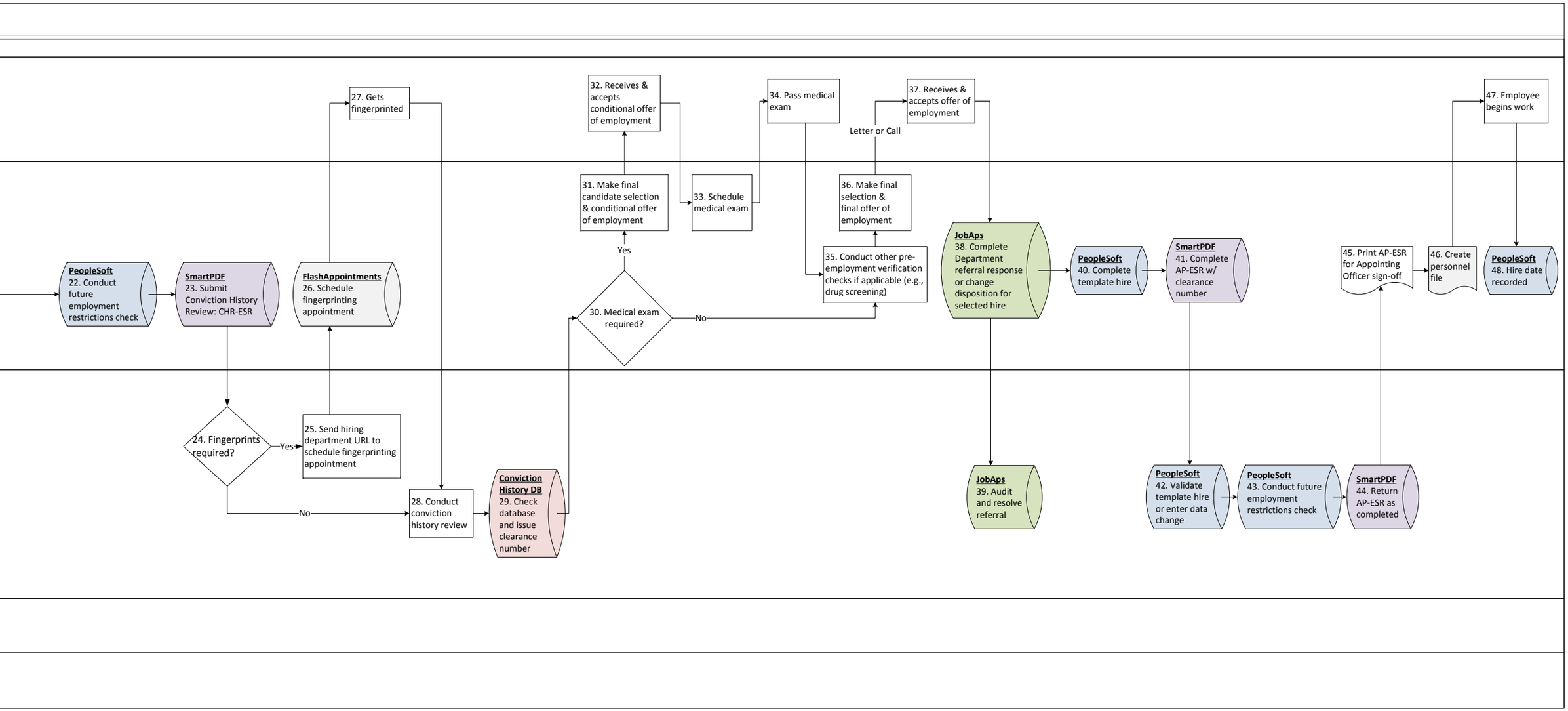
- **Component 3 - Post-Referral to Identification of Finalist:** DHR is working to add automated referral verification and other process improvements into the Request to Hire (RTH) process. The system will track the total number of reachable ranks for a recruitment, and confirm that the selected candidate is reachable based on depth in the ranks and the departments noted reasons for not selecting candidates ranked higher on the eligible list.

- **Component 4 - Pre-Employment Vetting and Appointment Processing**: DHR, in partnership with the Controller's Office, is currently working to streamline and integrate pre-employment verification and appointment processing. This project will consolidate the use of multiple systems for fingerprinting, background clearance, and appointment processing into one system built by SmartERP to connect with eMerge PeopleSoft. It will have appropriate workflow processes to ensure that a candidate is not issued clearance until all appropriate actions have been taken, and it will reduce the current system of manually re-entering data into multiple different systems.

Appendix B: Hiring Process Map for PCS Positions with Eligible List

City and County of San Francisco Simplified Hiring Process for a Permanent Civil Service Position (as of April, 2015)




PeopleSoft
22. Conduct future employment restrictions check
SmartPDF
23. Submit Conviction History Review: CHR-ESR
24. Fingerprints required?
Yes
No
25. Send hiring department URL to schedule fingerprinting appointment
FlashAppointments
26. Schedule fingerprinting appointment
27. Gets fingerprinted
28. Conduct conviction history review
Conviction History DB
29. Check database and issue clearance number
30. Medical exam required?
Yes
No
31. Make final candidate selection & conditional offer of employment
32. Receives & accepts conditional offer of employment
33. Schedule medical exam
34. Pass medical exam
35. Conduct other pre-employment verification checks if applicable (e.g., drug screening)
36. Make final selection & final offer of employment
Letter or Call
37. Receives & accepts offer of employment
JobAps
38. Complete Department referral response or change disposition for selected hire
JobAps
39. Audit and resolve referral
PeopleSoft
40. Complete template hire
SmartPDF
41. Complete AP-ESR w/ clearance number
PeopleSoft
42. Validate template hire or enter data change
PeopleSoft
43. Conduct future employment restrictions check
SmartPDF
44. Return AP-ESR as completed
45. Print AP-ESR for Appointing Officer sign-off
46. Create personnel file
47. Employee begins work
PeopleSoft
48. Hire date recorded