



County of Los Angeles
**CHIEF EXECUTIVE OFFICE
OPERATIONS CLUSTER**

SACHI A. HAMAI
Chief Executive Officer

DATE: January 29, 2020
TIME: 2:00 p.m. – 4:00 p.m.
LOCATION: Kenneth Hahn Hall of Administration, Room 830

AGENDA

Members of the Public may address the Operations Cluster on any agenda item by submitting a written request prior to the meeting.
Two (2) minutes are allowed for each item.

1. **Call to order – Rick Velasquez/Gevork Simdjian**
2. **INFORMATIONAL ITEM(S):**
(5 minutes)
 - A) Board Memo:
REPORT BACK ON COUNTY FLEET VEHICLE PURCHASING
RESTRICTIONS
CEO CSO – Gary Gero, Chief Sustainability Officer
ISD – Michael Owh, Purchasing Agent
3. **PRESENTATION/DISCUSSION ITEMS:**
 - A) JOB ORDER CONTRACTS CONSTRUCTION PROJECT MANAGEMENT
ISD – Michael Eugene, General Manager
4. **Public Comment**
(2 minutes each speaker)
5. **Adjournment**

FUTURE AGENDA TOPICS

CALENDAR LOOKAHEAD:

(5 minutes)

Board Letter:

INTRODUCTION OF AN ORDINANCE TO ESTABLISH A RENTAL
REGISTRATION FEE RELATED TO THE MOBILEHOME RENT
STABILIZATION ORDINANCE AND RENT STABILIZATION ORDINANCE

Board Letter:

AMENDMENTS TO THE PERMANENT MOBILEHOME RENT STABILIZATION
ORDINANCE AND PERMANENT RENT STABILIZATION ORDINANCE

BOARD LETTER/MEMO – FACT SHEET OPERATIONS CLUSTER

OPS CLUSTER AGENDA REVIEW DATE	1/29/2020	
BOARD MEETING	3/3/2020	
SUPERVISORIAL DISTRICT AFFECTED	All	
DEPARTMENT	Chief Executive Office / Internal Services Department	
SUBJECT	Countywide Sustainability Plan – for information only	
PROGRAM	Fleet Vehicle Purchasing	
SOLE SOURCE CONTRACT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, please explain why: not a contract	
DEADLINES/ TIME CONSTRAINTS	This is a 60-day report back in response to Board motion (Kuehl-Solis) of December 10, 2019 directing changes to vehicle purchasing policy. We have requested an extension for the report back in order to have the Operations Cluster and Audit Committee consider the changes before bringing it to Board for adoption.	
COST & FUNDING	Total cost: \$ 0	Funding source: TERMS (if applicable): Explanation: There is no internal cost to revise the policy. County departments may face higher initial vehicle procurement costs as a result of the policy but are likely to have a lower overall cost of ownership over the life of the vehicle due to cost savings for fuel and maintenance.
PURPOSE OF REQUEST	Approve vehicle purchase policy revisions consistent with the Board direction.	
BACKGROUND (include internal/external issues that may exist)	The Board motion directed CEO and ISD to develop revisions to the fleet purchasing policy – Board Policy 3.020 – to make two changes that are consistent with California state vehicle purchasing rules: 1) only allow the purchase of vehicles from companies that have recognized California's authority to set vehicle standards as provided by the federal Clean Air Act and 2) require the purchase of zero emission vehicles as the default option with an exception for public safety vehicles.	
DEPARTMENTAL AND OTHER CONTACTS	Name, Title, Phone # & Email: <ul style="list-style-type: none"> Gary Gero, Chief Sustainability Officer, 213-974-1160, ggero@ceo.lacounty.gov Michael Owh, Purchasing Agent, 323-267-2109, mowh@isd.lacounty.gov 	



County of Los Angeles CHIEF EXECUTIVE OFFICE

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SACHI A. HAMAI
Chief Executive Officer

Board of Supervisors
HILDA L. SOLIS
First District

MARK RIDLEY-THOMAS
Second District

SHEILA KUEHL
Third District

JANICE HAHN
Fourth District

KATHRYN BARGER
Fifth District

January 15, 2020

To: Supervisor Kathryn Barger, Chair
Supervisor Hilda L. Solis
Supervisor Mark Ridley-Thomas
Supervisor Sheila Kuehl
Supervisor Janice Hahn

From: Sachi A. Hamai
Chief Executive Officer

REPORT BACK ON COUNTY FLEET VEHICLE PURCHASING RESTRICTIONS (ITEM NO. 2, AGENDA OF DECEMBER 10, 2019)

As directed by the Board, the Chief Sustainability Office (CSO), in collaboration with the County Purchasing Agent and the Chief Executive Office (CEO), has prepared a new Board Policy 3.021 – County Fleet Vehicle Purchasing Restrictions to align the County's vehicle purchasing standards with the State of California with regard to support for California's authority to set vehicle emissions standards.

BACKGROUND

Given the severity of our air pollution, Los Angeles County has long been a leader in the fight against air pollution having established the first air pollution permitting program in the nation and creating the first air pollution control district in the 1940s. Similarly, the State of California has a long history of addressing this issue establishing the first automobile emissions standards in 1966 and creating the California Air Resources Board in 1967. When it enacted the 1970 federal Clean Air Act (CAA), the United States Congress recognized California's pioneering efforts and its extreme air pollution problem and granted to the state the authority to continue to set strict motor vehicle emissions standards under a waiver.

The waiver provisions of the CAA are contained in Section 209 and specify that the U.S. Environmental Protection Agency (EPA) may only deny a waiver request if it finds that California's extraordinary pollution circumstances no longer exist or if the state acted in an arbitrary and capricious manner in setting motor vehicle emissions standards. Since 1970, EPA has not denied a waiver request. However, last year the EPA began the process to revoke a previously approved waiver. This action is now the subject of litigation between California – which is supported by 22 states, the District of Columbia, and the City of Los Angeles – against the EPA. Despite this, four automakers – Ford, Honda, Volkswagen, and BMW – have voluntarily agreed to continue to meet California's standards regardless of the federal action.

The State of California has adopted a vehicle purchasing policy for certain classes of light and medium duty vehicles under which California will only buy vehicles from automakers that have agreed to meet California's standards. On December 10, 2019, your Board directed the County to develop a similar policy for Board consideration.

DISCUSSION

The CSO, in collaboration with the Internal Services Department (ISD) and operators of County fleets, has developed proposed Board Policy 3.021 – County Fleet Vehicle Restrictions (Attachment 1) that would align the County's vehicle purchasing policy with California's in accordance with Board direction.

This policy would limit County departments to purchasing vehicles from Ford, Honda, Volkswagen, BMW, and any other automaker that agrees to voluntarily meet California's motor vehicle emission standards as identified by the California Department of General Services. This policy would apply to all non-emergency sedans, sport utility vehicles, minivans, passenger and cargo vans, pickup trucks, and truck-cab-chassis. An exemption for Public Safety Special Performance (PSSP) vehicles is included in the proposed policy.

Additionally, an exemption process is established for departments that can demonstrate each of the following:

- 1) acquisition of a compliant vehicle would cause severe and extended impacts to the department's ability to execute its programmatic responsibilities;
- 2) the requested non-compliant vehicle is necessary to protect the health, safety, or security of the public or is necessary to provide critical services and functions;
- 3) the requested non-compliant vehicle acquisition cannot be supported with an existing fleet asset; and
- 4) the requested non-compliant vehicle acquisition is urgently required to ensure the County's ability to execute its programmatic responsibilities and cannot be postponed to subsequent years.

Exemption requests under proposed Board Policy 3.021 are to be provided in writing to the County Purchasing Agent at ISD who shall approve or deny such requests after consultation with the Chief Sustainability Officer.

The CSO and Internal Services Department (ISD), in collaboration with operators of County fleets, has also updated and revised Board Policy 3.020 – Clean Fuel – Sustainable Fleet (Attachment 2) in a manner that would align the County's vehicle purchasing policy with the Countywide Sustainability Plan in accordance with Board direction.

This updated policy would make Zero Emission Vehicles the standard for all new non-emergency passenger sedans purchases by County departments. An exemption for Public Safety Special Performance (PSSP) vehicles is included in the proposed policy.

RECOMMENDATION

It is recommended that the Board of Supervisors adopt revised Board Policy 3.020 – Clean Fuel – Sustainable Fleet and Board Policy 3.021 – County Fleet Vehicle Purchasing Restrictions and that the policies be made effective immediately upon adoption.

To support these policies, it is further recommended that the Board instruct:

- 1) the CEO, in consultation with the Chief Sustainability Officer and ISD, to develop recommendations on increasing electric vehicle supply equipment on County leased facilities; and
- 2) the Director of ISD to develop and implement vehicle standardization requirements that will simplify ordering, increase buying power, consolidate parts inventory, and ultimately decrease costs and increase efficiency of the County's fleet(s).

SAH:FAD:GG
jg

Attachment

1. Policy 3.021 – County Fleet Vehicle Purchasing Restrictions
2. Policy 3.020 – Clean Fuel – Sustainable Fleet

c: Executive Office, Board of Supervisors
 County Counsel
 Internal Services Department
 Department of Public Works
 Sheriff's Department
 Fire Department
 Los Angeles County Development Authority

Policy: 3.020 - Clean Fuel – Sustainable Fleet

Effective Date:

PURPOSE

Establishes a clean air – sustainable fleet policy to improve air quality in the South Coast Basin through the expanded use of clean fuels for County vehicles in conjunction with other County-sponsored environmental programs. This policy establishes standards for new vehicle purchases and vehicle replacement cycles that will ensure the County's vehicles are replaced in a fiscally responsible and consistent manner that reduces energy/fuels consumption, criteria pollutants generation, and greenhouse gas (GHG) emissions.

REFERENCE

September 20, 1994 Board Order, [Synopsis 9](#)

[November 30, 1994](#) Chief Administrative Office and Internal Services Department memo, "Los Angeles County Clean Fuels Policy"

January 10, 1995 Board Order, [Synopsis 8](#)

November 15, 2005 [Board Order No. 2](#)

February 3, 2009 [Board Order No. 23](#)

July 1, 2011 [Chief Executive Office Policy/Procedure/Guidelines-County Vehicle Policy](#)

[California Air Resources Board \(CARB\)](#)

[South Coast Air Quality Management Districts \(AQMD\)](#)

[California's Global Warming Solutions Act \(AB 32\)](#)

[California's Sustainable Communities Strategy \(SB 375\)](#)

[Vehicle Retirement and Replacement \(SB 1275\)](#)

[June 30, 2015 Board Order No. 22](#)

[December 10, 2019 Motion \(Kuehl-Hahn\)](#)

POLICY

It is the policy of the County of Los Angeles to transition its motor vehicle fleet to viable clean fuels, including hybrids and alternative fuels vehicles, as approved by the California Air Resources Board (CARB) and South Coast Air Quality Management Districts (AQMD).

The following County standards are provided for new vehicle purchases:

1. The standard for all new non-emergency passenger sedans for conducting routine County business shall be Zero Emission Vehicles.¹ Any exceptions to this provision shall be made for cause and approved by the Chief Executive Office (CEO) in consultation with ISD for technical clarification.
2. **Public Safety Special Performance (PSSP) Exemption**
County departments that can sufficiently demonstrate the need for vehicles with special performance requirements necessary for the protection of public safety and welfare shall not be subject to this policy. When invoking the PSSP exemption, County departments must submit sufficient justification with the agency's exemption request that demonstrates:
 - a. the requested acquisition(s) is necessary to protect the health, safety, or security of the public or is necessary to provide critical services and functions;
 - b. the vehicle is an authorized emergency vehicle pursuant to California Vehicle Code §165;
 - c. the vehicle, pursuant to California Vehicle Code §21055, may be:
 - i. driven in response to an emergency call or while engaged in rescue operations, or
 - ii. driven in immediate pursuit of an actual or suspected violator of the law, or
 - iii. driven in response to, but not returning from, a fire alarm, or
 - iv. operated from one place to another as rendered desirable or necessary by reason of an emergency call and operated to the scene of the emergency, or
 - v. operated from one fire station to another or to some other location by reason of the emergency call.
 - d. Where emergency response is not the primary purpose of a vehicle, a County department must be able to demonstrate that the specific vehicle may be used as part of an established mutual aid agreement that would necessitate an emergency response as outlined above.
3. The standard for new non-emergency trucks and medium to heavy-duty vehicles (Gross Vehicle Weight over 14,000 pounds) with emphasis on buses, trucks, street sweepers, and waste collection vehicles will be Compressed Natural Gas (CNG), or other alternative fuels other than diesel unless exempted as allowed by South Coast Air Quality Management District (AQMD) Rules 1191, 1193 and 1196.
4. Departments shall make at least 10% of all non-emergency light duty trucks or vans (14,000 pounds Gross Vehicle Weight or less) purchased as original equipment manufactured alternative fuel, such as CNG, Propane (LPG), Transitional Zero Emission Vehicles (T-ZEVs, Plug-In hybrids) or ZEV (Plug-In models). Any exceptions to this provision shall be made for cause and approved by the CEO in consultation with ISD for technical clarification.
5. Departments shall provide basis for seeking an exemption from the acquisition of vehicles not meeting the County standards to the CEO, in consultation with the Chief Sustainability Office, for review and approval. The written approval must be submitted along with the vehicle purchase requisition to the Internal Services Department's (ISD) Purchasing Division.
6. All exemptions will be reported by ISD, or the appropriate reporting department, in their Annual Clean Fuels – Sustainable Fleet report. (See No. 5 below)
7. Departments that manage fleet operations shall report to the Board by March 1st each year on the composition of their fleet and the number of vehicles powered by clean fuels, including hybrids and other alternative fueled vehicles.

The following are the guidelines to achieve a systematic approach to vehicle replacement:

1. All departments will utilize the following vehicle fleet replacement cycle standards for light-duty vehicles:

Vehicle Class	Years	Mileage
---------------	-------	---------

¹ [As defined by the California Air Resources Board.](#)

Emergency Vehicle*	8	110,000
Sedan	8	110,000
SUV	8	110,000
Van	8	110,000
Truck – Light-Duty	8	110,000

* Emergency Vehicle includes light duty emergency-related vehicles as defined by the California Vehicle Code Sections 165, 30, 25269, 21055, and 27002. Light duty trucks are defined as those of 14,000 pounds gross vehicle weight or less. All vehicle replacement standards are applicable on 'whichever comes first' basis.

2. Vehicles become candidates for replacement when they reach either the age or mileage replacement criteria, whichever comes first. When vehicles are identified as candidates for replacement, the vehicles are not mandated to be replaced. Rather, vehicle replacement candidates will be subject to further analysis, including current utilization level; front-line or backup assignment status; repair history and pending repair/refurbishment costs; perceived reliability, suitability, and safety; and ease of replacement. Departments will report the results of this review to the CEO as part of their annual vehicle budget requests.
3. Departments will consult with the CEO to develop budgetary plans to fund replacement vehicles. Vehicle replacement will be coordinated centrally through the CEO as part of the annual budget process. ISD will provide fleet utilization and repair historical data and help develop the replacement strategy for departments that use ISD Fleet Services. Other departments will similarly work directly with the CEO. Each department should prepare an annual vehicle replacement plan.
4. Departments shall review vehicle utilization for opportunities to reduce fleet operating costs. Where feasible, departments shall reduce vehicle counts by pooling, renting County motor pool vehicles, employee mileage reimbursement, etc. Departments shall review vehicles that are driven 5,000 miles or less annually. Generally, such vehicles will be considered underutilized, and should be removed/turned in or redeployed unless fully justified based on business/operating requirements. Departments are advised to periodically rotate higher use vehicles with lower use units.
5. Increases to departmental vehicle counts will require CEO approval based on operating and/or program needs.
6. Unless otherwise justified based on operating/business needs, vehicles must be replaced "in kind" (e.g., sedan for a sedan). Replacement vehicles must meet ISD vehicle standardization requirements, departmental business requirements, limit features/accessories to those that improve safety and/or reduce risk or liability issues, enhance employee productivity, and are clearly needed for operations.
7. In procurement calculations of the Total Cost of Ownership bid evaluation shall utilize vehicle maintenance costs and replacement mileage standards detailed above to determine the lowest responsible bid.
8. All retired/replaced vehicles must be turned in for disposal or salvage and may not be retained within any County operation unless approved by the CEO. For salvaged vehicles, auction proceeds will be deposited to Motor Vehicle Accumulated Capital Outlay (MVACO) or accounts identified by each department and returned as appropriate to each department.

RESPONSIBLE DEPARTMENT

Internal Services Department

Chief Executive Office

DATE ISSUED/SUNSET DATE

Issue Date: January 10, 1995	Sunset Review Date: January 10, 2004
Review Date: February 19, 2004	Sunset Review Date: January 10, 2007
Review Date: November 15, 2005	Sunset Review Date: January 10, 2009
Review Date: January 18, 2007	Sunset Review Date: January 10, 2010
Reissue Date: February 3, 2009	Sunset Review Date: January 10, 2010
Reissue Date: February 18, 2010	Sunset Review Date: February 18, 2014
Review Date: December 18, 2013	Sunset Review Date: February 18, 2016
Review Date: May 21, 2015	Sunset Review Date: March 31, 2019
Review Date: June 30, 2015	Sunset Review Date: March 31, 2019
Review Date: July 20, 2017	Sunset Review Date: March 31, 2021

3.021 – County Fleet Vehicle Purchasing Restrictions

Effective Date:

PURPOSE

Aligns the County's fleet vehicle purchasing with the State of California in support of California's authority under Section 209 of the federal Clean Air Act to set motor vehicle emissions standards.

REFERENCE

[December 10, 2019 Motion \(Kuehl-Hahn\)](#)

POLICY

It is the policy of the County of Los Angeles that County departments are required to purchase vehicles from Original Equipment Manufacturers (OEMs) that recognize California's authority to set vehicle emission standards under Section 209 of the Clean Air Act and that have aligned with the California Air Resources Board (CARB) in their commitment to reducing their fleets' emissions. A current list of CARB-aligned OEMs can be found on the California Department of General Services (DGS), Office of Fleet and Asset Management (OFAM) [website](#).

Designated vehicle categories subject to this policy include sedans, sport utility vehicles, minivans, passenger and cargo vans, pickup trucks, box trucks, and truck-cab-chassis as shown on the DGS OFAM [website](#).

Any exceptions to this policy, including Public Safety Special Performance (PSSP) exemptions, shall be requested by written application to the County Purchasing Agent in the Internal Services Department (ISD). The Purchasing Agent shall approve or deny requests in consultation with the Chief Sustainability Officer (CSO). The Purchasing Agent shall report annually to the Board on all exemptions granted.

For an exemption to be approved, County departments must provide justification that sufficiently demonstrates each of the following:

- 1) the acquisition of compliant vehicle would have a severe and extended impact to the agency's ability to execute its programmatic responsibilities;
- 2) the requested non-compliant vehicle is necessary to protect the health, safety, or security of the public or is necessary to provide critical services and functions;

- 3) the requested non-compliant vehicle acquisition cannot be supported with an existing fleet asset;
and
- 4) the requested non-compliant vehicle acquisition is urgently required to ensure the County's ability to execute its programmatic responsibilities and cannot be postponed to subsequent years.

Public Safety Special Performance (PSSP) Exemption

County departments that can sufficiently demonstrate the need for vehicles with special performance requirements necessary for the protection of public safety and welfare shall not be subject to this policy. When invoking the PSSP exemption, County departments must submit sufficient justification with the agency's exemption request that demonstrates:

- 1) the requested acquisition(s) is necessary to protect the health, safety, or security of the public or is necessary to provide critical services and functions;
- 2) the vehicle is an authorized emergency vehicle pursuant to California Vehicle Code §165;
- 3) the vehicle, pursuant to California Vehicle Code §21055, may be:
 - a. driven in response to an emergency call or while engaged in rescue operations, or
 - b. driven in immediate pursuit of an actual or suspected violator of the law, or
 - c. driven in response to, but not returning from, a fire alarm, or
 - d. operated from one place to another as rendered desirable or necessary by reason of an emergency call and operated to the scene of the emergency, or
 - e. operated from one fire station to another or to some other location by reason of the emergency call.
- 4) Where emergency response is not the primary purpose of a vehicle, a County department must be able to demonstrate that the specific vehicle may be used as part of an established mutual aid agreement that would necessitate an emergency response as outlined above.

RESPONSIBLE DEPARTMENT

Internal Services Department
Chief Executive Office

DATE ISSUED/SUNSET DATE

Issue Date: February XX, 2020	Sunset Review Date: February XX, 2025
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ISD Facilities Craft Program

Craft Participation Analysis

Executive Summary

JANUARY 2020



Introduction & Intent

On September 28, 2010, the LA County Board of Supervisors authorized the development of the County Deferred Maintenance Program, more currently known as the Facility Reinvestment Program (FRP), to establish a rational basis for short- and long-term planning of reinvestment in County facilities. In response, ISD's Facilities Operations Services (ISD-FOS) has initiated a five-year project planning process that coincides with the CEO's five-year funding plan that identifies and plans current FRP work, including the volume of work that would be associated with the county craft Force Account limits. One result of this planning activity is the identification of increased county work-force opportunities that exceed the current County employee workload capacities in many craft areas over the next 10 years. This workload has a value of \$195M.

Based on the Board of Supervisor's request to investigate the potential to provide meaningful work opportunities for County craft labor combined with the projected increased workload to address existing, documented County facility deficiencies, ISD-FOS initiated a study to analyze the increased workload for Force Account craft labor suitable for performing this work internally, and quantifying the associated increased County staffing requirements.

Purpose

This report serves two purposes:

1. To identify potential opportunities within the FRP for work to be performed by ISD in-house Crafts over a 10-year period. This potential group of work within the FRP is identified as the "ISD Facilities Craft Program."
2. To perform a "Craft Participation Analysis" which assesses Craft capacities reflecting the historical volume of work performed by ISD to be utilized as a guide in resource planning for future short- and long-term availability of Craft resources. This Craft Participation Analysis will identify additional Craft resources necessary to address LA County's Board of Supervisors' interest in optimizing the use of in-house Craft resources subject to the 'Force Account' limits set forth in the State Public Contract Code (PCC).

Criteria, Parameters & Methodology

The ISD Facilities Craft Program analysis was conducted based on the following criteria and parameters:

- Specific County systems maintenance and deficiency databases were selected to identify Force Account work suitable for existing County ISD Craft labor pools
- This data was reduced to exclude County departments with their own in-house maintenance labor including LASD, DHS, DOW, and LACFD, which identified a workload of \$195M suitable for county Force Account resources
- Analyses assume all potential deficiency work to be executed over a period of 10 years starting FY20/21





Criteria, Parameters & Methodology continued

- In addition to the raw data, interviews were conducted, and historical information was analyzed, including 2020 hourly staff rates for ISD, current staff count per Craft, and their potential availability for utilization in the ISD Facilities Craft Program
- RSMMeans and the Gordian Group Cost book were utilized for analytical due diligence
- An additional analysis of total volume of potential deficiency work included the application of “Severity Categorization” for ISD’s \$195M volume of work. The grouping of the deficiency work is defined in four categories: Critical, High, Medium and Low

Total Potential Increase of Staffing Based on Workload Demand

The potential additional Craft work opportunities identified in the results of this study conclude that additional County craft resources would be needed starting in year 1 and peaking at 74 Full Time Employees based upon current workload, as shown in Figure 1.

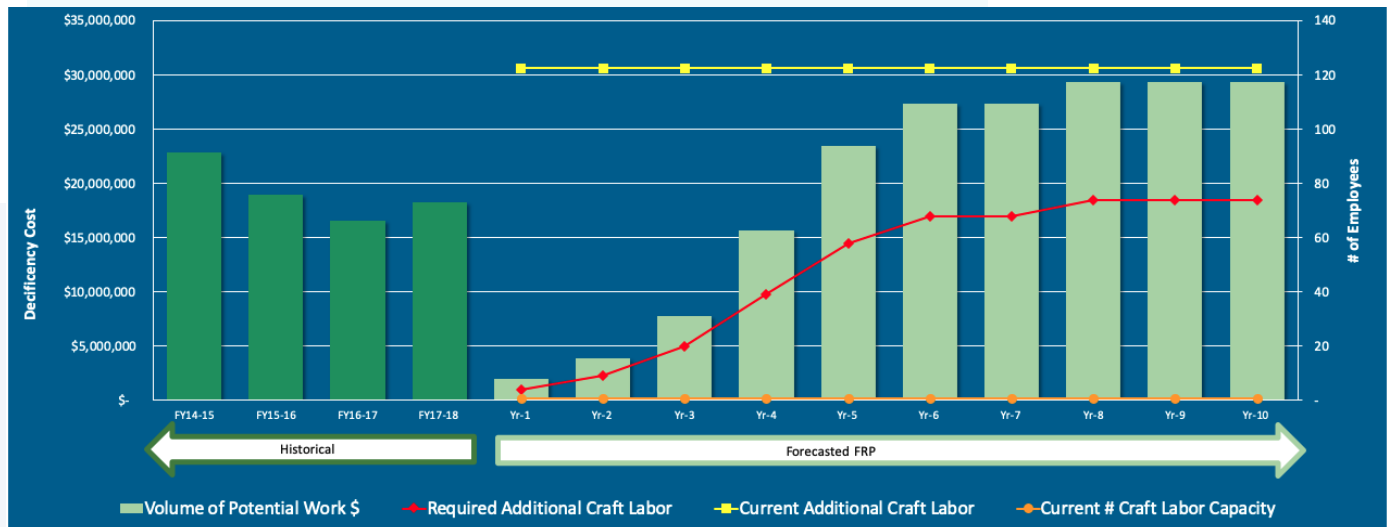


Figure 1: Additional Craft Labor required to meet the projected workload (in red)

Craft by Craft Summary

\$	195,446,014	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
%	1%	2%	4%	8%	12%	14%	14%	15%	15%	15%	
Volume of Potential Work \$	\$ 1,954,460	\$ 3,908,920	\$ 7,817,841	\$ 15,635,681	\$ 23,453,522	\$ 27,362,442	\$ 27,362,442	\$ 29,316,902	\$ 29,316,902	\$ 29,316,902	
Required Additional Craft Labor	4	9	20	39	58	68	68	74	74	74	
ELEVATOR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
METAL WORKS	-	-	-	-	-	-	-	-	-	-	
PAINTING / SIGNAGE	-	1	1	2	3	4	4	4	4	4	
PLUMBING	-	-	1	1	2	3	3	3	3	3	
MASONRY	-	1	1	3	4	5	5	5	5	5	
HVAC	-	-	1	2	3	3	3	4	4	4	
ROOFING	2	4	8	17	25	29	29	31	31	31	
FLOORING	1	1	3	5	8	9	9	10	10	10	
ELECTRICAL	-	1	2	4	5	6	6	7	7	7	
CARPENTRY	1	1	3	5	8	9	9	10	10	10	
Current Additional Craft Labor	123	123	123	123	123	123	123	123	123	123	
Craft Labor Deficit to Meet Demand	(4.0)	(9.0)	(20.0)	(39.0)	(58.0)	(68.0)	(68.0)	(74.0)	(74.0)	(74.0)	

Table 1: Summary by Craft by Year showing projected Craft Deficit (excluding Roofing Cohorts 1 and 2, containing FRP roofing projects for FY 17/18, and FY 18/19, respectively, not yet committed to execution). If uncommitted roofing work for Cohort 1 and Cohort 2 are included, this increases the projected cost from \$84M to \$93M and a subsequent increase on staff requirements from 31 FTEs to 37 FTEs



ISD Facilities Craft Program



Craft Participation Analysis

JANUARY 2020

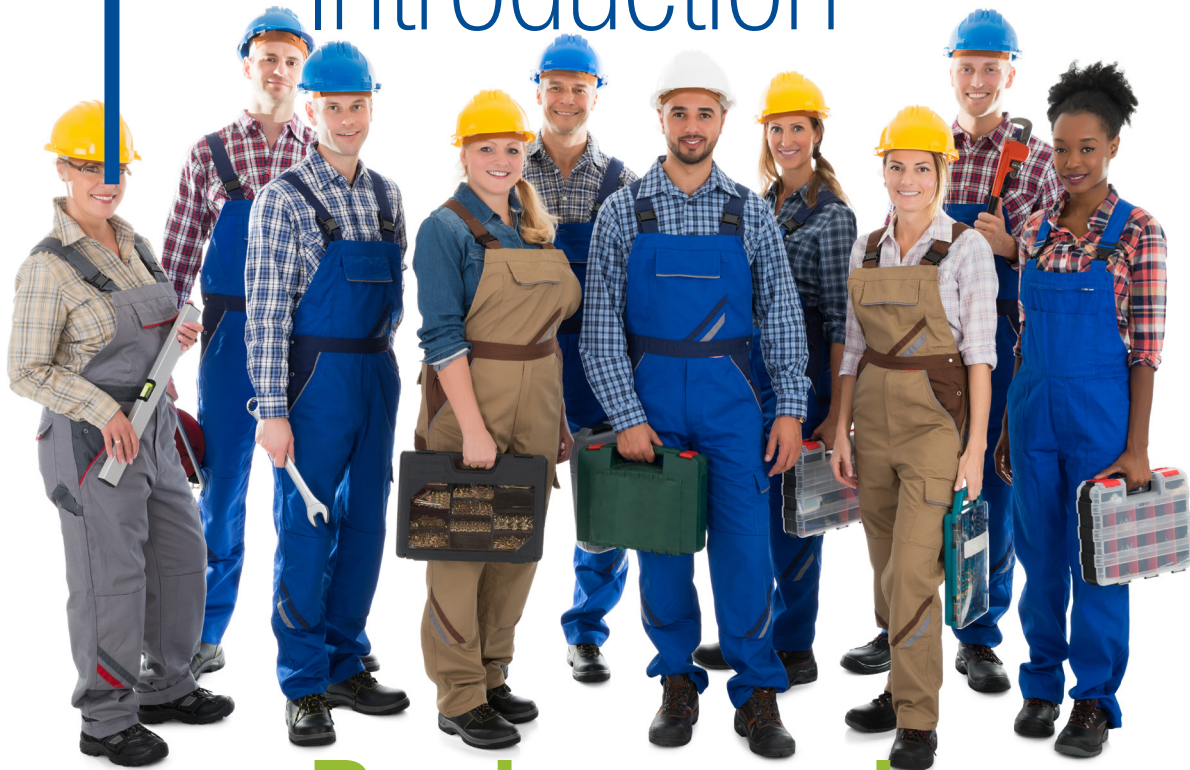
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Introduction



Background

On September 28, 2010, the LA County Board of Supervisors authorized the development of the County Deferred Maintenance Program, more currently known as the Facility Reinvestment Program (FRP), to establish a rational basis for short- and long-term planning of reinvestment in County facilities. In response, the Internal Services Department (ISD), working with AECOM Technical Services, Inc., has implemented a comprehensive approach for the assessment of the condition of County-owned facilities. Subsequently, the County of LA deployed a web-based asset management database, known as Strategic Asset Management (SAM), to record and track current County facility conditions and forecast both short- and long-term maintenance requirements. The purpose of this database has been for the development of long-term plans to fund facility reinvestment based on prioritized needs, evaluation of current County practices, determination of best practices, and consideration of potential significant energy efficiencies that would reduce consumption and operating costs.



ISD's Facilities Operations Services has initiated a five-year project planning process that coincides with the CEO's five-year funding plan that identifies and plans current FRP work, including the volume of work that would be associated with the 'Force Account' limits. It is anticipated that meeting the needs of the Force Account work may necessitate the hiring of additional in-house Craft staff. In addition to the FRP work identified within the SAM database, all deficiency work less than the statutory Force Account limit of \$50,000, as well as all project work related to roofing, flooring, and painting above and beyond the \$50,000 limit, is anticipated to be performed by in-house Craft, with the exception of building assets related to the Los Angeles County Fire Department, Los Angeles County Sheriff Department (LASD), Department of Health Services (DHS), and Department of Public Works, whose FRP-related Force Account work will be managed by those departments. Additionally, circumstances such as timeline conflicts, capacity, project complexity, etc., may require ISD to engage outside contractors.



Purpose

This report serves two purposes:

1. To identify potential opportunities over a 10-year period within the FRP for work to be performed by ISD in-house Craft. This potential group of work within the FRP is identified as the “ISD Facilities Craft Program.”
2. To perform a “Craft Participation Analysis” which assesses Craft capacities reflecting the historical volume of work performed by ISD to be utilized as a guide in resource planning for future short- and long-term availability of Craft resources. This Craft Participation Analysis will identify additional Craft resources necessary to address LA County’s Board of Supervisors’ interest in optimizing the use of in-house Craft resources subject to the ‘Force Account’ limits set forth in the State Public Contract Code (PCC).

Summary of Findings

45M GSF in County facilities and assets

LA County's total assets are approximately 45M gross square feet (GSF), with Supervisory District 1 (SD1) comprising the largest portion representing 23M GSF, more than double the assets in size for any of the other SDs, as shown in Figure 1.1. The assets within the remaining districts vary in size from 3M to 7M GSF.

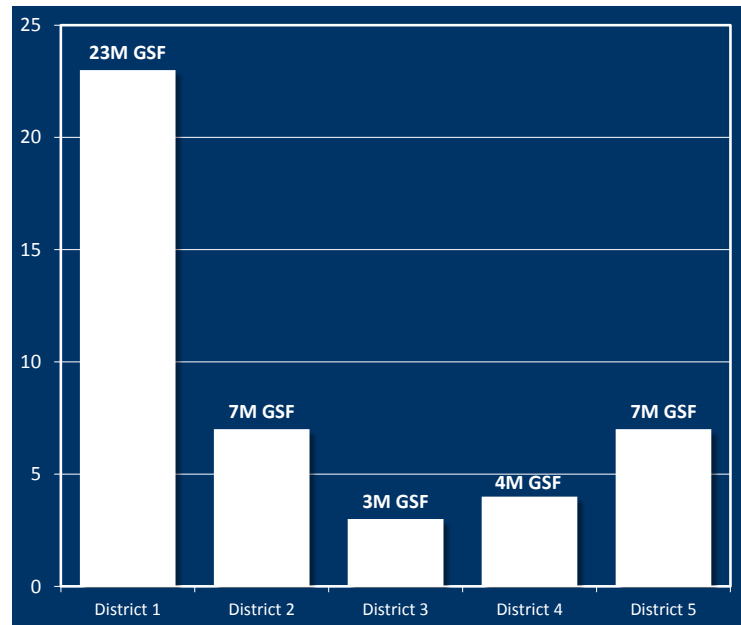


Figure 1.1: County Assets Gross Square Feet, by District

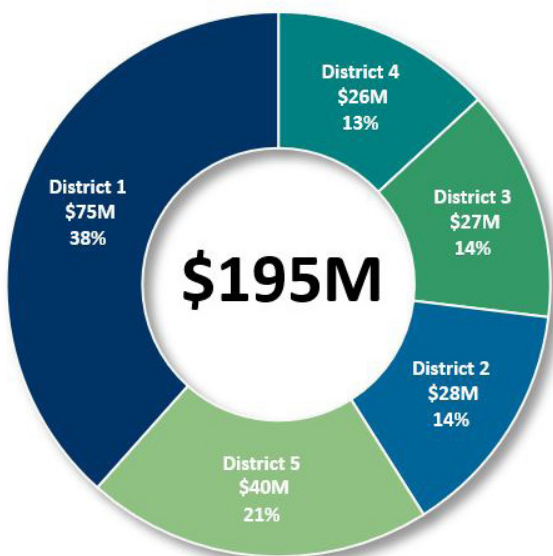


Figure 1.2: Potential Opportunities for ISD In-House Crafts, by District

\$195M total potential opportunities for ISD in-house Crafts participation

Based on the available data in the County's SAM database, the current Craft resources capacity, and other background information collected and provided by ISD, a total of \$195M of deficiency work has been identified in the Deficiencies Report produced by SAM. This body of work represents potential opportunities for work to be performed by ISD in-house Craft, which will be referred to as the ISD Facilities Craft Program work. SAM identifies, in total, \$354M of deficiency work throughout the 5 SDs. However, for the purposes of this study, County departments who employ Craft resources independent of ISD are intentionally omitted, thereby reducing the sum of potential work for ISD's in-house Craft labor significantly. DHS and LASD were the largest County departments contributing to this \$354M volume of work throughout all 5 SDs. Figure 1.2 shows the remaining \$195M volume of work, with SD1 and SD5 together representing approximately 59% of the total potential volume of work, with the remaining 41% being shared between SD2, SD3, and SD4.

Probation and Parks & Recreation make up 40% of County Craft work

The County assets/facilities occupied by the Probation and Parks & Recreation Departments together represent 40% of the total potential opportunities to be performed by ISD's in-house Craft labor pools. The remaining departments with significant shares of the potential work include ISD with 17% and the Public Library system with 16%. The further remaining departments collectively making up 32% of the potential work are shown in Figure 1.3. The volume of work for other departments including Public Health, Beaches & Harbors, and Public Social Services make up 5% or less of the \$195M deficiency work.

Note, these figures exclude the Los Angeles County Fire Department, LASD, DHS, and Department of Public Works, whose FRP-related Force Account work will be managed by those departments.

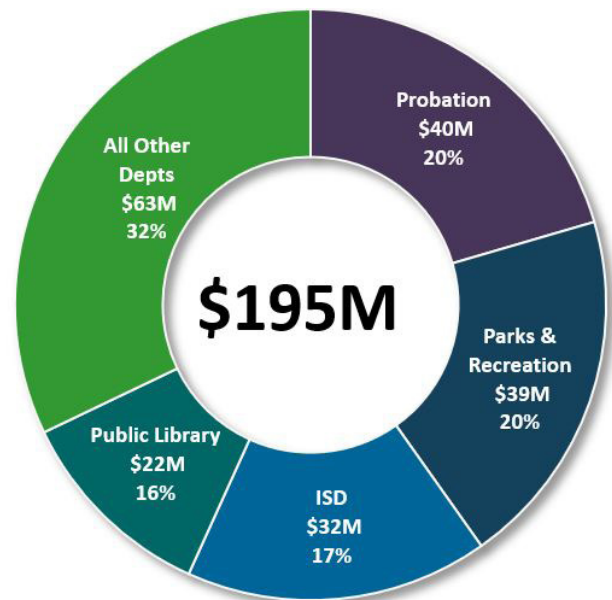


Figure 1.3: Potential Opportunities for ISD In-House Craft, by Tenant Department



Roofing, Carpentry, Electrical, and Flooring constitute more than two thirds of the work opportunities for ISD in-house Crafts

More than two-thirds of the Deficiencies volume of work that could potentially be performed by ISD in-house Craft fall into four categories: Roofing, the largest by volume at approximately \$84M; Carpentry, at approximately \$27M; Electrical at approximately \$22M; and Flooring at approximately \$20M. The HVAC, Masonry, Plumbing, Painting, Metal Works, Elevator, and Signage Craft combined represent the remaining 22% of the Deficiencies work, as shown in Figure 1.4.

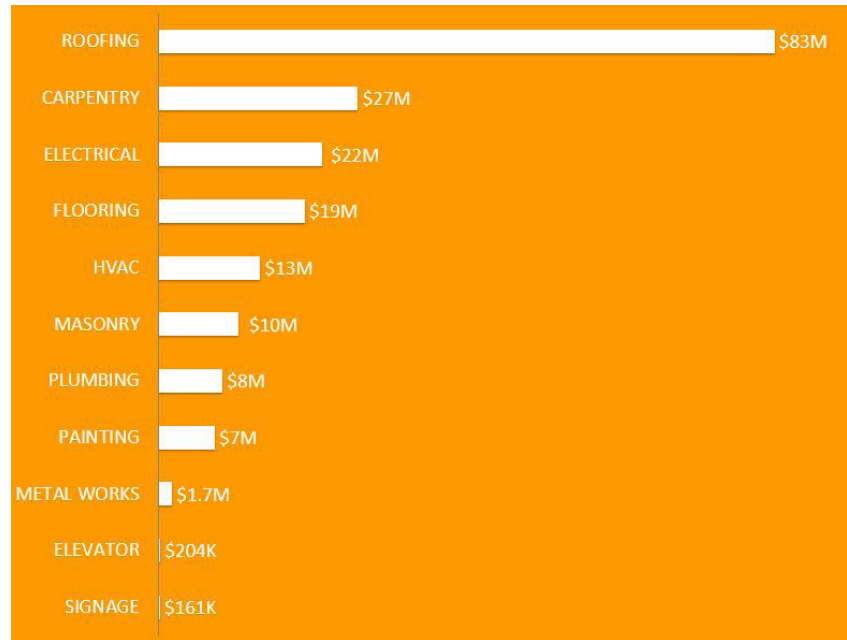


Figure 1.4: Potential Opportunities for ISD In-House Craft, by Craft



Limited available capacity to participate in new ISD Facilities Craft Program

Of the 10 trades identified for this Craft Participation analysis, a total of 123 full time, existing County ISD employees were identified. This FTE count is a portion of existing ISD in-house Craft that cover maintenance for all SDs, with the three largest Craft making up 71 employees out of the 123, including:

- HVAC – 22
- Electrical – 33
- Plumbing – 16

Relying on the information collected from ISD during various meetings and interviews, the analysis incorporates the current workload and availability of the existing Craft employees. It appears that out of the 123, there is an extremely limited number of hours deemed as available capacity to participate in the ISD Facilities Craft Program. However, according to the demand analysis conducted, the required gap in workforce resources needed for the subject ISD Facilities Craft Program work would be 74 additional employees.

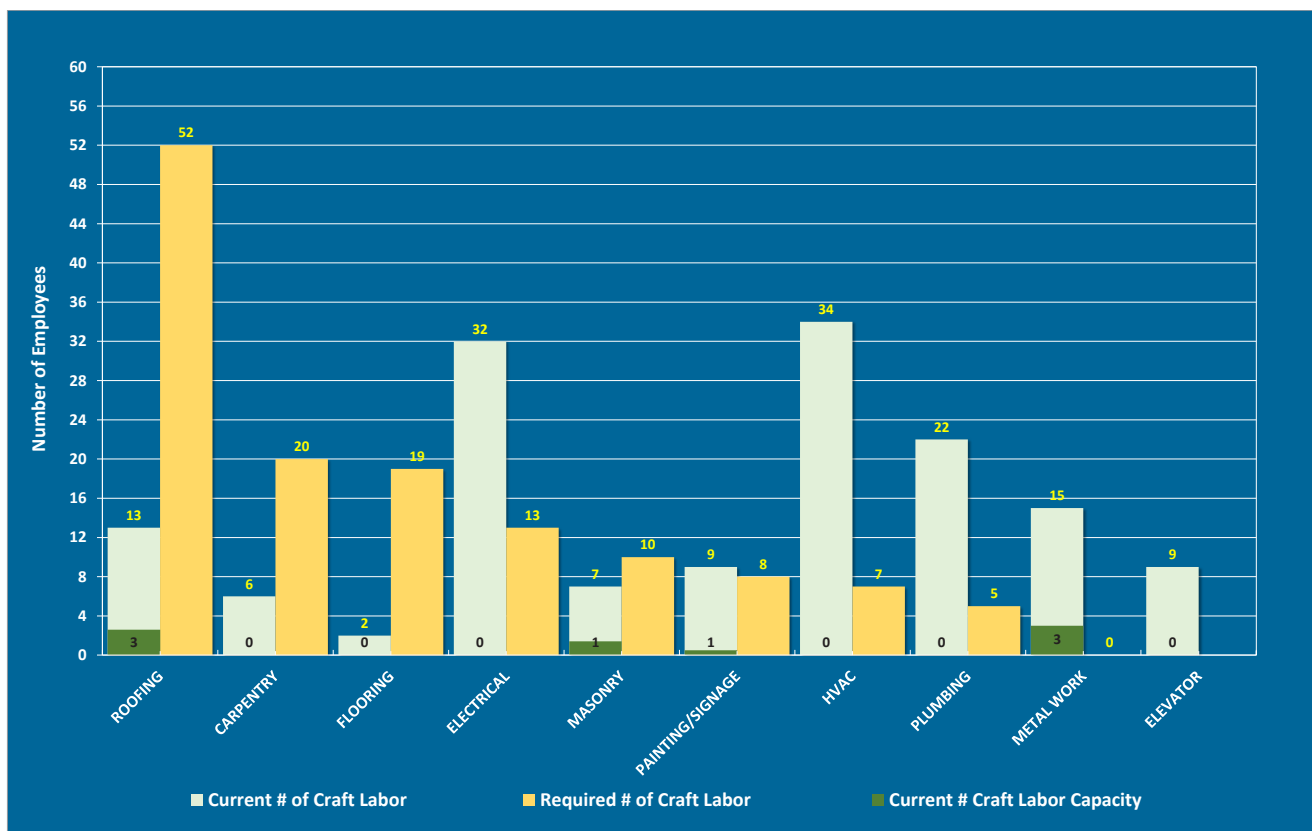


Figure 1.5: Current Craft FTE vs. Total Craft FTE Needed



Conclusion

In response to the purpose of this report to “identify potential opportunities over a 10-year period, inclusive of the FRP for work to be performed by ISD in-house Craft,” the analysis shows that ISD will require an additional 74 employees of various craft labor categories to support the current in-house Craft staff of 123 employees. The potential Craft work opportunities identified in this report, spanning a 10-year proposed duration, would require a significant level of effort, peaking at 74 Full Time Employees (FTEs). The graph in Figure 1.6 reflects a ramping up of staff count with consideration to lead time for the on-boarding process of new FTEs. Based on a series of meetings with ISD and Craft Shop management, staff provided their understanding of the current workload and overall availability for in-house Craft. ISD Craft management noted that their labor is dispatched to service emergency situations for the majority of their work week which is prioritized above the identified maintenance work within the larger FRP. With the level of unplanned demand, the Craft supervisors can estimate a maximum of 0.6 FTEs that would be available for additional capacity. This results in a significant gap which could be dedicated to ISD Craft Participation work group scope.

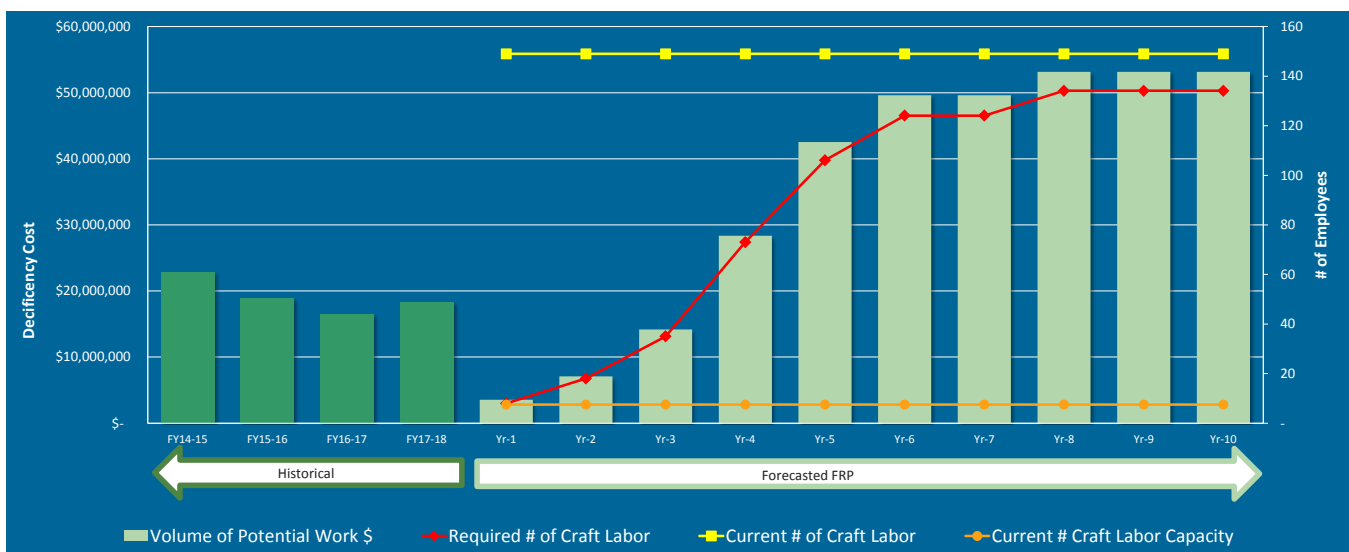


Figure 1.6: Craft FTE - Current and Need, By Year

This leads to four possible approaches to address the resulting gap:

1. Hire 74 new employees consisting of the various Crafts, as needed – a feasible, but costly and time-consuming option, further explored in Section 3.
2. Conduct an in-depth evaluation of the in-house Crafts workload, to understand why over 94% of existing in-house Crafts are tied up, and therefore not available for any FRP work. The most plausible cause would be that most of the current existing in-house Crafts may be occupied by a disproportionate volume of daily maintenance service calls, preventing them from addressing any preventative maintenance work, and most definitely any of the potential FRP opportunities identified in this report. An ideal outcome of this evaluation would result in freeing up the required amount of resources that is 74 FTEs, from the existing Crafts workforce and dedicate them to the FRP, in which case there would be no need to hire new employees.
3. A hybrid approach, combining elements of both options above, to fill the 74 FTEs gap. This could be achieved by freeing up a number of the existing in-house Crafts and supplementing them by hiring a number of new employees. Depending on the findings of the above-mentioned evaluation, an ideal maintenance organization structure for LA County's consideration would be to have two Crafts groups. One group to continue focusing on the ongoing maintenance service calls and preventive maintenance, and a second group to engage in the potential FRP opportunities.
4. Further review of the 10 in-house Crafts mostly impacted by the FRP work to understand the current process and appropriation of work.



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2

Basis of Study



The magnitude of the conclusions drawn in this study in terms of the number of additional staff required to execute the ISD Facilities Craft portion of the FRP are estimates based on the data provided as discussed in this report and a specific set of assumptions, including, but not limited to:

- Deficiencies work items included as part of the collected \$195M was selected if a deficiency item was identified to be equal to or less than \$50,000. All deficiency work of up to \$50,000 in cost as identified in the SAM database are considered for the Force Account Program (Reference PCC Section 20123) and part of the ISD Craft Participation Analysis



- Exceptions were applied to Crafts Roofing, Flooring and Painting, which are not subject to the \$50,000 budgetary cap. All identified deficiency work under the Craft labor categories of Roofing, Painting and Flooring, regardless of cost, are considered as part of this ISD Facilities Craft Program and Craft Participation Analysis
- Deficiency work under proprietors Los Angeles County Fire Department, Department of Public Works, DHS and LASD are excluded from this study. These departments are recognized to commission their own individual department Crafts and are therefore intentionally omitted from the ISD Craft Participation Analysis
- Analyses assume all potential deficiency work to be executed over a period of 10 years starting FY20/21
- In context of the SAM database, items that have no available costing information and are identified as “Not Costed” are excluded from this study
- Burdened Cost in the SAM database as used in this study does not include additional costs associated with: driving time to remote locations, road closures at project sites, hiring and placement of cranes or other equipment at project sites, and additional staff needed for traffic control activities, for example. These costs could be assessed on a per scope of work basis and are not incorporated into the costs for this study
- Lead time required to onboard a new hire as a Craft resource for this study is assumed to be 6 months
- RSMeans Productivity Rates are calculated based on national industry standards
- All Crafts are assumed to work 1,744 work hours per year
- A 5% annual hourly rate escalation is applied
- Craft Hourly Rates for 2020 are applied to year 1 of the 10-year projected duration
- Assumes 33% of the hourly rate is for costs beyond wage compensation (i.e., overhead, insurance, pension, etc.)

Craft	Hourly Rate
Elevator	\$ 173.00
Metal Works	\$ 164.00
Painting/Signage	\$ 127.00
Plumbing	\$ 171.00
Masonry	\$ 144.00
HVAC	\$ 171.00
Roofing	\$ 145.00
Flooring	\$ 142.00
Electrical	\$ 171.00
Carpentry	\$ 144.00

- Historical ISD Service Request data, sourced from the Financial Accounting Management Information System (FAMIS), captures previous fiscal years, FY18-19, FY17-18, FY 16-17, FY15-16, and FY14-15
- Labor and material cost breakout for the following craft labor categories are below. Percentage distribution is based on historical data by Jacobs, referencing RSMeans and Gordian Construction cost for discretionary comparisons (Gordian Group and RSMeans are industry leading providers of facility and localized construction cost data):
 - a. Roofing Craft labor and material breakout is 34% and 66%, respectively
 - b. Carpentry Craft labor and material cost breakout is 38% and 62%, respectively
 - c. Electrical Craft labor and material cost breakout is 38% and 62%, respectively
 - d. Flooring Craft labor and material cost breakout is 50% and 50%, respectively
 - e. HVAC Craft labor and material cost breakout is 32% and 68%, respectively
 - f. Masonry Craft labor and material cost breakout is 51% and 49%, respectively
 - g. Plumbing Craft labor and material cost breakout is 39% and 61%, respectively
 - h. Painting Craft labor and material cost breakout is 50% and 50%, respectively
 - i. Metal Works Craft labor and material cost breakout is 15% and 85%, respectively
 - j. Elevator Craft labor and material cost breakout is 24% and 76%, respectively





Assumptions

In order to meet the objective of executing the identified potential work for in-house Crafts within the larger FRP portfolio, this report estimates the necessary FTE count per Craft required to meet the additional demand. This report is a representation of data and information collected from various sources provided by ISD.

The main source of data utilized, with access provided by ISD, is the SAM database which houses massive amounts of information supporting the development of the ISD Facilities Craft Program. Various categories of work and groupings are available from various SAM reports, including module reports labeled All Systems, All Buildings, All Sites, All Deficiencies, and All Projects.

The Deficiencies Report was chosen for the most relevant raw data, classifications for severity of deficiency, and quantities to use as this report's baseline. Additionally, the SAM All Buildings report was used to extract the Proprietor, Classification Code, and GSF fields to build into the baseline data and incorporated into a processed source data file. The raw SAM data download provided a listing of over 4,400 Los Angeles County assets, including buildings parking lots and utilities. This study assumes the exclusion of the parking lot data and any other deficiencies work categorized within SAM as 'Excluded.' The logic in applying this filter is to provide a square footage data match to the SAM Homepage Dashboard report in October 2019. An additional source is a FAMIS data download which was used for comparison purposes of past years' volume of work. For the study, ISD provided an accumulation of service requests from the previous five fiscal years which are plotted in graphs within this report.

Further information was collected from ISD including 2020 hourly staff rates, current staff count per Craft, and their potential availability for utilization in the ISD Facilities Craft Program. Note, the quantification of current FTE count for each Craft excludes supervisor roles.

RSMeans and the Gordian Group Cost book were utilized for analytical due diligence and application of cross-checking industry productivity rates. It is noted that this report only uses the data downloaded from the SAM database as of September 2019, and therefore does not account for any future deficiencies or projected asset deterioration.

3

Data Analysis



Opening Statement

Potential Deficiencies Volume for In-House Craft

Once the data from the SAM deficiencies report and the four-year Historical Data were retrieved from SAM and FAMIS respectively, we segregated the costs that could potentially pertain to the ISD in-house Craft resources. Next, we compared the details to the historical data, and then processed the resulting information in several ways for cost and severity categories to show how the identified potential deficiencies can be approached utilizing the in-house Craft resources.

In which District is there the most work for ISD in-house Crafts?

The first result from the analysis is the total volume of maintenance and deficiency repair work in the ISD Facilities Craft Program that could be performed in-house, given the selection criteria outlined in Section 2, Basis of Study. The adjacent Figure 3.1 shows the breakdown of potential ISD Craft Force Account work associated with each SD:

1. SD 1 – 38% at \$75M
2. SD 5 – 21% at \$40M
3. SD 2 – 14% at \$28M
4. SD 3 – 14% at \$27M
5. SD 4 – 13% at \$26M

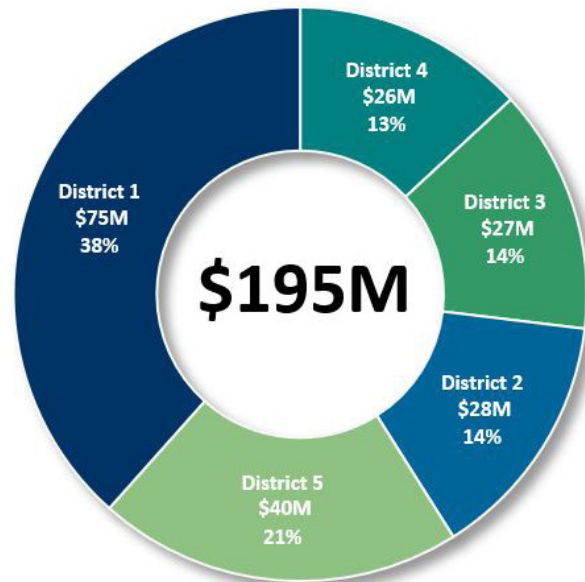


Figure 3.1: Potential Opportunities for ISD In-House Crafts, by District

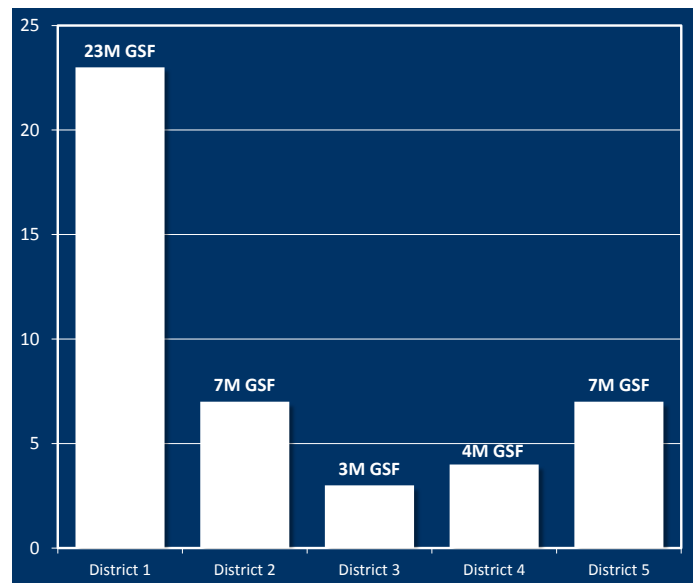
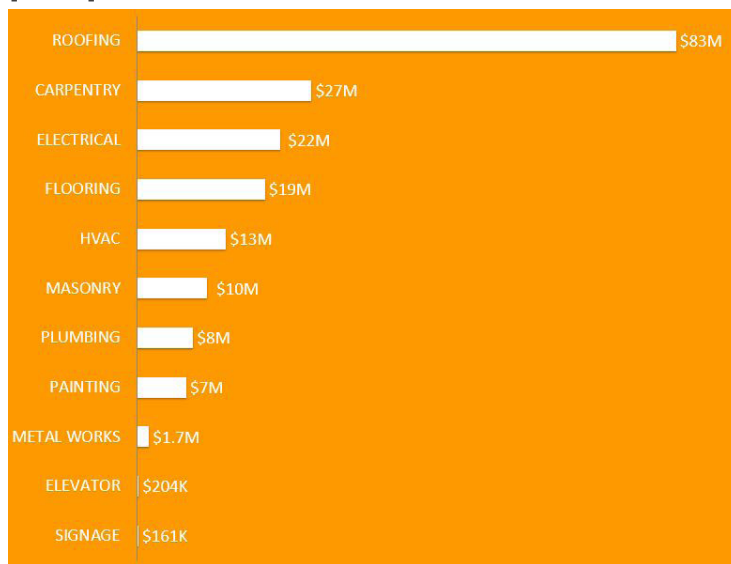


Figure 3.2: County Assets Gross Square Feet, by District

Figure 3.2 shows that SD1 comprises the largest GSF of County assets at 23M GSF, so it is expected that it would require a large portion of the in-house craft volume of work within the ISD Facilities Craft Program.

By taking a look at the data from a different angle, we were able to break down the \$195M volume of work by Craft. It is determined that out of the seventeen (17) different in-house Craft classifications, seven crafts could not be clearly associated with any of the subject work, either due to their ancillary nature as helper, general maintenance, machinist, and equipment operator, or because there were no tasks in the database that specifically determined to require these Craft, such as locksmith, heat and frost insulator, and wastewater. Thus, this study generates findings focusing on 10 Crafts: carpentry, electrical, flooring, roofing, HVAC, masonry, plumbing, painting/signage, metal works, and elevator.

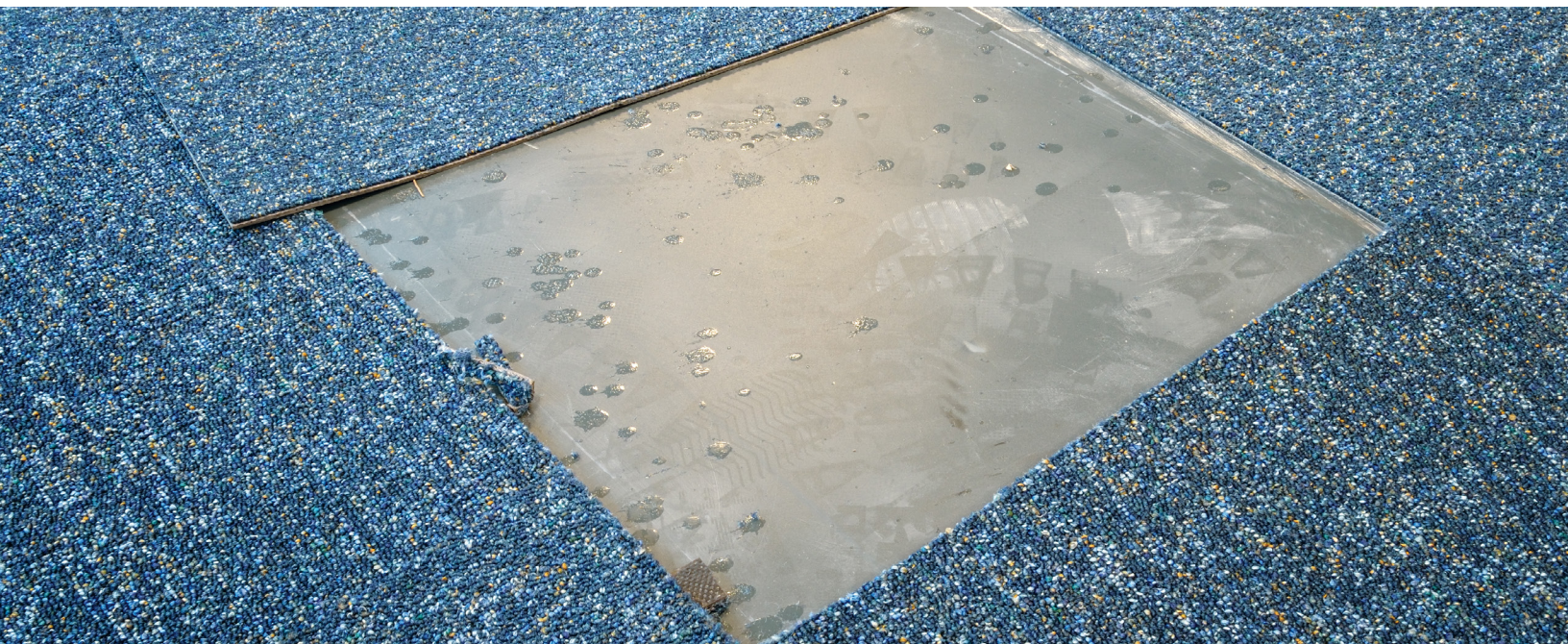
Which ISD in-house Craft takes up the highest proportion of the work?



The remaining 10 Craft classifications were considered to be able to cover the entirety of the \$195M worth of work, as shown in Figure 3.3, where it can be clearly seen that the Roofing Craft represents the largest volume of the ISD Facilities Craft Program.

Carpentry, Electrical, and Flooring crafts combined follows as a representation of the following substantial portion of the volume of work. Subsequently, HVAC, Masonry, Plumbing, Painting/Signage, Metal Works, and Elevator combined is relatively half of the Roofing volume..

Figure 3.3: Potential Opportunities for ISD In-House Crafts, by Craft



The seven most needed in-house Craft across all five districts are roofing, carpentry, electrical, flooring, HVAC, masonry, and plumbing.

A step further was taken to process the figures, shown in Figure 3.4, to determine which Craft forms most of the work within each district. In general, it appears that the most common work across all five districts in crafts are, in order of volume, roofing, carpentry, electrical, flooring, HVAC, masonry, and plumbing, even though other crafts are needed as well.

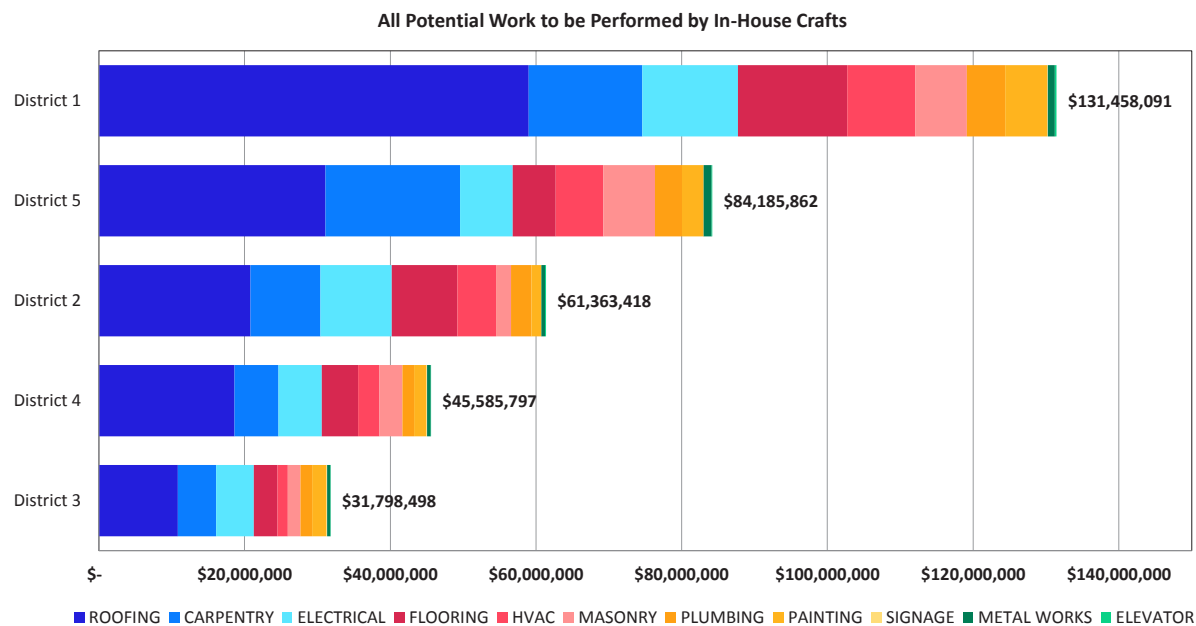


Figure 3.4: Potential Opportunities for ISD In-House Crafts, by District, by Craft

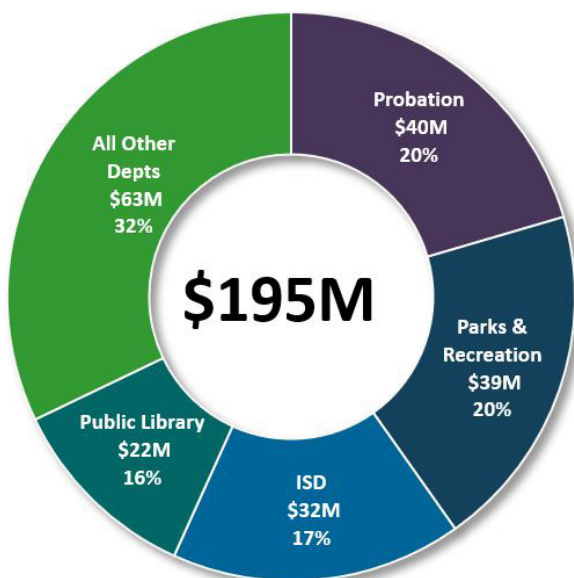
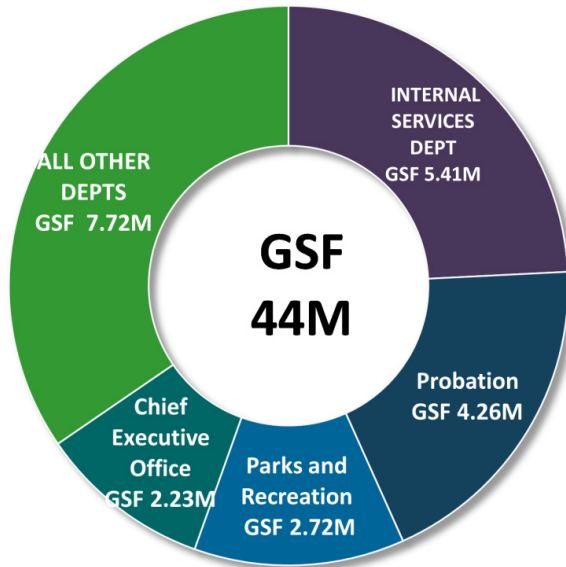


Figure 3.5: Potential Opportunities for ISD In-House Crafts, by Tenant Department

By taking a look at the data from a tenant department perspective, we can see in Figure 3.5 a breakdown of the tenant departments with the highest proportions of deficiencies work that could potentially be assigned to ISD in-house Craft.

Figure 3.7 provides the detailed breakdown of the 'All Other Departments' volume of work that constitutes \$63M or 32% of the potential \$195M ISD Facilities Craft Program scope of work.



Together, ISD, Probation, and Parks & Recreation constitute more than half of the total GSF of occupied county facilities (excluding Fire, LASD, Public Works, and DHS), as shown in Figure 3.6. The County assets total to 44M GSF with the inclusion of tenant departments, LA County Fire Department, LASD and DHS. However, for the purposes of this study, those tenant departments are excluded in reference to the actual ISD Facilities Craft Program deficiency work.

Figure 3.6: County Assets Gross Square Footage (including DHS, LASD, DPW, and DHS), by Tenant Department

Which tenant departments are in most need of in-house repair and maintenance by Craft?

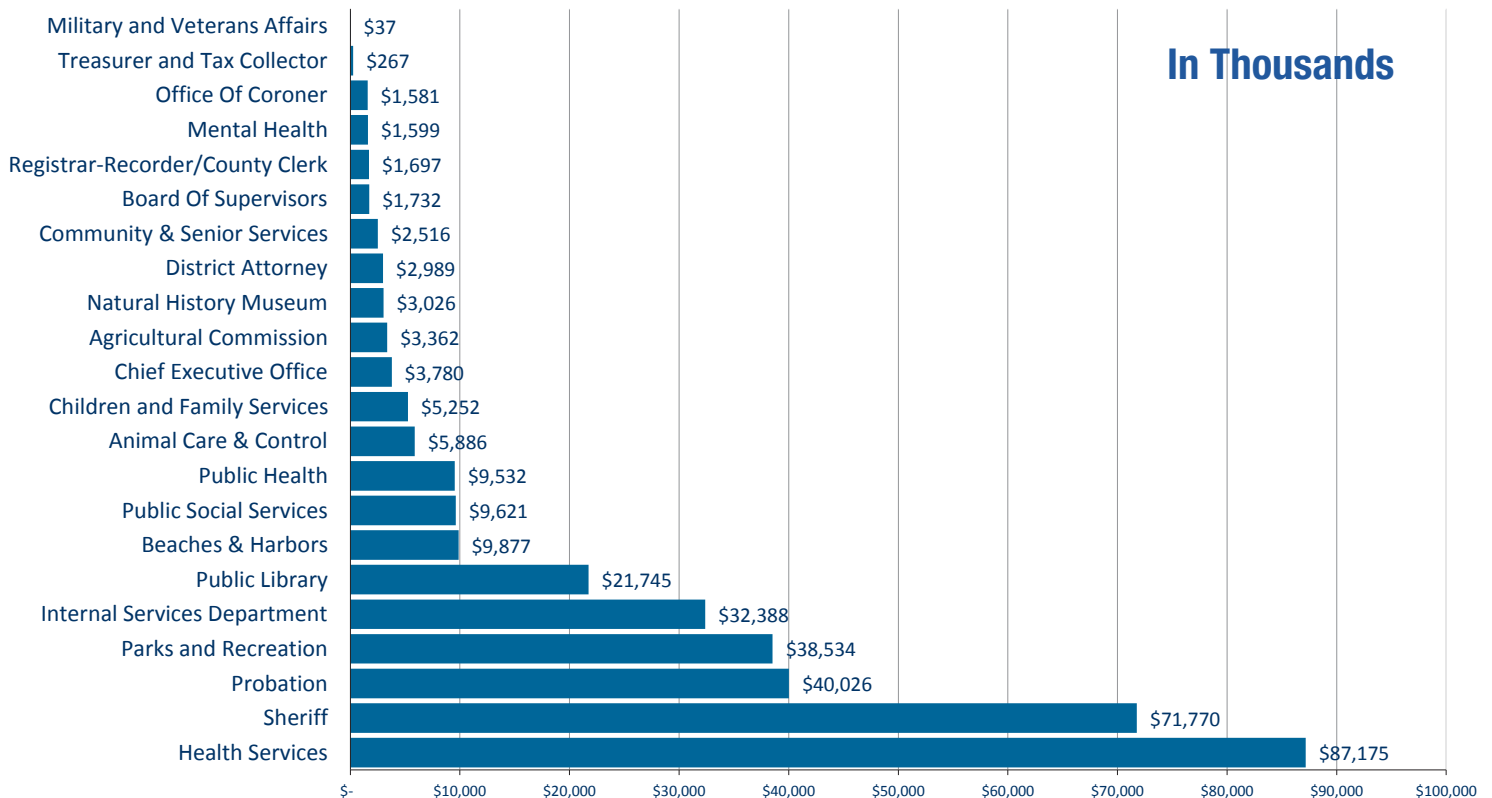


Figure 3.7: Potential Opportunities for ISD In-House Crafts, by Tenant Department

What is the makeup of work by severity classification?

An additional analysis of total volume of potential deficiency work included the application of “Severity Categorization” for ISD’s \$195M volume of work. The grouping of the deficiency work is defined in four categories: Critical, High, Medium and Low. Figure 3.8 reflects that the portions of the \$195M deficiency work are relatively equal amongst the three severity categories. The work identified as ‘Critical’ severity was quantified as less than 0.5% of the \$195M and is therefore not plotted on the figures within this report.

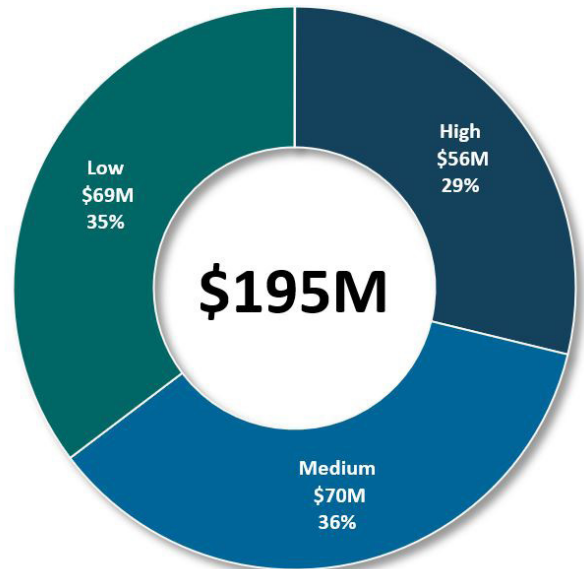


Figure 3.8: Potential ISD Craft Opportunities by Severity Classification, of the \$195M Total

Which District has the most urgent need based on severity?

SD1 contains both a significant amount of the County’s GSF and bears the largest volume of the ISD Facilities Craft Program work. The deficiency works classified as ‘High’ severity parallels the same findings and are mostly located within SD1 boundaries. Consequently, illustrated in Figure 3.9, SD1 also carries similar characteristics and displays a proportionate amount of the ‘Medium’ and ‘Low’ severity classification of work. The scope identified as ‘Critical’ severity was quantified as less than 0.5% of the \$195M and is therefore not plotted on the figures within this report.

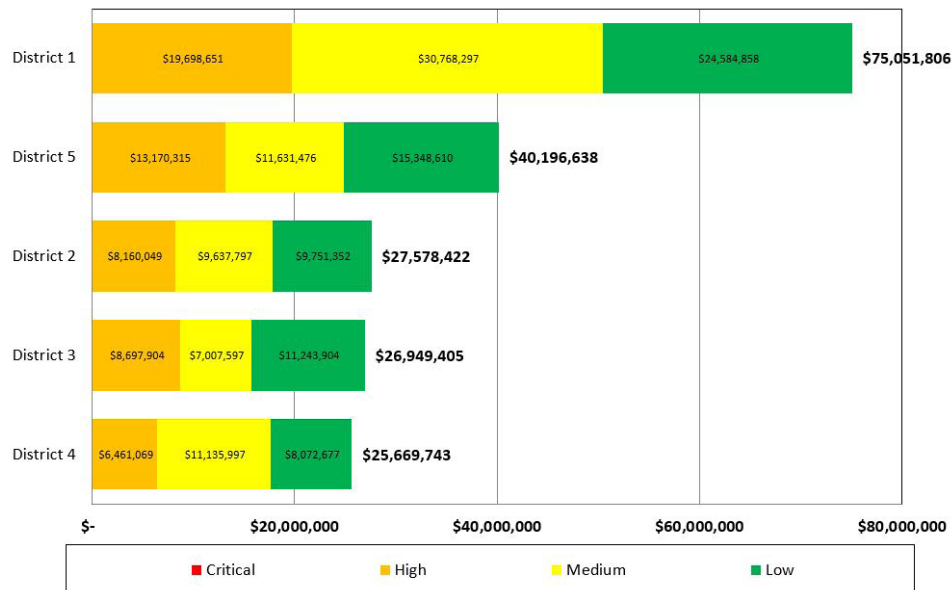


Figure 3.9: Potential Opportunities, by Severity Classification and District

Roofing

Excluding Cohorts* 1 & 2

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD
- *Please see Glossary on page 47



For the purpose of the overall Craft analysis, Cohort 1 (FY 17/18 projects with a Priority Score of 6 or greater) and Cohort 2 (FY 18/19 projects with a Priority Score of 6 or greater) are excluded and assumed to be executed through the FRP. However, specifically for Roofing, all projects in Cohort 1 and 2 not yet committed to execution are herein considered for this analysis as a second option.

Additional 31 Roofing FTEs needed to meet demand

The data reflects that \$84M of the \$195M ISD Facilities Craft Program is attributed to the Roofing work. The analysis in Figure 3.10 shows that SD 1 and SD 5 represent 62% of the volume of potential work to be performed by the in-house Roofing Craft and the remaining 38% is spread between SD2, SD3, and SD4. The top tenant departments that carry the largest potential roofing deficiencies are ISD, Parks and Recreation and the Public Library, shown in Figure 3.11.

ISD currently effectively utilizes a staff of 10.5 Roofing Craft workers.

Based on the information derived from ISD Craft management meetings, the Craft workers are occupied at 100% capacity and are not available to be engaged in the ISD Facilities Craft Program effort. To respond to the additional Roofing volume of work, projected at \$84M, the roofing FTE Craft workforce may require a tripling of the staff counts, should ISD choose that option.

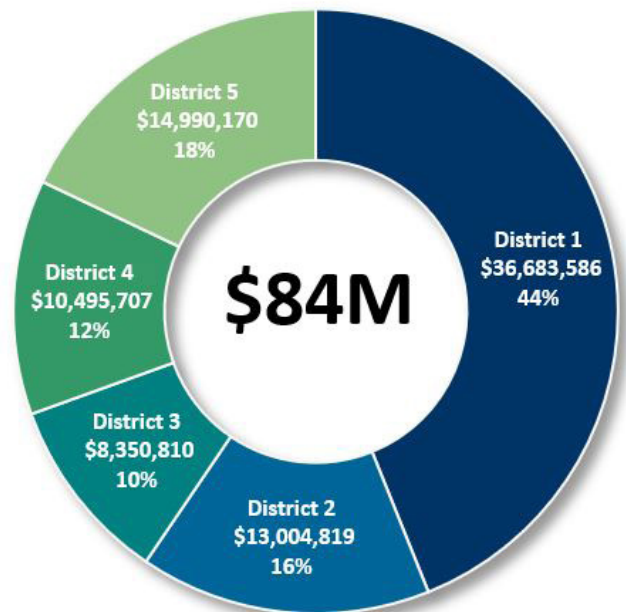


Figure 3.10: Potential Opportunities for Roofing by District

Potential \$84M of Roofing deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

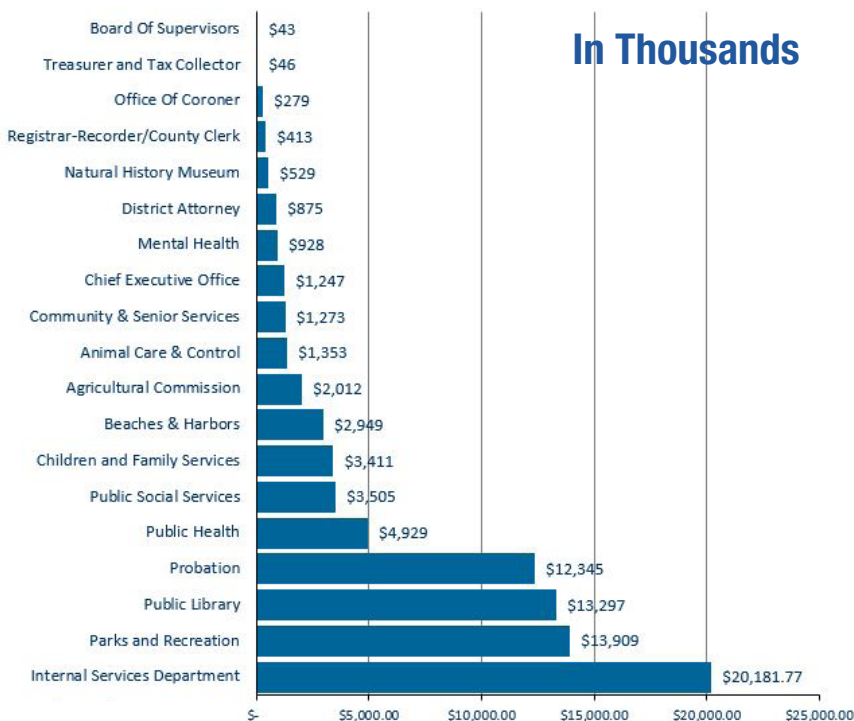


Figure 3.11: Potential Opportunities for Roofing, by Tenant Department

Meetings and staff interviews provided some insight to Roofing Craft work processes and efficiency factors contributing to the insufficient capacity to engage in the ISD Facilities Craft Program. Current Roofing Craft efficiency is affected by the working pattern and the wait time after utilizing open flame** within the Craft shop. Besides the staff's regular workload, responding to emergencies, preventive maintenance and Service Requests, the staff also provides Quality Assurance for all Job Order Contract (JOC) projects, thereby increasing the workload by 10%. For prudent safety practice, working in pairs is a common occurrence and is taken into consideration by the Craft supervisors when assessing the efficiency of the team.

To complete the total of \$84M of potential roofing work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of 31 full time employees, shown in Figure 3.12.

Note: The ISD Roofing Craft is unique in that the unit has the authority to provide delivery and execution of work above and beyond the \$50,000 Force Account limit.

** "Open Flame" (sometimes called Torch Down) is a roofing process used during installation of modified bitumen roofing materials where a directional open flame is applied by the installer to melt or liquify the bitumen adhesive material, ensuring a long lasting moisture resistant seal to the roof area.



Figure 3.12: Roofing Craft FTE to meet ISD Facilities Craft Program Demand

Roofing

Including Cohorts 1 & 2

Additional 37 Roofing FTEs needed to meet demand

With the addition of uncommitted works for Cohort 1 and Cohort 2, the data reflects an increase from \$84M to \$93M for roofing. The impact of the increase on the distribution among the districts carried minimal change, however staff requirements will increase from 31 FTEs to 37 FTEs.

ISD currently effectively utilizes a staff of 10.5 Roofing Craft workers.

Based on the information derived from ISD Craft management meetings, the Craft workers are occupied at 100% capacity and are not available to be engaged in the ISD Facilities Craft Program effort. To respond to the additional Roofing volume of work, projected at \$93M, the roofing FTE Craft workforce may require significantly increased the staff counts, should ISD choose that option.

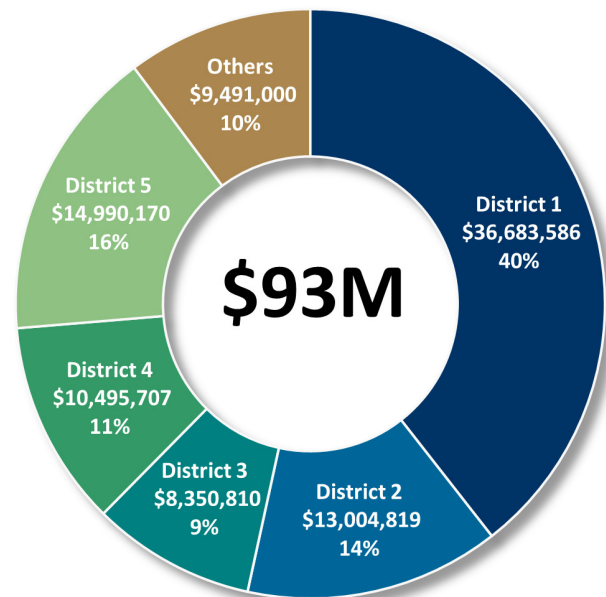


Figure 3.10.1: Potential Opportunities for Roofing by District

Potential \$84M of Roofing deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

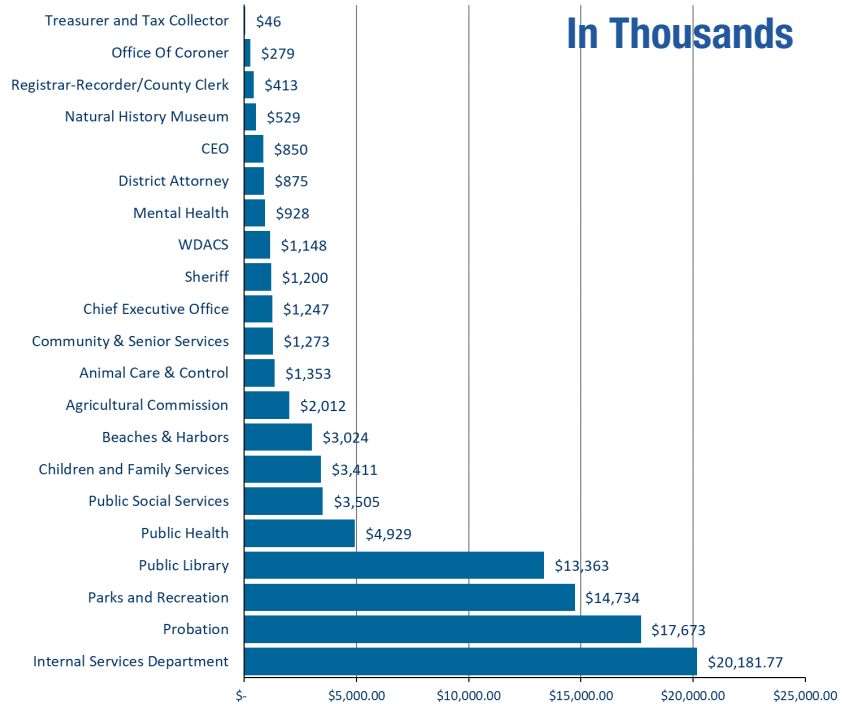


Figure 3.11.1: Potential Opportunities for Roofing, by Tenant Department (inclusive of Cohort 1 & Cohort 2)

To complete the total of \$93M of potential roofing work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of 37 full time employees, shown in Figure 3.12.1.

Note: The ISD Roofing Craft is unique in that the unit has the authority to provide delivery and execution of work above and beyond the \$50,000 Force Account limit.

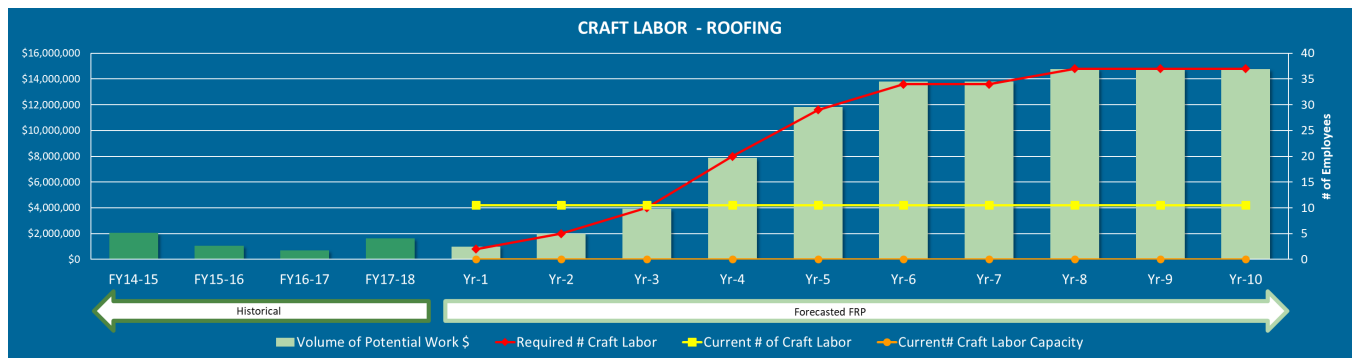


Figure 3.12.1 Roofing Craft FTE to meet ISD Facilities Craft Program Demand (inclusive of Cohort 1 & Cohort 2)

Carpentry

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD

Additional 10 Carpentry FTEs needed to meet demand

The data reflects that \$27M of the \$195M ISD Facilities Craft Program is attributed to the Carpentry work. The analysis in Figure 3.13 shows that SD1 and SD5 represent 55% of the volume of potential work to be performed by the in-house Electrical Craft and the remaining 45% is spread between SD2, SD3, and SD4. The top tenant departments that carry the \$15M of the potential carpentry deficiencies are Probation and Parks & Recreation, as shown in Figure 3.14.

ISD currently effectively utilizes a staff of 5 Carpentry Craft workers.

Based on the information provided by ISD, the Craft workers are occupied at 100% capacity and not available to be utilized in the ISD Facilities Craft Program effort.

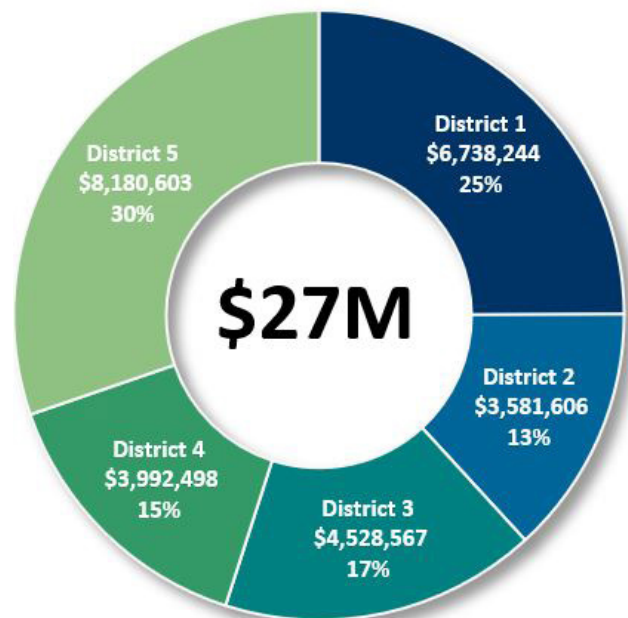


Figure 3.13: Potential Opportunities for Carpentry by District

Potential \$27M of Carpentry deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

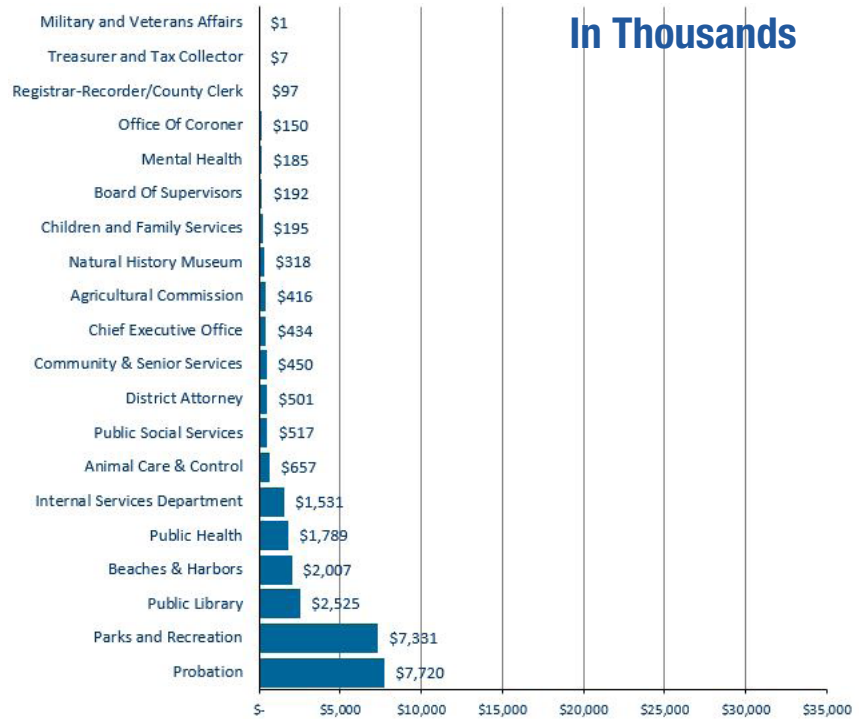


Figure 3.14: Potential Opportunities for Carpentry, by Tenant Department

The study shows the current Carpentry Craft workload on a high level, are divided amount the following in their respective percentages: 20% cabinets; 30% door repairs and replacement, including door frames, closers, etc.; 25% drywall, excluding taping and painting; and 25% ceilings.

Carpentry Craft also utilizes vendors to perform some of the work with the outside vendor's volume of work estimated at 10-15% of the total current day to day Craft workload.

To complete the total of \$27M of potential Carpentry work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of 10 additional FTEs, as shown in Figure 3.15.

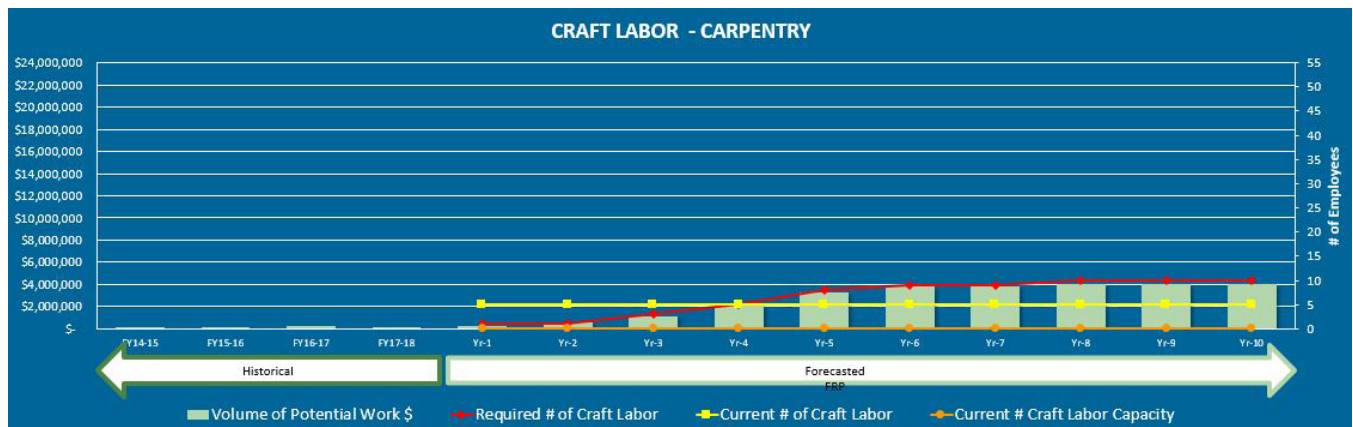


Figure 3.15: Carpentry Craft FTE to meet ISD Facilities Craft Program Demand

Electrical

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD

Additional 7 Electrical FTEs needed to meet demand

The data reflects that \$22M of the \$195M ISD Facilities Craft Program is attributed to the Electrical work. The analysis in Figure 3.16 shows that SD1 and SD3 represent 52% of the volume of potential work to be performed by the in-house Electrical Craft and the remaining 47% is spread between SD2, SD4, and SD5. The top tenant departments that carry the 48% of the potential carpentry deficiencies are Probation and Parks & Recreation, as shown in Figure 3.17. The third largest tenant department with potential Electrical work is ISD, with a total of \$2.4M out of the \$22M total work.

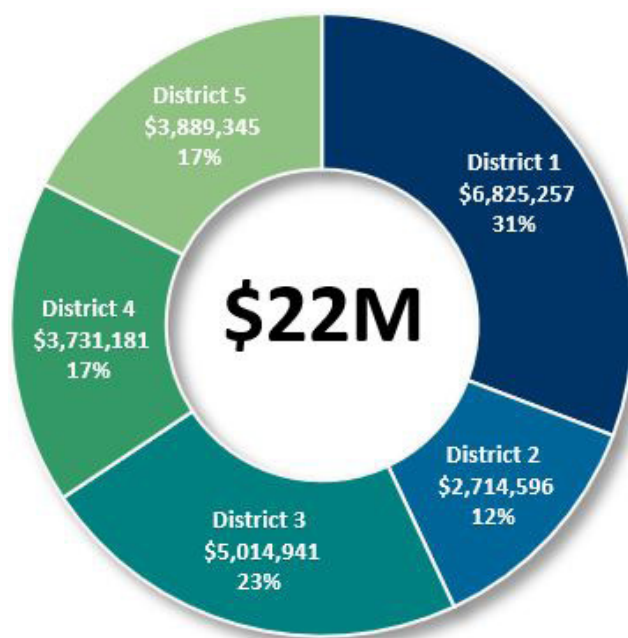


Figure 3.16: Potential Opportunities for Electrical by District

Potential \$22M of Electrical deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

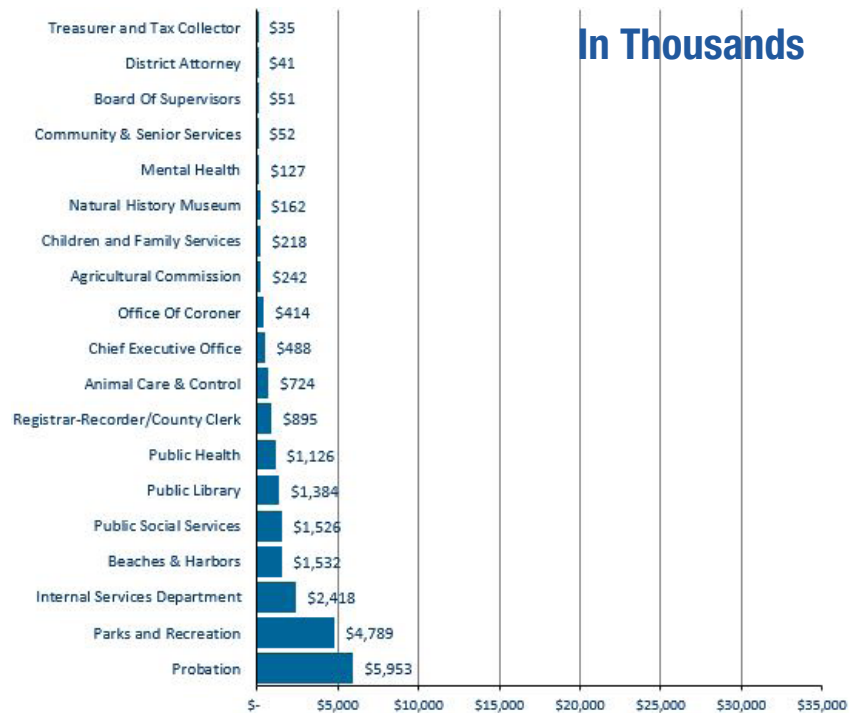


Figure 3.17: Potential Opportunities for Electrical, by Tenant Department

To complete the total of \$22M of potential Electrical work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of 7 additional FTEs, as shown in Figure 3.18.

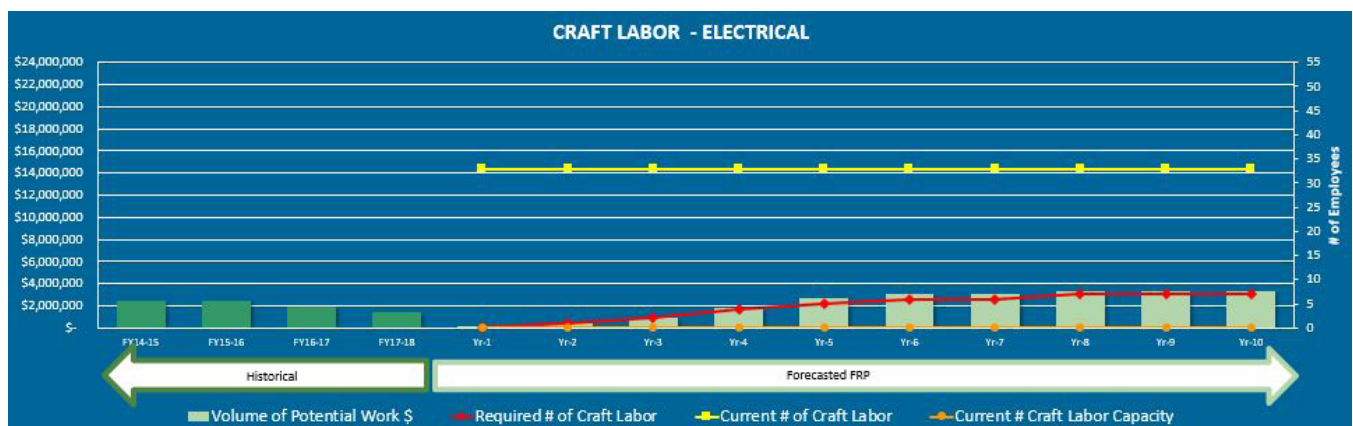


Figure 3.18: Electrical Craft FTE to meet ISD Facilities Craft Program Demand

Flooring

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD

Additional 10 Flooring FTEs needed to meet demand

The data reflects that \$20M of the \$195M ISD Facilities Craft Program is attributed to the Flooring work. The analysis in Figure 3.19 shows that SD1 represents almost half of the potential Flooring work at 47%. Though SD5 represents second place in terms of volume of work, it is far behind with 16% of the overall Flooring work. The remaining 37% is spread between SD2, SD3, and SD4. The top tenant department, Probation, was classified as the proprietor of nearly a third of the \$20M deficiency work, and remaining departments are as shown in Figure 3.20.

ISD currently effectively utilizes a staff of 1.5 Flooring Craft workers, one FTE currently acting as a supervisor.

Based on the information provided by ISD, the Craft workers are occupied at 100% capacity and not available to be utilized in the ISD Facilities Craft Program effort.

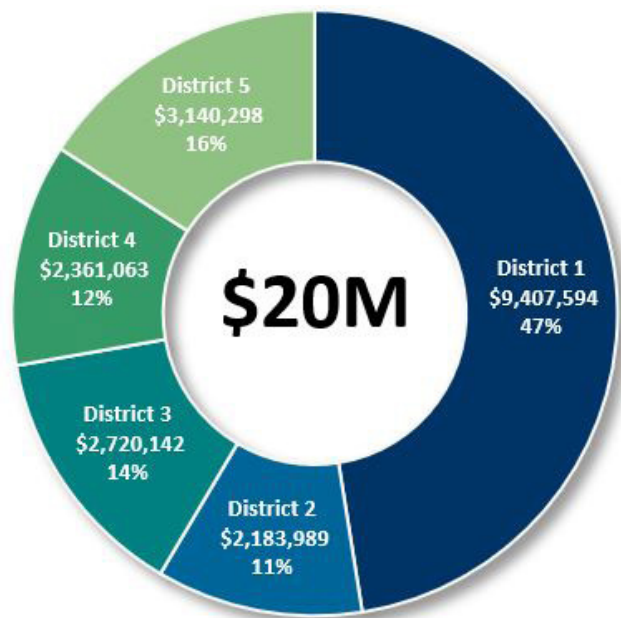


Figure 3.19: Potential Opportunities for Flooring by District

Potential \$20M of Flooring deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

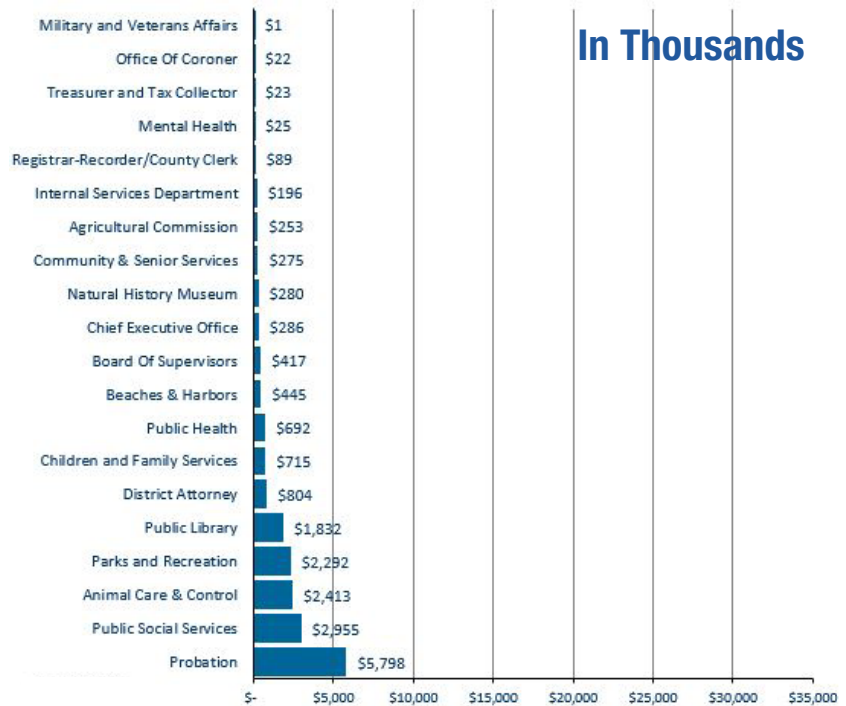


Figure 3.20: Potential Opportunities for Flooring, by Tenant Department

The study found the Flooring Craft currently handles all requests related to carpets, vinyl, all other soft flooring and surface preparation which requires between 60-75% of the total work load effort. Outside vendors are utilized at 10% of the total volume due to weekend and off-hours at the tenant department's needs. The Craft shop conveyed the shop is severely understaffed; therefore, almost 70% of the services requests are passed on to vendors.

A caveatted note, the Flooring Craft is unique in that the unit has the authority to provide delivery and execution of work above and beyond the \$50,000 Force Account limit.

To complete the total of \$20M of potential Flooring work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of an additional 10 FTEs, as shown in Figure 3.21.

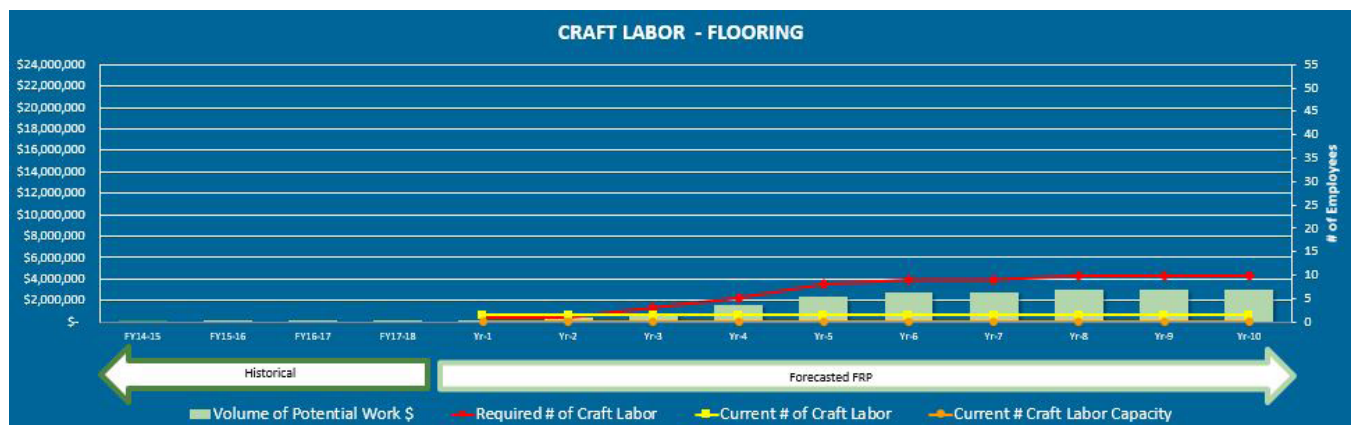


Figure 3.21: Flooring Craft FTE to meet ISD Facilities Craft Program Demand

HVAC

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD

Additional 4 HVAC FTEs needed to meet demand

The data reflects that \$14M of the \$195M ISD Facilities Craft Program is attributed to the HVAC work. The analysis in Figure 3.22 shows that SD1 and SD2 represent 58% of the volume of potential work to be performed by the in-house HVAC Craft and the remaining 42% is spread between SD3, SD4, and SD5. The top tenant departments that carry the almost half of the potential HVAC deficiencies at 43% are Parks & Recreation and ISD, as shown in Figure 3.23.

ISD currently effectively utilizes a staff of 22 HVAC Craft workers.

Based on the information provided by ISD, the Craft workers are occupied at 100% capacity and not available to be utilized in the ISD Facilities Craft Program effort.

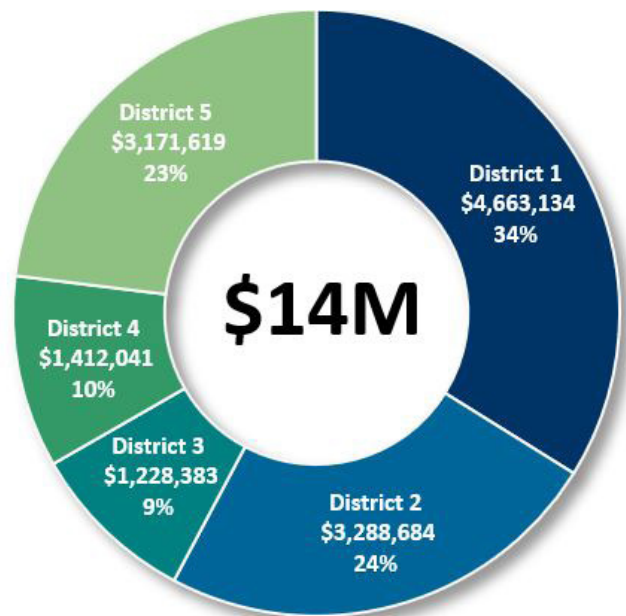


Figure 3.22: Potential Opportunities for HVAC by District

Potential \$14M of HVAC deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

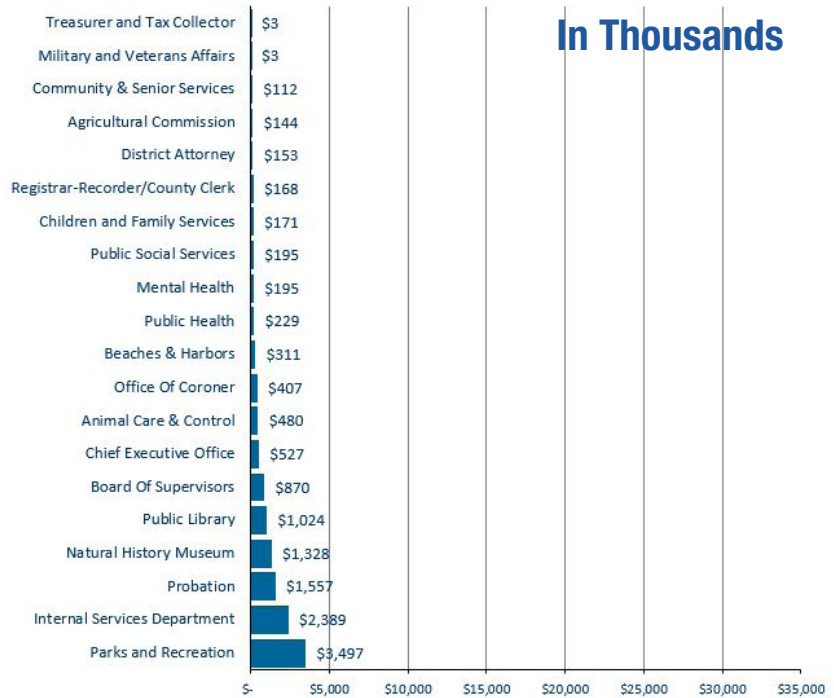


Figure 3.23: Potential Opportunities for HVAC, by Tenant Department

Interviews with Craft Management reveal the current workload is impacted by servicing, not only the 44M GSF of Los Angeles County assets, but also including “leased buildings.” These buildings leased by the County are not recorded in the FAMIS system or SAM database, and adds 10% to the Craft’s total workload.

HVAC Craft covers the components of controls, ducts, chillers, air handling units, chilled water pipes, pumps, valves, etc. It is noted that HVAC Craft requires having two separate crews: one for construction classified work and the other for maintenance classified work; with the former utilized for disaster circumstances such as earthquakes, floods and the like.

To complete the total of \$14M of potential HVAC work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of 4 additional FTEs, as shown in Figure 3.24.

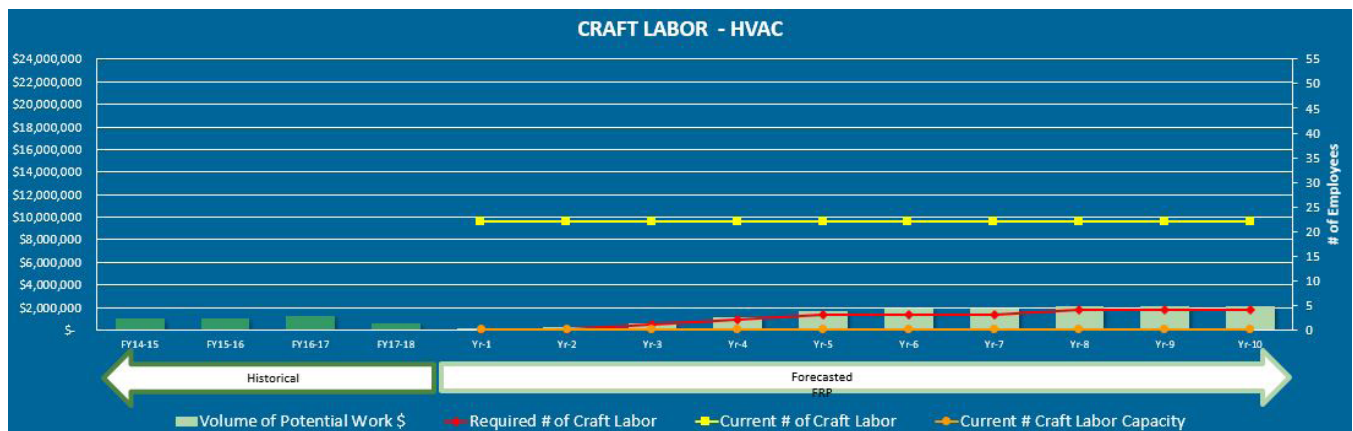


Figure 3.24: HVAC Craft FTE to meet ISD Facilities Craft Program Demand

Masonry

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD

Additional 5 Masonry FTEs needed to meet demand

The data reflects that \$11M of the \$195M ISD Facilities Craft Program is attributed to the Masonry work. The analysis in Figure 3.25 shows that SD1 and SD5 represent 64% of the volume of potential work to be performed by the in-house Masonry Craft and the remaining 36% is spread between SD2, SD3, and SD4. The top tenant departments that carry the 66% of the potential Masonry deficiencies are ISD, Probation and Parks & Recreation, as shown in Figure 3.26.

ISD currently effectively utilizes a staff of 6 Masonry Craft workers.

Based on the information provided by ISD, the Craft workers have a potential capacity to apply 10% of the work force (equivalent to 0.6 of an FTE) to be utilized in the ISD Facilities Craft Program effort.

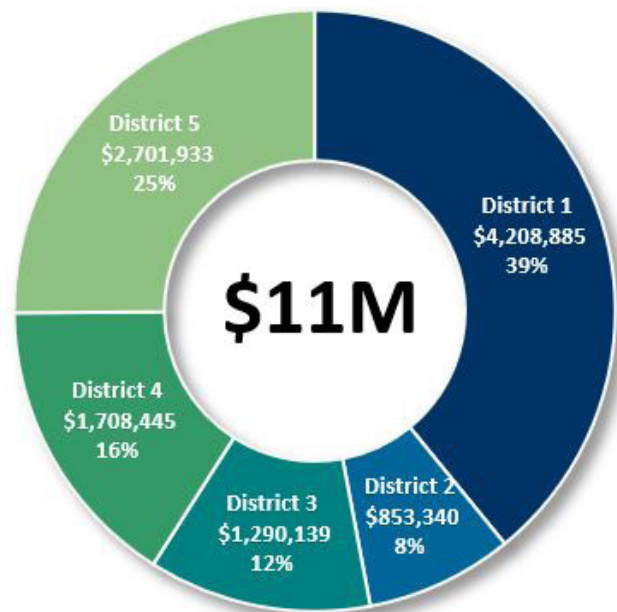


Figure 3.25: Potential Opportunities for Masonry by District

Potential \$11M of Masonry deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

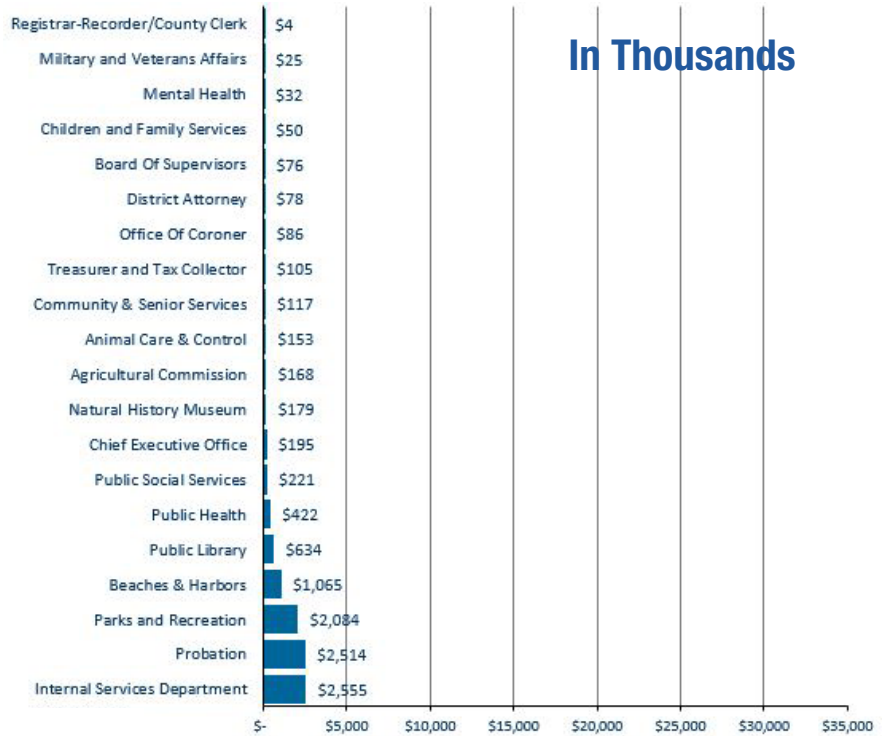


Figure 3.26: Potential Opportunities for Masonry, by Tenant Department

Interviews with Craft Management reveal the current workload consists of work related to concrete finish, tile setting, demolition, epoxy coating, polyurethane fillers, plaster and stucco, brick and block laying, and stone veneer. Only specialized work is outsourced to vendors such as asphalt, parking lot slurries, epoxy coating, etc.

Working in pairs is a common occurrence and is taken into consideration by the Craft supervisors when assessing the efficiency of the team.

To complete the total of \$11M of potential Masonry work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of 5 additional FTEs, as shown in Figure 3.27.

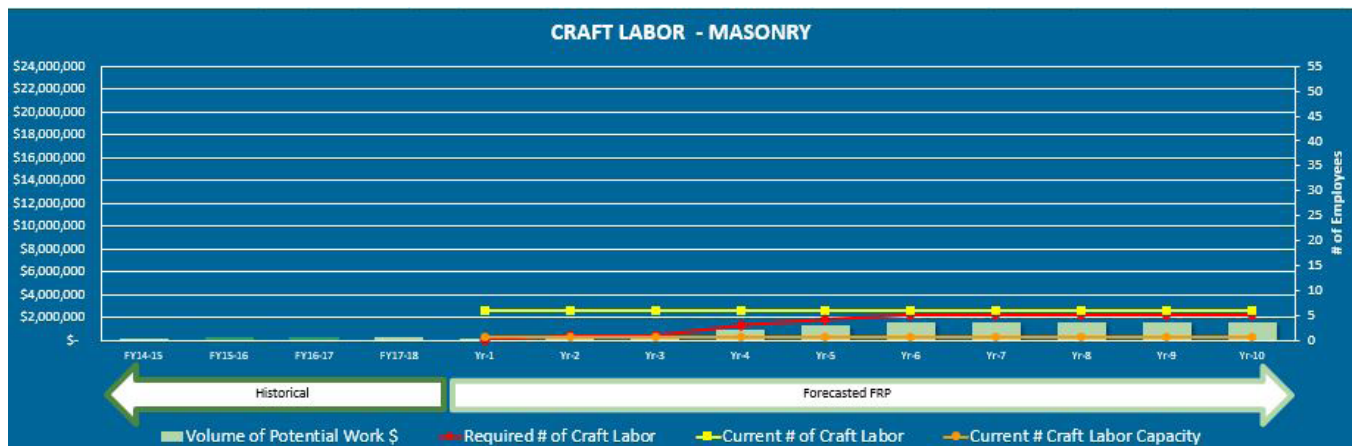


Figure 3.27: Masonry Craft FTE to meet ISD Facilities Craft Program Demand

Plumbing

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD

Additional 3 Plumbing FTEs needed to meet demand

The data reflects that \$9M of the \$195M ISD Facilities Craft Program is attributed to the Plumbing work. The analysis in Figure 3.28 shows that SD1 and SD5 represent 60% of the volume of potential work to be performed by the in-house Plumbing Craft and the remaining 40% is spread between SD2, SD3, and SD4. The top tenant departments that carry the 65% of the potential Plumbing deficiencies are Probation, Parks & Recreation and ISD, as shown in Figure 3.29.

ISD currently effectively utilizes a staff of 16 Plumbing Craft workers.

Based on the information provided by ISD, the Craft workers are occupied at 100% capacity and not available to be utilized in the ISD Facilities Craft Program effort.

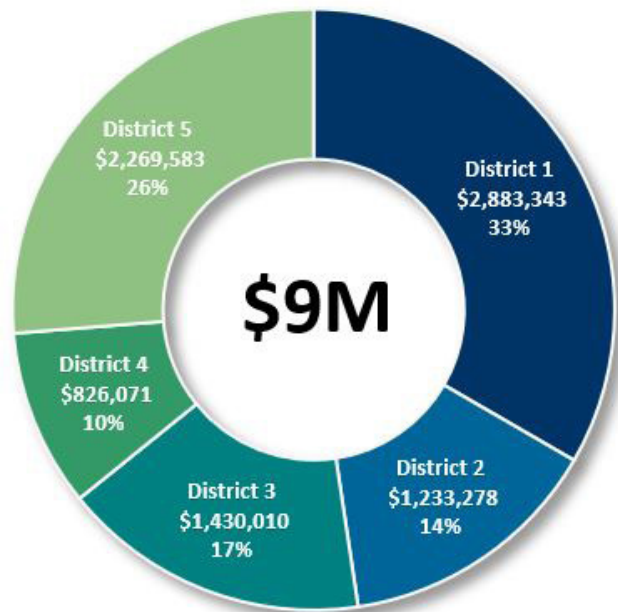


Figure 3.28: Potential Opportunities for Plumbing by District

Potential \$9M of Plumbing deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

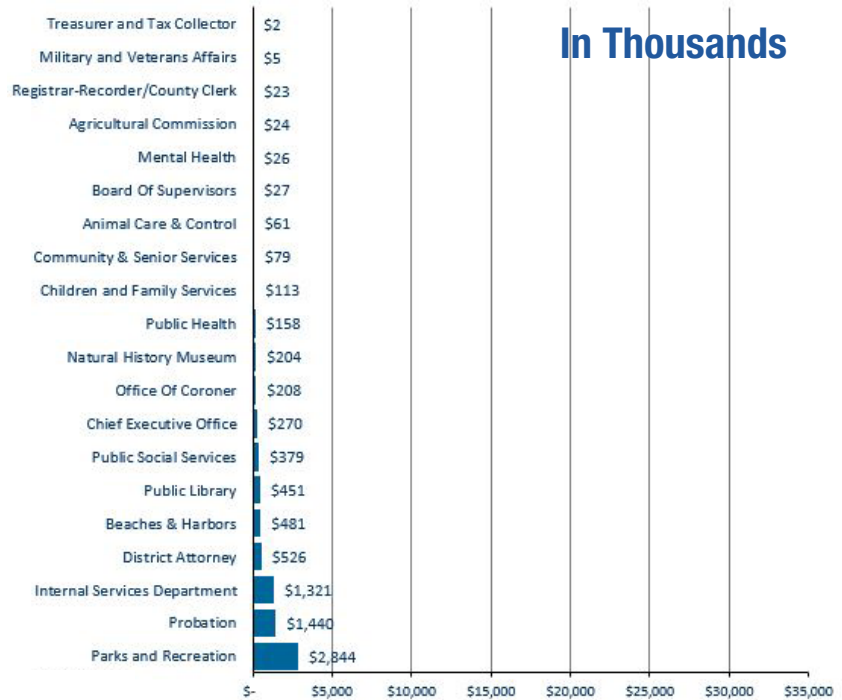


Figure 3.29: Potential Opportunities for Plumbing, by Tenant Department

ISD provided insight within the Plumbing Craft shop's current structure. The makeup of which is four separate teams within the Craft to segregate work streamlines, and each team is headed by one supervisor. The four sub-crafts, namely sewer and drainage, water, gas and fuel. Dependent on the complexity of the given service request, the work may be outsourced to an outside vendor. This occurrence is estimated at 5% of the total workload. ISD noted that two major factors affecting efficiency can be attributed to servicing leased buildings and the necessity of working in pairs.

To complete the total of \$9M of potential Plumbing work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of 3 additional FTEs, as shown in Figure 3.30.

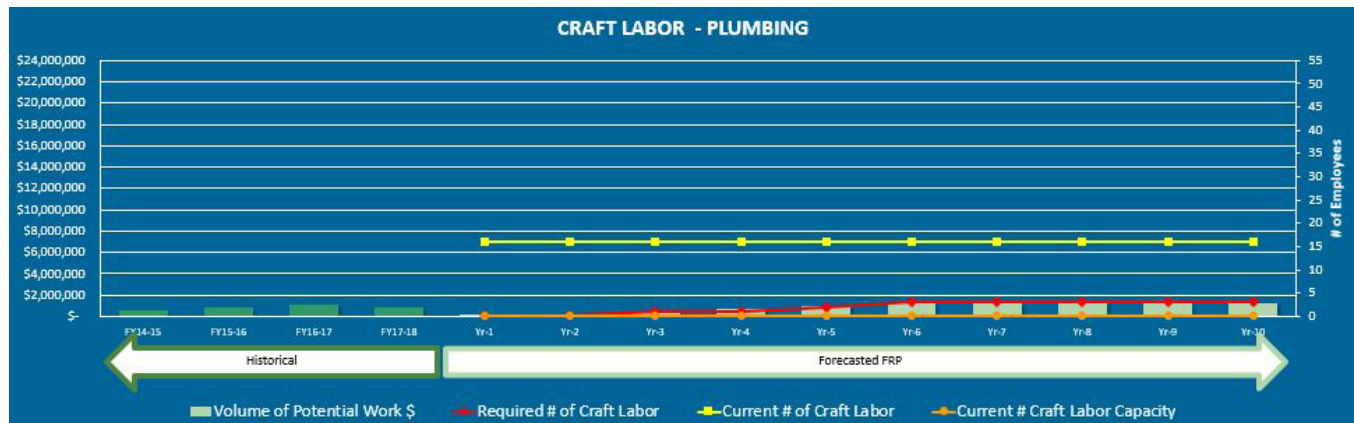


Figure 3.30: Plumbing Craft FTE to meet ISD Facilities Craft Program Demand

Painting/Signage

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD

Additional 4 Painting/Signage FTEs needed to meet demand

The data reflects that \$7M of the \$195M ISD Facilities Craft Program is attributed to the Painting/Signage work. The analysis in Figure 3.31 shows that SD1 and SD3 represent 65% of the volume of potential work to be performed by the in-house Painting/Signage Craft and the remaining 35% is spread between SD2, SD4, and SD5. The top tenant departments that carry the 65% of the potential Painting/Signage deficiencies are Probation, ISD and Parks & Recreation, as shown in Figure 3.32.

ISD currently effectively utilizes a staff of 6.5 Painting/Signage Craft workers.

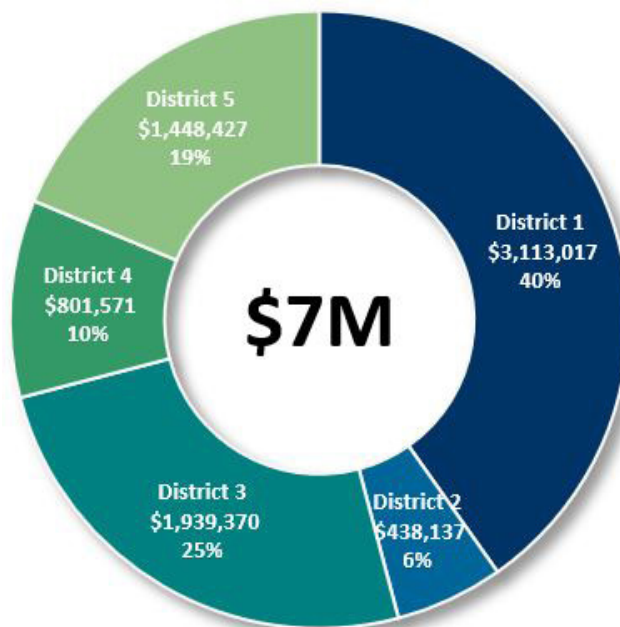


Figure 3.31: Potential Opportunities for Painting/Signage by District

Potential \$7M of Painting/Signage deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

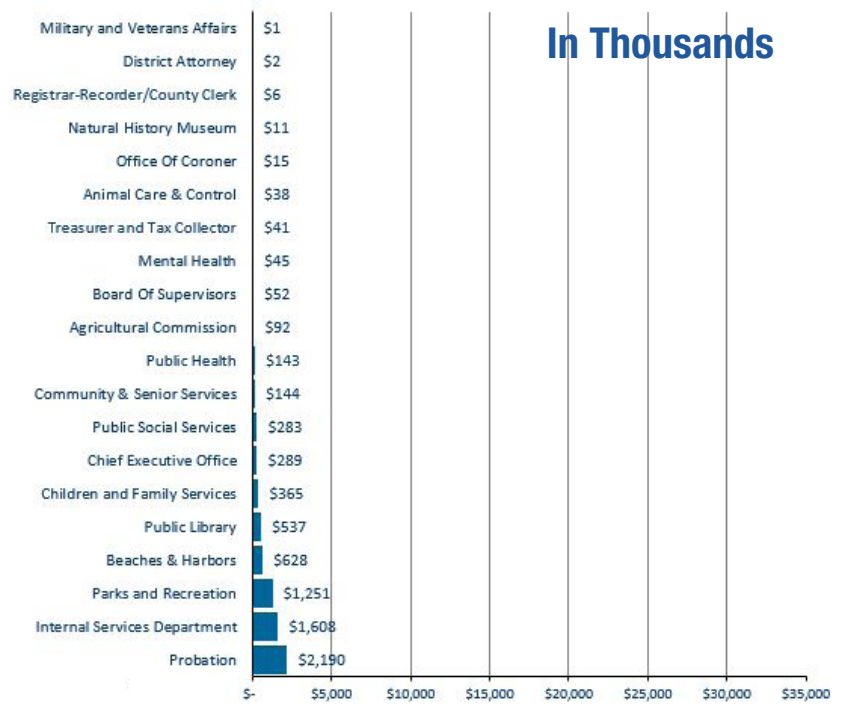


Figure 3.32: Potential Opportunities for Painting/Signage, by Tenant Department

Based on the information provided by ISD, the Craft workers are occupied at 100% capacity and not available to be utilized in the ISD Facilities Craft Program effort.

A caveatted note, the Painting/Signage Craft is unique in that the unit has the authority to provide delivery and execution of work above and beyond the \$50,000 Force Account limit.

To complete the total of \$7M of potential Painting/Signage work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of 4 additional FTEs, as shown in Figure 3.33.

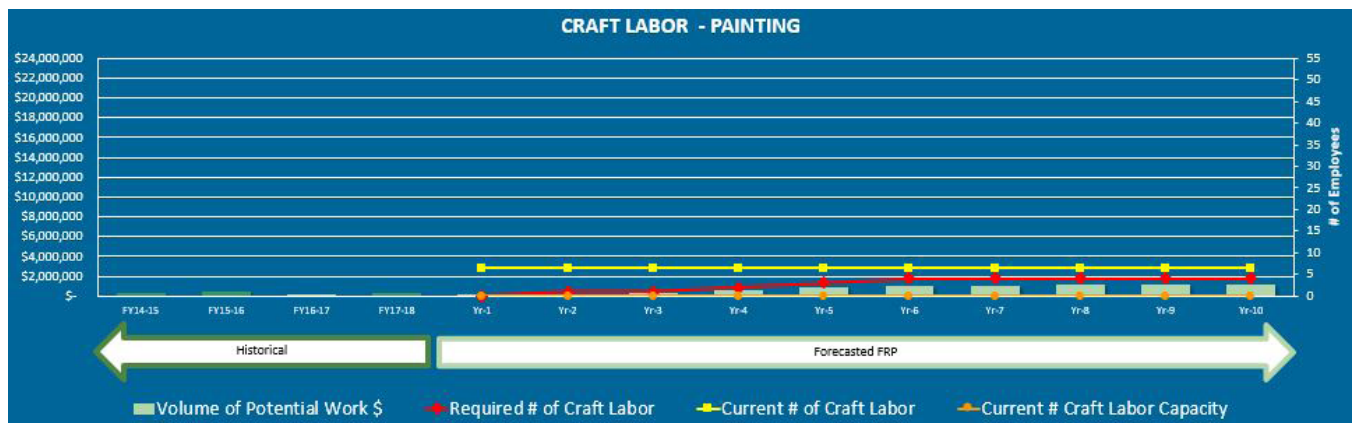


Figure 3.33: Painting/Signage Craft FTE to meet ISD Facilities Craft Program Demand

Metal Works

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD

Additional <1 Metal Works Crafts needed to meet FRP demand

The data reflects that \$2M of the \$195M ISD Facilities Craft Program is attributed to the Metal Works work. The analysis in Figure 3.34 shows that SD3 and SD5 represent 46% of the volume of potential work to be performed by the in-house Metal Works Craft and the remaining 54% is spread between SD1, SD2, and SD4. The top tenant departments that carry the 76% of the potential Metal Works deficiencies are Parks & Recreation, Beaches & Harbor and Probation, as shown in Figure 3.35.

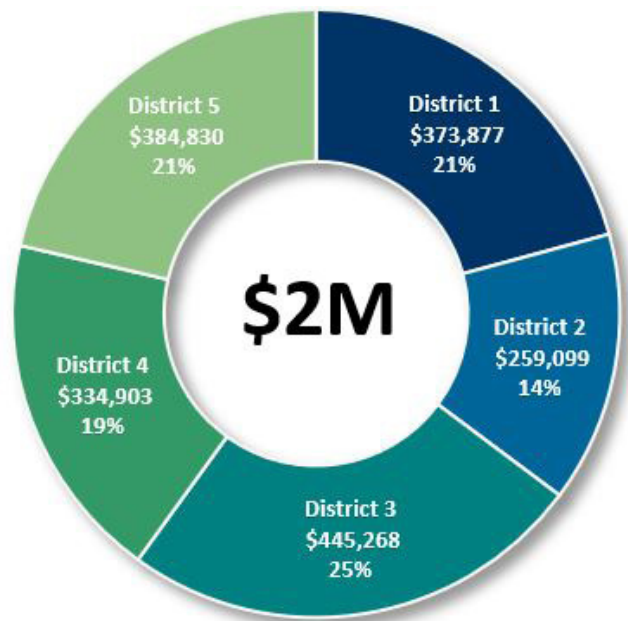


Figure 3.34: Potential Opportunities for Metal Works by District

Potential \$2M of Metal Works deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

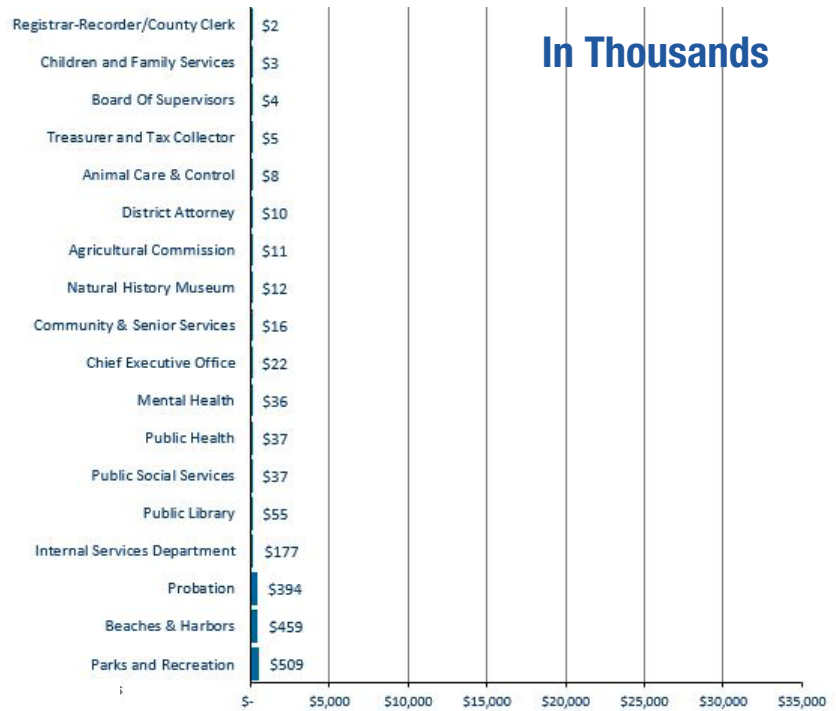


Figure 3.35: Potential Opportunities for Metal Works, by Tenant Department

ISD currently effectively utilizes a staff of 13 Metal Works Craft workers.

Based on the information provided by ISD, the Craft workers are occupied at 100% capacity and not available to be utilized in the ISD Facilities Craft Program effort.

To complete the total of \$2M of potential Metal Works work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of <1 additional FTE, as shown in Figure 3.36.

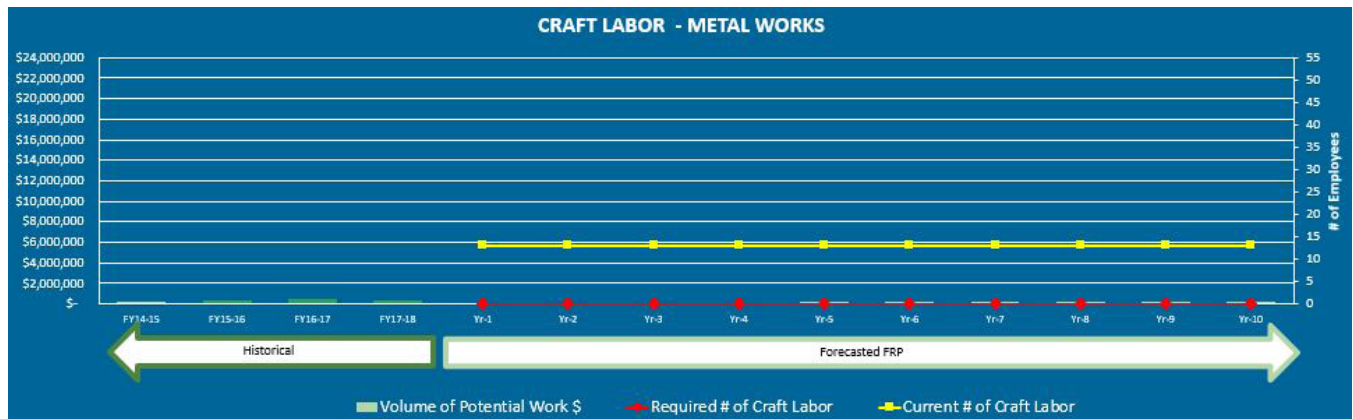
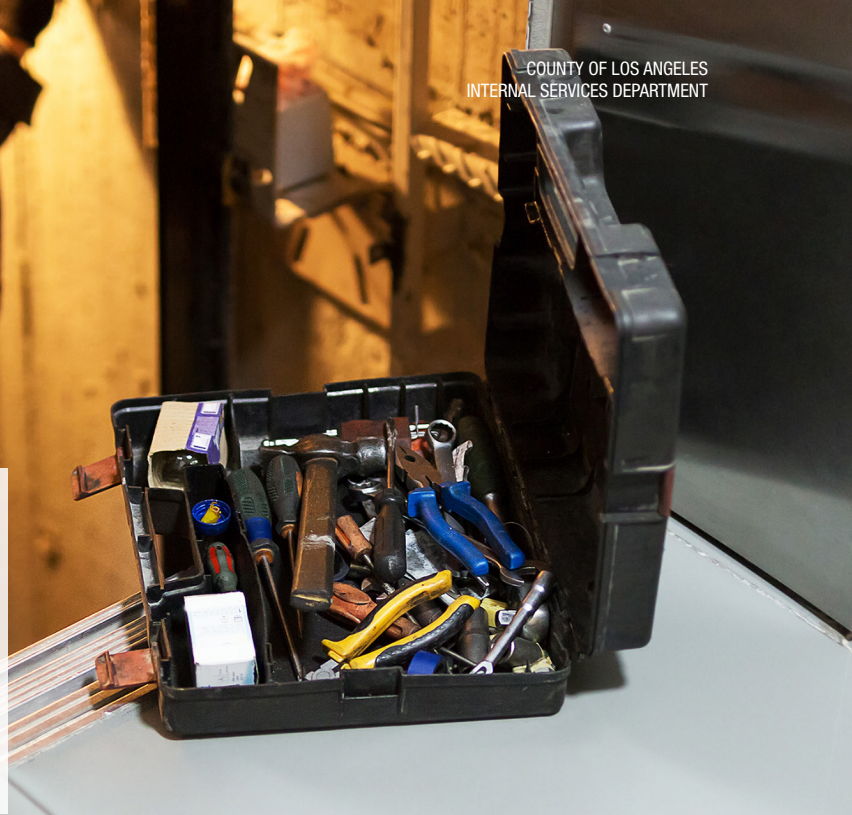


Figure 3.36: Metal Works Craft FTE to meet ISD Facilities Craft Program Demand

Elevators

The information represented on the figures included for this craft is based on the following collection of data:

- Deficiencies Report download from SAM database
- Total in-house Craft resources
- In-house Craft availability provided by ISD



Additional <1 Elevators Crafts needed to meet FRP demand

The data reflects that \$0.3M of the \$195M ISD Facilities Craft Program is attributed to the Elevator work. The analysis in Figure 3.37 shows that SD1 represents 76% of the volume of potential work to be performed by the in-house Elevator Craft and the remaining 24% is spread between SD2, SD3, SD4 and SD5. The top tenant department that carries half of the potential Elevator deficiencies is Probation, as shown in Figure 3.38.

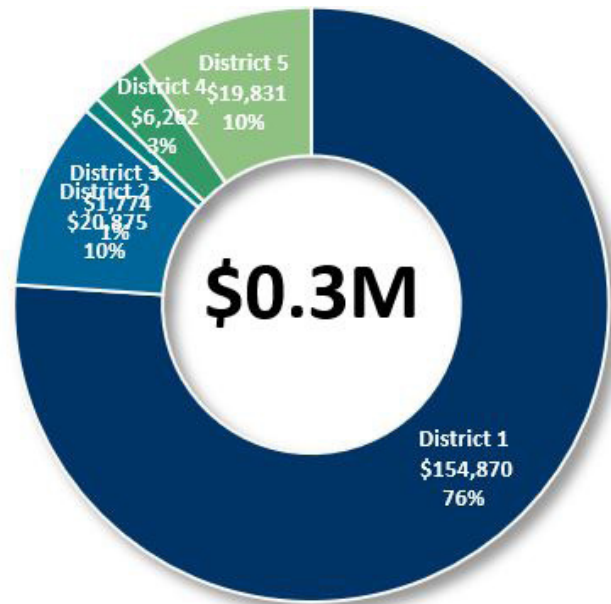


Figure 3.37: Potential Opportunities for Elevators by District

Potential \$0.3M Elevator deficiencies over 10 years

A strategic planning activity is recommended for ISD to determine how to fulfill the labor demand with consideration to organization goals, economic conditions, and the competitive work force.

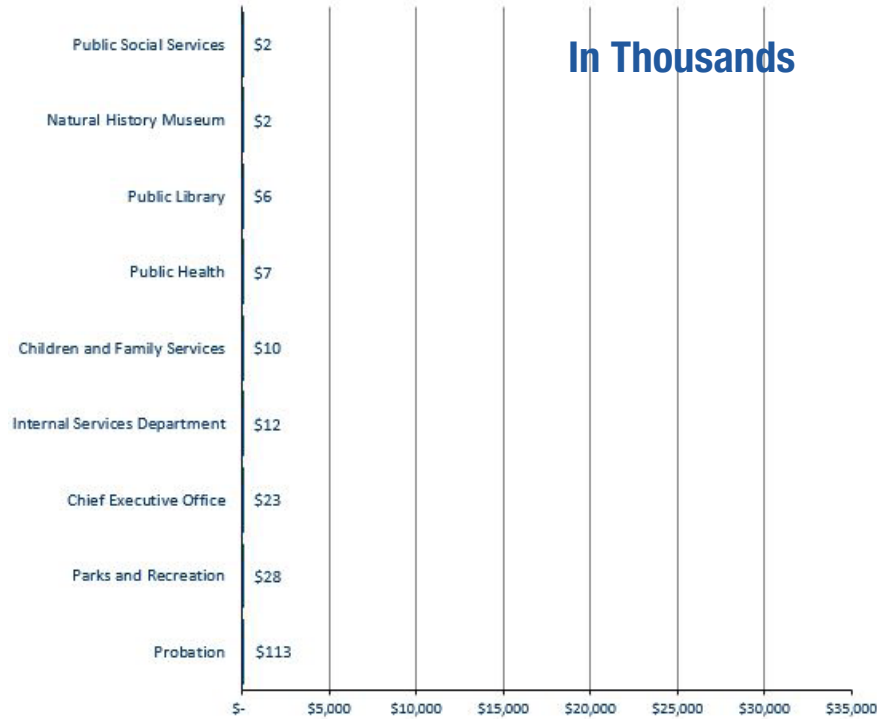


Figure 3.38: Potential Opportunities for Elevators, by Tenant Department

ISD currently effectively utilizes a staff of 9 Elevators Craft workers.

Based on the information provided by ISD, the Craft workers are occupied at 100% capacity and not available to be utilized in the ISD Facilities Craft Program effort.

To complete the total of \$0.3M of potential Elevator work over the course of 10 years, it was found that the peak FTE needed to meet the demand of the ISD Facilities Craft Program would be an equivalent of <1 additional FTE, as shown in Figure 3.39.

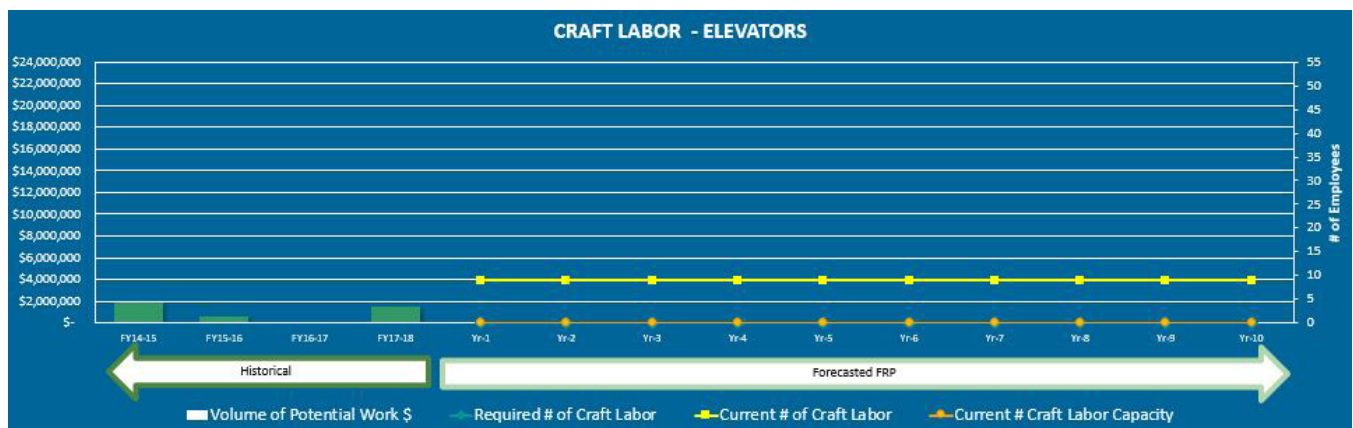


Figure 3.39: Metal Works Craft FTE to meet ISD Facilities Craft Program Demand



Disclaimer

Data analysis performed for this report should be considered broad, exploratory and a representation of qualitative data. This report reflects a theoretical perspective in which to hire Craft skilled labor over a 10-year duration. Approaches may vary depending on general considerations made by executing group, eventual distribution of the potential facility reinvestment work and the fluctuating capacity of the work force, and craft labor hire market. All such information is provided solely for guidance and information reference purposes only and all users thereof should be guided accordingly.

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4 Appendix

Glossary of Terms

TERM	DEFINITION
Burdened Labor Rate	Labor rates provided by ISD for each Craft. Assumed to be compensation to ISD to include employee wages, costs for management salaries, and costs for employee benefits
Deficiency Cost	Cost estimate indicated in SAM Deficiency Report download
Deficiency Report	A data report downloaded from SAM, containing detailed work descriptions for spot repairs in the LA County buildings. Deficiencies on report exclude “Level 2” associated action items
Facilities Reinvestment Program	Also referred to as “FRP.” Initiative by Chief Executive Office to address the backlog deferred maintenance needs of Los Angeles County. The FRP currently represents an investment of \$750M over a 5-year period: FY 17/18 through FY 22/23
Force Account	Employment of a labor force maintained under an expense account of a public body
Gross Square Foot	Also referred to as “GSF.” The sum of all floor areas within the LA County buildings that exist with the outer faces of exterior walls; referenced in a SAM “All Buildings” Report download
Strategic Asset Management Database	Also referred to as “SAM.” A web-based database used by ISD to assist in the management of Los Angeles County’s assets, in tracking and recording facility conditions
Cohort	Maintenance and repair projects within the Facilities Reinvestment Program (FRP) which have been grouped together by Fiscal Year to accommodate planning, budgeting, building type, tenant, supervisory district, and craft area distribution

Alternative Staffing Approach by Severity Ranking

The staffing profiles described in this report assume that additional Craft FTEs are brought onboard over a 7- to 10-year duration to meet the demands of the FRP without adversely affecting the existing workload of ISD Craft in any area. In the Introduction section, potential approaches were described to fulfill the FTEs required to meet the demand of the ISD Facilities Craft Program.

As a sub-set to the Craft Participation Analysis, this study also provides another potential scenario in addressing the execution of \$195M work during the same 10 year duration.

In using the severity classification as the lead driver for the data output, the logic implies that work is to be performed by the levels of severity ranking. For example, in Year 1 the work performed would be those classified as 'Critical.' Those classified as 'High' are to be performed in Years 1 to 6; work under 'Medium' is to be performed in Years 1 to 9; and work under 'Low' to be performed in Years 5 to 10.

Figure 3.10 reflects the data output as per the described logic. The graph illustrates a surge of the work to be performed in Year 3 with the FTE count peaking at 54 FTEs at Year 4. This potential approach presents the \$195M scope of work at an efficient allocation throughout the 10-year duration, thus minimizing the impact to the volume of work per year and stabilizes the FTEs required to perform the work. This work plan would address the work in the nearer term to avoid further deterioration of the assets with the greatest severity.

ISD should pursue a strategic plan to determine the impact of labor onboarding durations with regard to applications, orientation, office-space planning, and operational expenses.

Figure A-1: Craft FTE Projection, By Severity

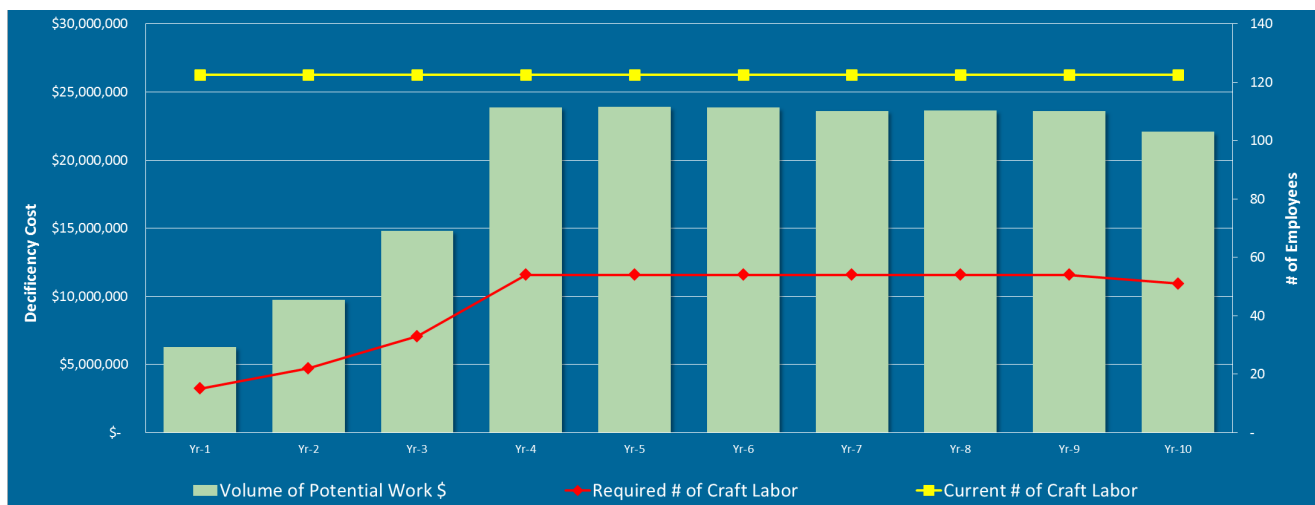


Figure A-2: Accelerate to final total ISD Facilities Craft Program staffing levels for all Craft area year 4 – Total peak additional FTEs equals 54

	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Total
Critical	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
High	33%	28%	21%	10%	5%	3%	0%	0%	0%	0%	100%
Medium	1%	3%	10%	25%	23%	13%	14%	7%	3%	0%	100%
Low	0%	0%	0%	0%	2%	9%	14%	18%	25%	32%	100%
ALL CRAFTS											
Critical	\$ 75,462	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
High	\$ 56,187,987	\$ 5,953,078	\$ 8,220,429	\$ 10,040,164	\$ 13,133,631	\$ 13,023,017	\$ 5,817,668	\$ -	\$ -	\$ -	
Medium	\$ 70,181,164	\$ 273,529	\$ 1,496,767	\$ 4,784,418	\$ 10,755,991	\$ 9,226,219	\$ 10,488,713	\$ 13,586,603	\$ 10,726,661	\$ 8,842,262	
Low	\$ 69,001,400	\$ -	\$ -	\$ -	\$ -	\$ 1,648,337	\$ 7,540,889	\$ 10,036,376	\$ 12,921,160	\$ 14,777,875	
All Departments	\$ 195,446,013	\$ 6,302,069	\$ 9,717,197	\$ 14,824,583	\$ 23,889,622	\$ 23,897,572	\$ 23,847,269	\$ 23,622,979	\$ 23,647,821	\$ 23,620,137	\$ 22,076,764
FTE	12	24	53	53	55	55	54	49	49	49	-

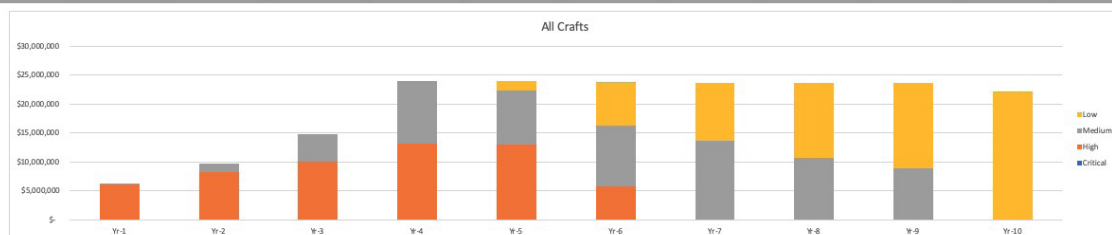


Figure A-3: Accelerate to final total Craft staffing by year 4 - Roofing peak additional FTEs equals 37

	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Total
Critical	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
High	9%	12%	16%	27%	27%	9%	28%	28%	25%	90%	100%
Medium						19%			10%		100%
Low											100%
ROOFING											
Critical	\$ 313	\$ 313	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
High	\$ 37,568,610	\$ 3,381,175	\$ 4,508,233	\$ 6,010,978	\$ 10,143,525	\$ 10,143,525	\$ 3,381,175	\$ -	\$ -	\$ -	
Medium	\$ 35,337,837	\$ -	\$ -	\$ -	\$ -	\$ 6,714,189	\$ 9,894,594	\$ 9,894,594	\$ 8,834,459	\$ -	
Low	\$ 10,618,332	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,061,833	\$ 9,556,498	
All Departments	\$ 83,525,092	\$ 3,381,488	\$ 4,508,233	\$ 6,010,978	\$ 10,143,525	\$ 10,143,525	\$ 10,095,364	\$ 9,894,594	\$ 9,894,594	\$ 9,896,293	\$ 9,556,498
FTE	9	16	37	35	29	29	27	8	8	8	

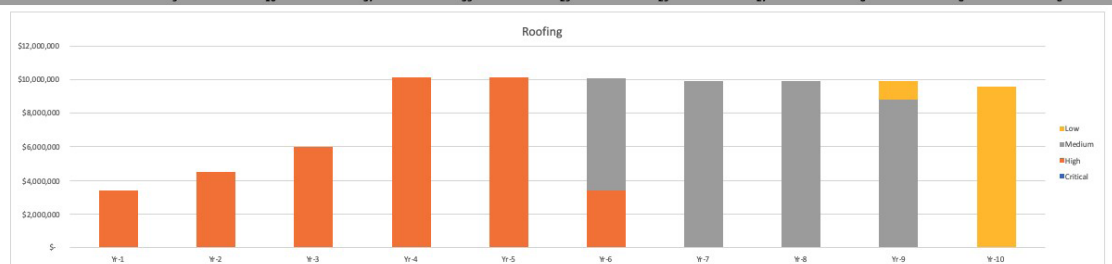


Figure A-4: Accelerate to final total Craft staffing by year 4 - Carpentry final peak additional FTEs equals 13

	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Total
Critical	100%										100%
High	13%	42%	45%								100%
Medium			15%	45%	40%						100%
Low					2%	20%	20%	20%	20%	18%	100%
CARPENTRY											
Critical	\$ 45,924	\$ 45,924	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
High	\$ 2,121,249	\$ 275,762	\$ 890,925	\$ 954,562	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Medium	\$ 7,605,006	\$ -	\$ -	\$ 1,140,751	\$ 3,422,253	\$ 3,042,002	\$ 344,987	\$ -	\$ -	\$ -	
Low	\$ 17,249,338	\$ -	\$ -	\$ -	\$ -	\$ 3,449,868	\$ 3,449,868	\$ 3,449,868	\$ 3,449,868	\$ 3,104,881	
All Departments	\$ 27,021,518	\$ 321,687	\$ 890,925	\$ 2,095,313	\$ 3,422,253	\$ 3,386,989	\$ 3,449,868	\$ 3,449,868	\$ 3,449,868	\$ 3,104,881	\$ 27,021,518
FTE	1	1	2	3	6	6	7	13	13	13	

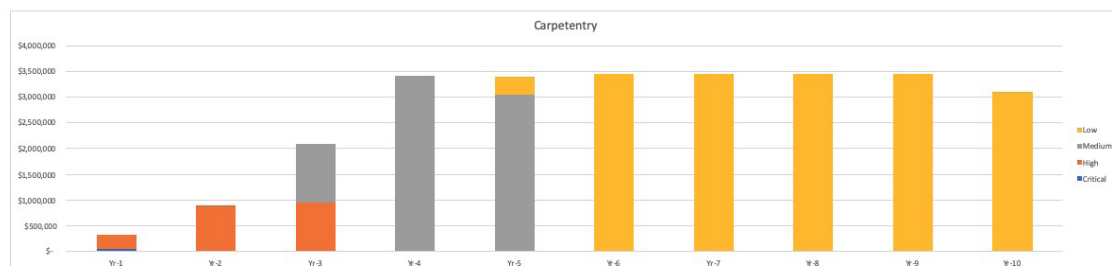


Figure A-5: Accelerate to final total Craft staffing by year 4 - Electrical final peak additional FTEs equals 5



Figure A-6: Accelerate to final total Craft staffing by year 4 – Flooring final peak additional FTEs equals 8

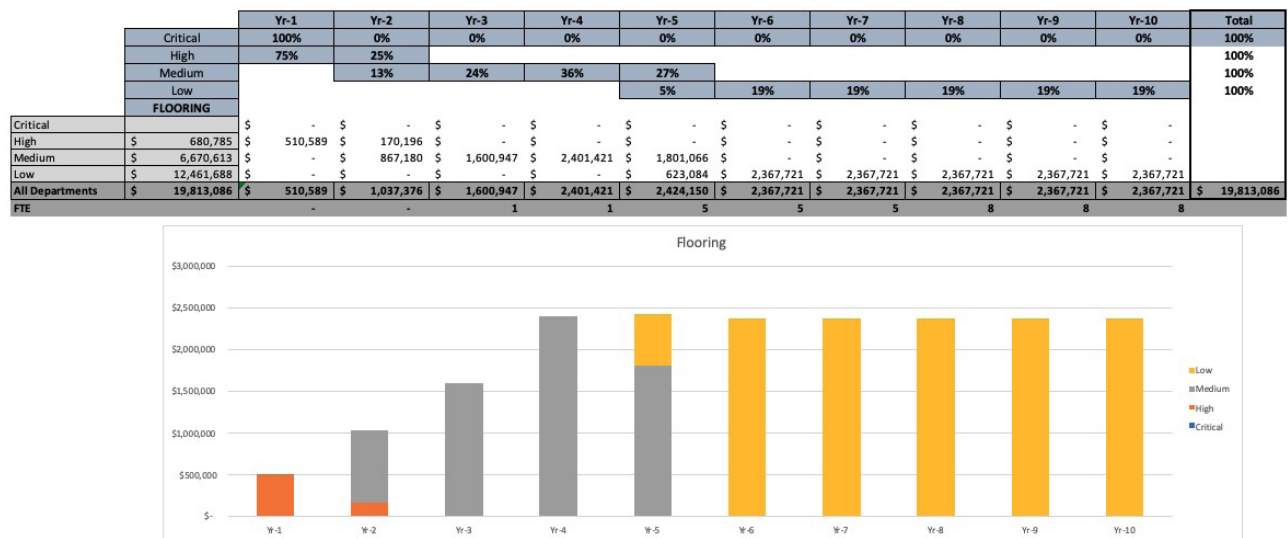


Figure A-7: Accelerate to final total Craft staffing by year 4 - HVAC final peak additional FTEs equals 6

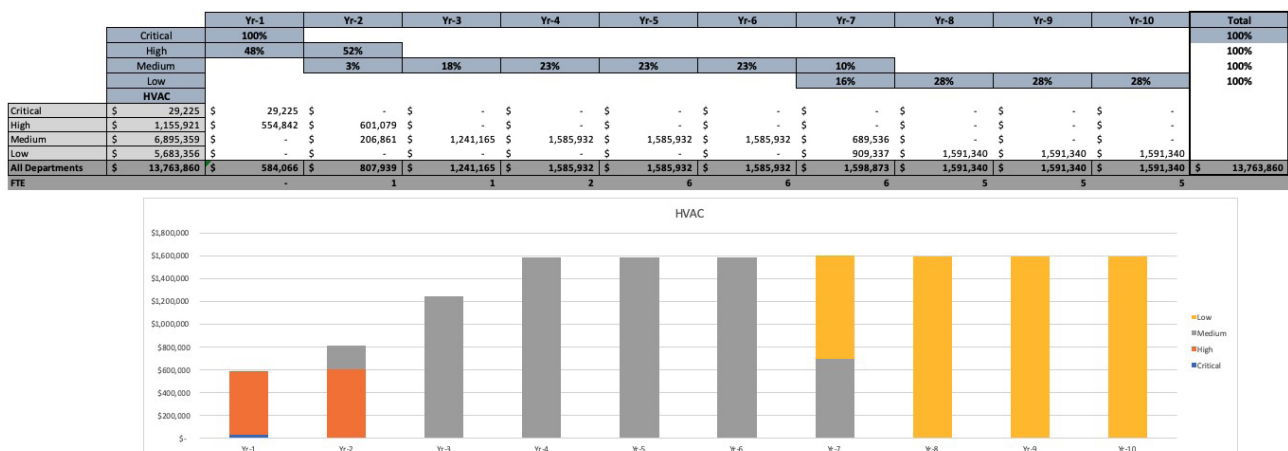


Figure A-8: Accelerate to final total Craft staffing by year 4 - Masonry final peak additional FTEs equals 4

		Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Total
	Critical	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
	High	21%	36%	43%								100%
	Medium			4%	37%	37%	22%					100%
	Low						10%	23%	23%	23%	21%	100%
	MASONRY											
Critical		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
High	\$ 1,525,589	\$ 320,374	\$ 549,212	\$ 656,003	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Medium	\$ 3,509,059	\$ -	\$ -	\$ 140,362	\$ 1,298,352	\$ 1,298,352	\$ 771,993	\$ -	\$ -	\$ -	\$ -	
Low	\$ 5,728,093	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 572,809	\$ 1,317,461	\$ 1,317,461	\$ 1,317,461	\$ 1,202,900	
All Departments	\$ 10,762,742	\$ 320,374	\$ 549,212	\$ 796,366	\$ 1,298,352	\$ 1,298,352	\$ 1,344,802	\$ 1,317,461	\$ 1,317,461	\$ 1,317,461	\$ 1,202,900	\$ 10,762,742
FTE			1	2	2	4	4	4	6	6	6	

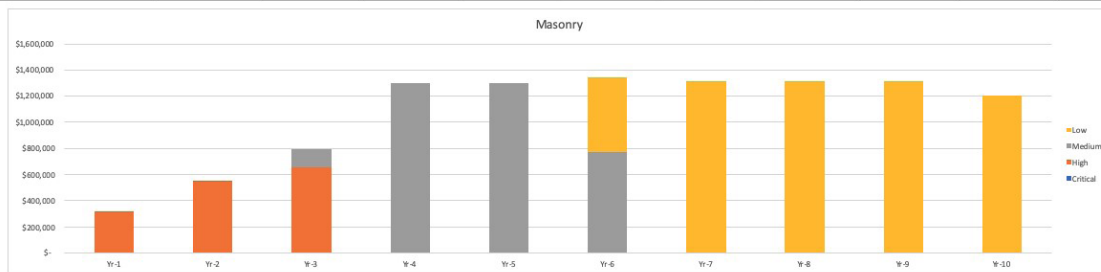


Figure A-9: Accelerate to final total Craft staffing by year 4 - Plumbing final peak additional FTEs equals 3

		Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Total
PLUMBING	Critical	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
	High	20%	35%	40%	5%							100%
	Medium				30%	33%	32%	5%				100%
	Low							22%	26%	26%	26%	100%
Critical	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
High	\$	1,730,586	\$	605,705	\$	692,234	\$	86,529	\$	-	\$	-
Medium	\$	3,086,704	\$	-	\$	-	\$	926,011	\$	1,018,612	\$	987,745
Low	\$	3,824,994	\$	-	\$	-	\$	-	\$	154,335	\$	-
	\$	-	\$	-	\$	-	\$	-	\$	841,499	\$	994,499
	\$	-	\$	-	\$	-	\$	-	\$	994,499	\$	994,499
All Departments	\$	8,642,285	\$	346,117	\$	605,705	\$	692,234	\$	1,012,541	\$	1,018,612
	\$	-	\$	-	\$	-	\$	-	\$	987,745	\$	995,834
	\$	-	\$	-	\$	-	\$	-	\$	994,499	\$	994,499
FTE			1	1	2	2	2	2	3	3	3	

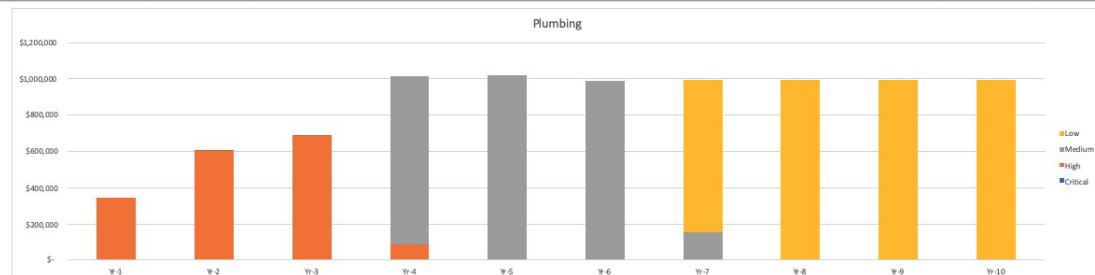


Figure A-10: Accelerate to final total Craft staffing by year 4 – Painting/Signage final peak additional FTEs equals 1

		Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Total
	Critical	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
	High	100%										100%
	Medium	11%	17%	23%	37%	12%						
	Low					12%	18%	18%	18%	18%	16%	100%
PAINTING/SIGNAGE												
Critical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
High	\$ 56,362	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Medium	\$ 2,486,629	\$ 273,529.21	\$ 422,726.96	\$ 571,924.70	\$ 920,052.78	\$ 298,395.50	\$ -	\$ -	\$ -	\$ -	\$ -	
Low	\$ 5,197,530	\$ -	\$ -	\$ -	\$ -	\$ 623,703.63	\$ 935,555.44	\$ 935,555.44	\$ 935,555.44	\$ 935,555.44	\$ 831,604.84	
All Departments	\$ 7,740,521	\$ 329,891	\$ 422,727	\$ 571,925	\$ 920,053	\$ 922,099	\$ 935,555	\$ 935,555	\$ 935,555	\$ 935,555	\$ 831,605	\$ 7,740,521
FTE												

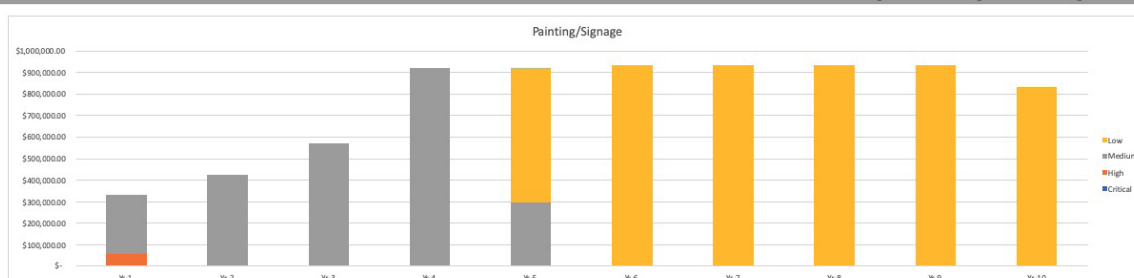


Figure A-11: Accelerate to final total Craft staffing by year 4 - Metal Works
final peak additional FTEs equals <1

	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Total
Critical	100%										100%
High	27%	50%	23%								100%
Medium			20%	45%	35%						100%
Low					5%	19%	19%	19%	19%	19%	100%
METAL WORKS											
Critical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
High	\$ 220,395	\$ 59,506.71	\$ 110,197.62	\$ 50,690.90	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Medium	\$ 446,343	\$ -	\$ -	\$ 89,268.63	\$ 200,854.42	\$ 156,220.10	\$ -	\$ -	\$ -	\$ -	
Low	\$ 1,131,239	\$ -	\$ -	\$ -	\$ 56,561.95	\$ 214,935.41	\$ 214,935.41	\$ 214,935.41	\$ 214,935.41	\$ 214,935.41	
All Departments	\$ 1,797,977	\$ 59,507	\$ 110,198	\$ 139,960	\$ 200,854	\$ 212,782	\$ 214,935	\$ 214,935	\$ 214,935	\$ 214,935	\$ 1,797,977
FTE											

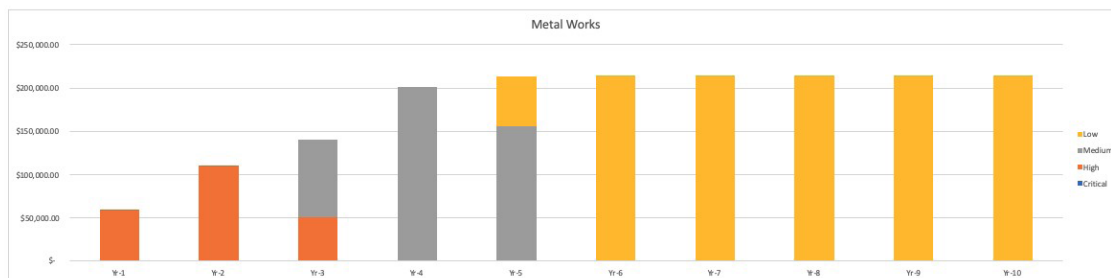
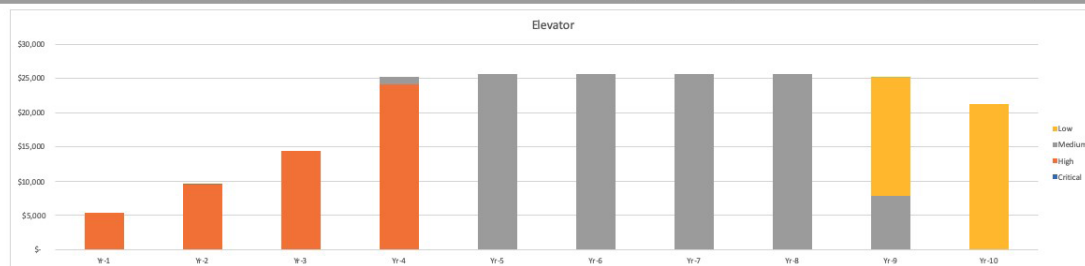


Figure A-12: Accelerate to final total Craft staffing by year 4 - Elevator final
peak additional FTEs <1

	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Total
Critical	100%										100%
High	10%	18%	27%	45%							100%
Medium				1%	23%	23%	23%	23%	7%		100%
Low									45%	55%	100%
ELEVATOR											
Critical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
High	\$ 53,523	\$ 5,352	\$ 9,634	\$ 14,451	\$ 24,085	\$ -	\$ -	\$ -	\$ -	\$ -	
Medium	\$ 111,471	\$ -	\$ -	\$ -	\$ 1,115	\$ 25,638	\$ 25,638	\$ 25,638	\$ 25,638	\$ 7,803	
Low	\$ 38,618	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,378	
All Departments	\$ 203,612	\$ 5,352	\$ 9,634	\$ 14,451	\$ 25,200	\$ 25,638	\$ 25,638	\$ 25,638	\$ 25,638	\$ 25,181	\$ 203,612
FTE											



Figures

Figure 1.1: County Assets Gross Square Feet, by District

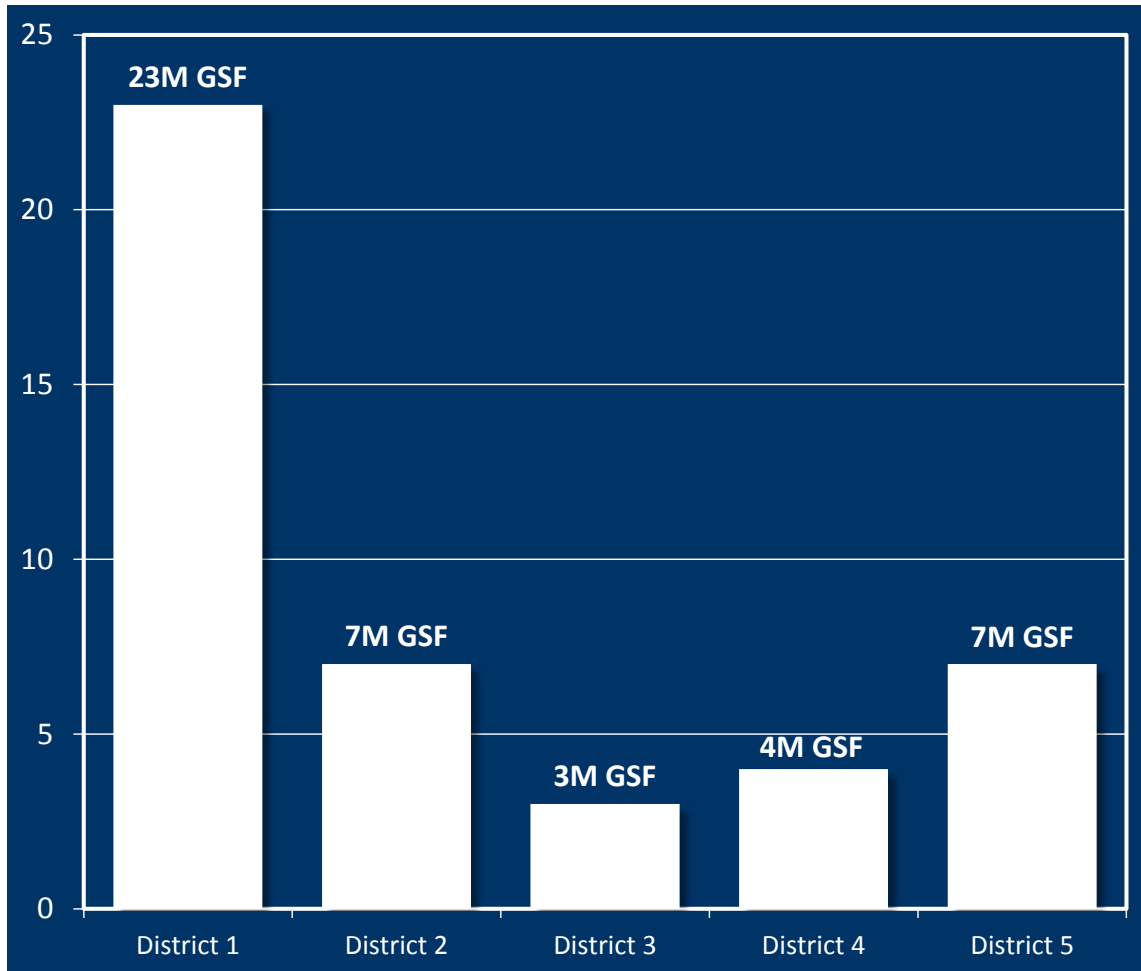


Figure 1.2: Potential Opportunities for ISD In-House Crafts, by District

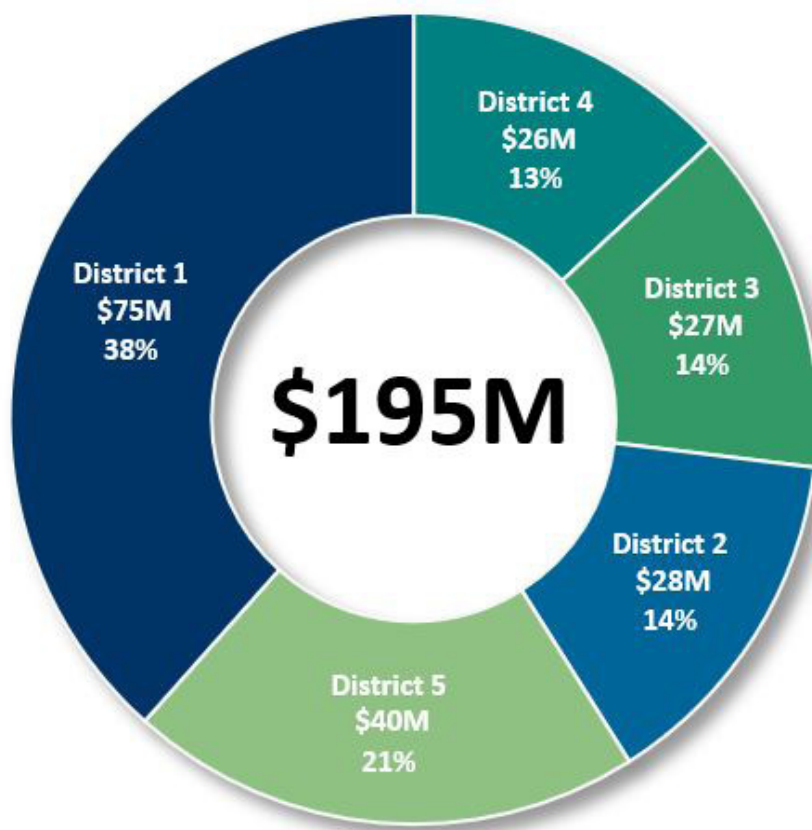


Figure 1.3: Potential Opportunities for ISD In-House Crafts, by Tenant Department

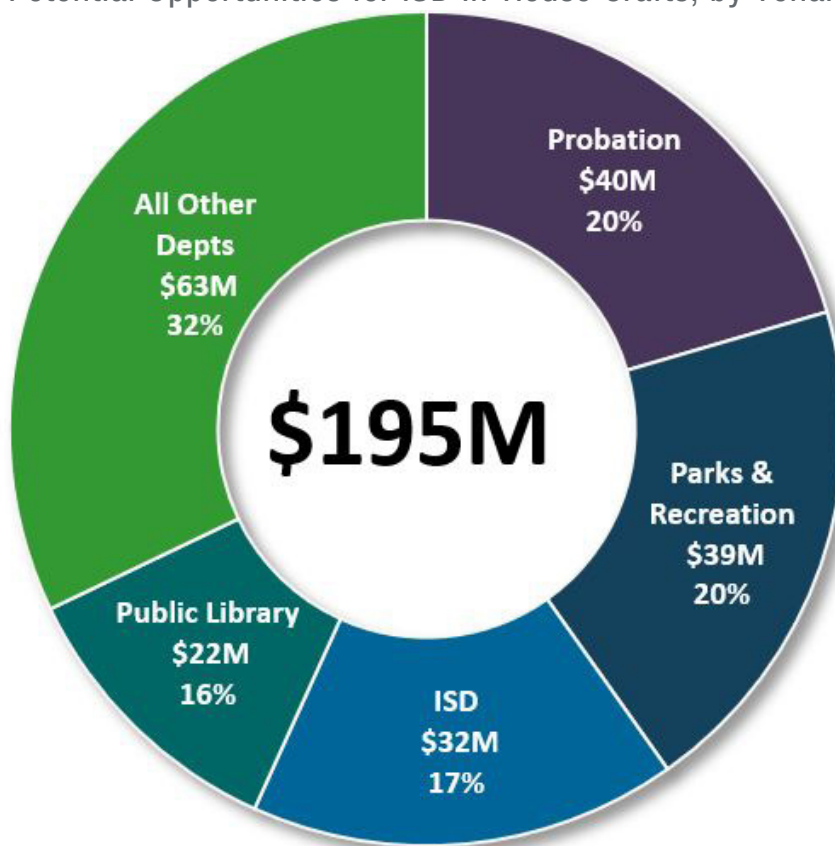


Figure 1.4: Potential Opportunities for ISD In-House Crafts, by Craft

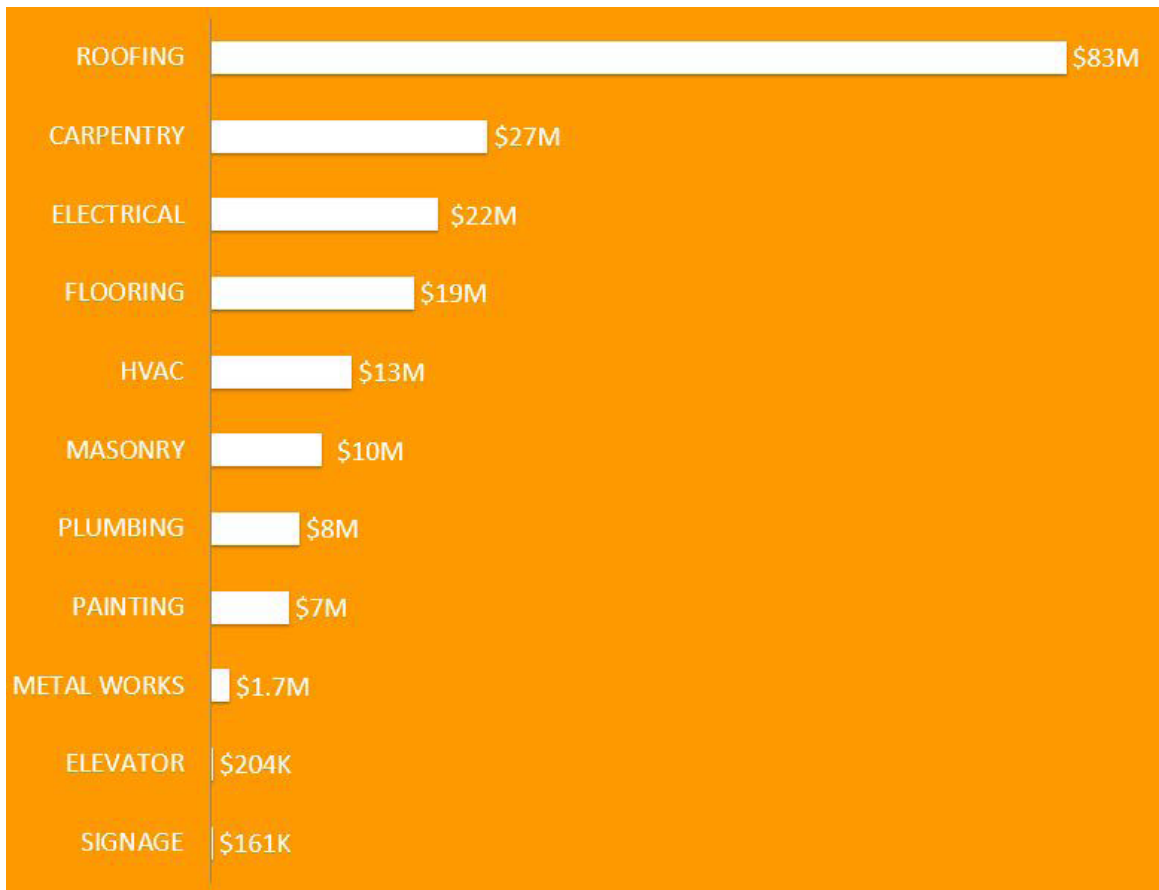


Figure 1.5: Current Craft FTE vs. Total Craft FTE Needed

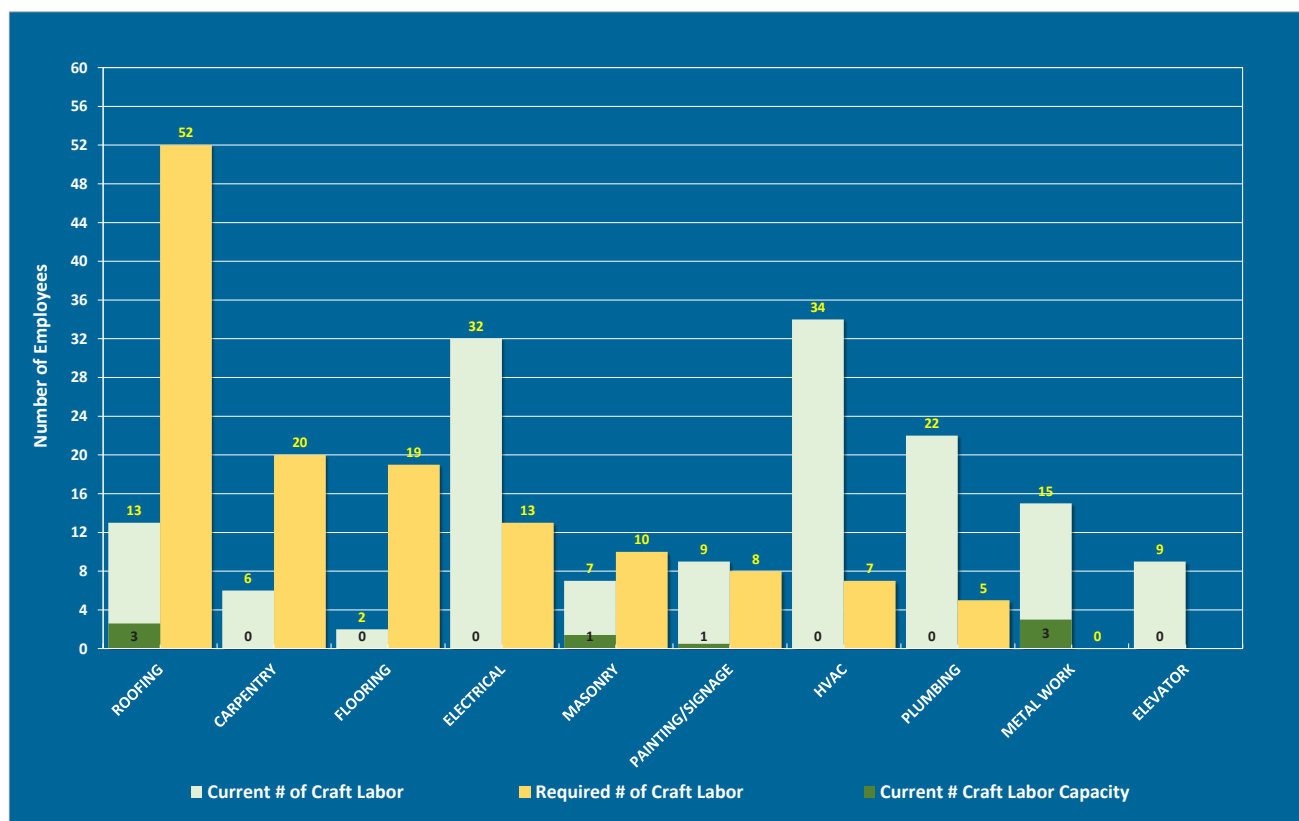


Figure 1.6: Craft FTE - Current and Need, By Year

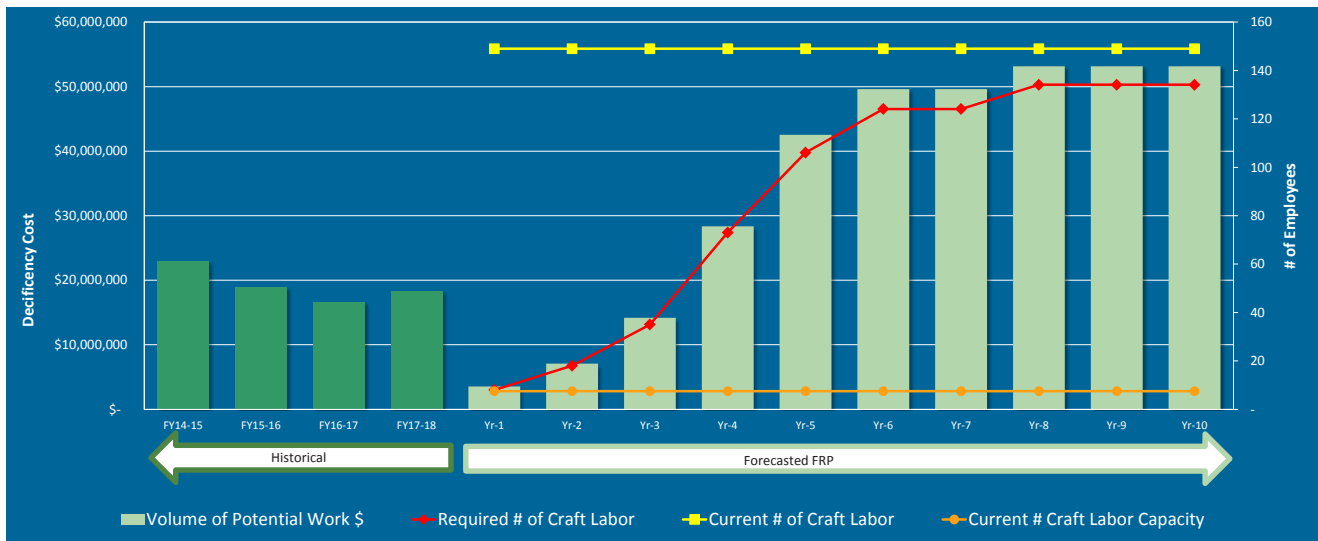


Figure 2.1: Crafts FTE - Deficiencies Report Download from the SAMS Database

ID	District	Site	Site Name	Building / L Building Name	Room	Quantity	Proprietor	Classification	Classification Code	Type	Severity	Action	Deficiency Cost	
0006-35703	District 2	00400	Martin Luther King Jr. Outpatient Center	MLK - Leroy Weekes Medical Support Building - North	302	2	Health Services	Exterior Utility Doors	B2050.20	Rusted	Low	Repair	\$ 1,878.72	
0006-35707	District 2	00400	Martin Luther King Jr. Outpatient Center	MLK - Leroy Weekes Medical Support Building - North	304	6	Health Services	Low-Slope Roofing Cover	B3010.50	Peeling	Medium	Minor repair	\$ 272.55	
0006-35710	District 2	00400	Martin Luther King Jr. Outpatient Center	MLK - Leroy Weekes Medical Support Building - North	101	600	Health Services	Plaster and Gypsum Board	A2010.20	Peeling	Low	Minor repair	\$ 5,636.17	
0006-35712	District 2	00400	Martin Luther King Jr. Outpatient Center	MLK - Leroy Weekes Medical Support Building - North	102	2	Health Services	Cash-In-Place Concrete	A1010.10	Cracked	Low	Minor repair	\$ 783.24	
0006-35724	District 2	00400	Martin Luther King Jr. Outpatient Center	MLK - Leroy Weekes Medical Support Building - North	151	36	Health Services	Plaster and Gypsum Board	A2010.20	Peeling	Low	Minor repair	\$ 783.24	
0006-35877	District 2	00400	Martin Luther King Jr. Outpatient Center	MLK - Leroy Weekes Medical Support Building - North	302	1	Health Services	Compressed-Air Equipment	D2060.10	Inoperable	Low	Remove	\$ 521.87	
0006-35954	District 2	00400	Martin Luther King Jr. Outpatient Center	MLK - Leroy Weekes Medical Support Building - North	153	3	Health Services	Cash-In-Place Concrete	A1010.20	Missing	Medium	Minor repair	\$ 792.24	
0007-48167	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	103	54	Health Services	Resilient Flooring	C2030.50	Broken	Low	Replace	\$ 1,071.08	
0007-48168	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	103	1	Health Services	Air Outlets and Inlets	D3030.50	Rusted	Low	Replace	\$ 407.08	
0007-48170	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	301	2	Health Services	Meat Slat Treads and Nosing	B1080.10	Rusted	Low	Minor repair	\$ 1,189.86	
0007-48173	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	102A	1	Health Services	Interior Parking Gates	E1010.30	Missing	Low	Replace	\$ 8,809.13	
0007-48175	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	102A	1	Health Services	Interior Parking Gates	E1010.30	Missing	Low	Replace	\$ 8,809.13	
0007-48176	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	EXT-N	1	Health Services	Door Hardware	B2050.90	Inoperable	Medium	Reinstall	\$ 730.62	
0007-48177	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	403	1000	Health Services	Cash-In-Place Concrete	A1010.10	Efflorescence	Low	Minor repair	\$ 2,609.34	
0007-48183	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	104	1	Health Services	Exit Signs	D0400.50	Inoperable	Medium	Replace	\$ 730.62	
0007-48184	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	502	8	Health Services	Parking Bumpers	G2020.40	Broken	Low	Replace	\$ 1,920.47	
0007-48185	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	403	8	Health Services	Exit Signs	D0400.50	Missing	Medium	Replace	\$ 939.36	
0007-48186	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	801	1000	Health Services	Cash-In-Place Concrete	A1010.10	Efflorescence	Low	Minor repair	\$ 2,609.34	
0007-48187	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	801	1	Health Services	Interior Parking Gates	E1010.30	Missing	Low	Replace	\$ 8,809.13	
0007-48188	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	401	1	Health Services	Meat Slat Treads	B1080.50	Rusted	Low	Replace	\$ 229.62	
0007-48192	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	106	1	Health Services	Interior Parking Fee Collection Equipment	E1010.30	Deteriorated	Low	Minor repair	\$ 991.55	
0007-48193	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	504	2	Health Services	Meat Slat Treads	B1080.50	Rusted	Low	Minor repair	\$ 521.87	
0007-48194	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	404	7500	Health Services	Cash-In-Place Concrete	A1010.10	Efflorescence	Low	Minor repair	\$ 17,221.84	
0007-48207	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	302	200	Health Services	Post-Tensioned CIP RC Slab and Anchors	B1015.10	Cracking (pattern)	High	Major repair	\$ 6,262.41	
0007-48208	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	502	200	Health Services	CIP RC Column Supporting a Beam	B1015.50	Deteriorated	Medium	Routine Maintenance	\$ 939.36	
0007-48209	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	302	200	Health Services	CIP RC Shear Walls	B1015.70	Cracking (pattern)	High	Follow-up study (Structure)	\$ 9,392.62	
0007-48210	District 2	00400	Martin Luther King Jr. Outpatient Center	Parking Structure (Martin Luther King/Drew Medical Center)	503	150	Health Services	Post-Tensioned CIP RC Slab and Anchors	B1015.10	Cracking (shrinkage)	Medium	Minor repair	\$ 4,696.81	
00392-60757	District 5	40061	RM02 - RD524	Guard Shack	0039-2	01	Probation	Fabricated Wall Panel Assemblies	B2010.30	Worn	Low	Repair	\$ 1,300.49	
00392-60759	District 5	40061	RM02 - RD524	Guard Shack	0039-2	01	Probation	Exterior Single-Panel Doors	B2050.30	Broken	Low	Minor repair	\$ 219.18	
00392-60762	District 5	40061	RM02 - RD524	Guard Shack	0039-2	01	Probation	Exterior Fixed Windows	B2020.20	Worn	Low	Replace	\$ 334.00	
00392-60764	District 5	40061	RM02 - RD524	Guard Shack	0039-2	01	Probation	Reception Counters	E2010.30	Deteriorated	Low	Minor repair	\$ 425.84	
00392-60767	District 5	40061	RM02 - RD524	Guard Shack	0039-2	01	Probation	Interior Fabrications	C2020	Worn	Low	Minor repair	\$ 443.59	
00392-60768	District 5	40061	RM02 - RD524	Guard Shack	0039-2	Ext N	1	Probation	Downspouts	B3020.70	Deteriorated	Low	Replace	\$ 448.81
00392-60770	District 5	40061	RM02 - RD524	Guard Shack	0039-2	01	Probation	Plaster and Gypsum Board	A2010.20	Peeling	Low	Repair	\$ 701.39	
00392-60772	District 5	40061	RM02 - RD524	Guard Shack	0039-2	01	Probation	Gravel Steps and Fences	B3010.90	Peeling	Low	Repair	\$ 180.36	
00392-60785	District 5	40061	RM02 - RD524	Guard Shack	0039-2	01	Probation	Panelboards	D0500.30	Missing	Medium	Replace	\$ 1,040.70	
00394-60758	District 5	40061	RM02 - RD524	Storage	0039-4	01	Animal Care & Control	Wood Flooring	C2030.45	Deteriorated	Low	Replace	\$ 2,989.26	
00394-60761	District 5	40061	RM02 - RD524	Storage	0039-4	01	Animal Care & Control	Coating Painting and Coating	C2090.70	Rusted	Low	Repair	\$ 801.59	
00394-60763	District 5	40061	RM02 - RD524	Storage	0039-4	01	Animal Care & Control	Wall Painting and Coating	C2010.70	Dirty	Low	Repair	\$ 1,879.72	
00394-60766	District 5	40061	RM02 - RD524	Storage	Ext N	1200	Animal Care & Control	Fabricated Wall Panel Assemblies	B2010.30	Rusted	Low	Repair	\$ 3,005.96	
00394-60769	District 5	40061	RM02 - RD524	Storage	0039-4	01	Animal Care & Control	Exterior Ceiling Doors	B2050.30	Stuck	Low	Replace	\$ 8,809.13	
00394-60771	District 5	40061	RM02 - RD524	Storage	0039-4	01	Animal Care & Control	Exterior Ceiling Doors	B2050.30	Broken	Low	Replace	\$ 7,765.39	
00394-60773	District 5	40061	RM02 - RD524	Storage	0039-4	02	Animal Care & Control	Ceiling Painting and Coating	C2090.70	Rusted	Low	Repair	\$ 801.59	
00394-60809	District 5	40061	RM02 - RD524	Storage	0039-4	02	Animal Care & Control	Wood Flooring	C2030.45	Deteriorated	Medium	Replace	\$ 3,135.38	
00394-60810	District 5	40061	RM02 - RD524	Storage	0039-4	02	Animal Care & Control	Wall Painting and Coating	C2010.70	Dirty	Low	Repair	\$ 1,879.72	
00394-60812	District 5	40061	RM02 - RD524	Storage	0039-4	21	Animal Care & Control	Structural Panels	B1020.20	Rusted	High	Minor repair	\$ 751.49	
00394-60819	District 5	40061	RM02 - RD524	Storage	0039-4	02	Animal Care & Control	Interior Central Station Air-Handling Units	C3050.50	Not Present	High	Install	\$ 43,330.91	
00394-60820	District 5	40061	RM02 - RD524	Storage	0039-4	Ext S	20	Animal Care & Control	Roadway Cuts and Gutters	G2010.20	Broken	Medium	Resource	\$ 542.74
00394-60822	District 5	40061	RM02 - RD524	Storage	0039-4	Ext S	1	Animal Care & Control	Electrical Metal Supports	D0500.90	Dangerous	High	Remove	\$ 41.75
0101-18108	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C1004	1	Chief Executive Office	Exit Signs	D0400.50	Inoperable	Medium	Replace	\$ 834.99	
0101-18112	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	104	200	Chief Executive Office	Concrete Slab-on-Grade	B1015.30	Cracking (pattern)	Medium	Resource	\$ 834.99	
0101-18115	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	203	300	Chief Executive Office	Concrete Slab-on-Grade	B1015.30	Cracking (pattern)	Medium	Resource	\$ 1,252.48	
0101-18117	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C1000	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18121	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C1009	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18143	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	1005	25	Chief Executive Office	CIP RC Column Supporting a Beam	B1015.50	Cracking (pattern)	High	Major repair	\$ 3,026.83	
0101-18146	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	1003	2	Chief Executive Office	Facet Panels	B2010.10	Missing	Medium	Minor repair	\$ 1,252.48	
0101-18183	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	805	4	Chief Executive Office	Interior Lighting	D0400.50	Inoperable	Medium	Replace	\$ 2,922.46	
0101-18184	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C910	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18186	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	902	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18188	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C809	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18191	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C801	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18192	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C710	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18194	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	705	5	Chief Executive Office	Interior Lighting	D0400.50	Inoperable	Medium	Replace	\$ 3,650.08	
0101-18196	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C612	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18197	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	E509	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18216	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	603	5	Chief Executive Office	Fences and Gates Performance Require	D2060.20	Dangerous	Low	Minor repair	\$ 5,218.68	
0101-18217	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	603	1	Chief Executive Office	Parking Lot Pavement Markings	B1015.30	Leaking	Low	Repair	\$ 626.24	
0101-18277	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	606	1	Chief Executive Office	Parking Lot Traffic Signage	G2020.40	Broken	Medium	Replace	\$ 1,565.60	
0101-18278	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	611	6	Chief Executive Office	Parking Lot Traffic Signage	G2020.40	Missing	Low	Repair	\$ 1,313.21	
0101-18279	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	614	2	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 417.49	
0101-18283	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C510	10	Chief Executive Office	Meters and Gauges	D0101.10	Unsecured	Low	Install	\$ 5,218.68	
0101-18286	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	E101	100	Chief Executive Office	Concrete Slab-on-Grade	B1015.30	Cracking (pattern)	Medium	Resource	\$ 1,415.49	
0101-18301	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	611	1	Chief Executive Office	Hydraulic Pumps	D3050.10	Leaking	Low	Minor repair	\$ 1,043.74	
0101-18321	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	E609	1	Chief Executive Office	Wiring Devices	D0500.50	Noncompliant	Low	Replace	\$ 208.75	
0101-18322	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	E101	3	Chief Executive Office	Concrete Passenger Elevators	B1015.30	Noncompliant	Low	Replace	\$ 315.12	
0101-18325	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C809	20	Chief Executive Office	Joint Sealants	B2010.90	Loose	Low	Install	\$ 834.99	
0101-18327	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	C710	1	Chief Executive Office	Meat Slat Treads	B1080.10	Chipped	Low	Minor repair	\$ 2,087.47	
0101-18335	District 1	10742	Hall of Justice	0101-1 Hall of Justice - Parking Structure	QD-115	2	Chief Executive Office	Joint Sealants	B2010.90	Cracking (shrinkage)	Medium	Replace	\$ 417.49	

Figure 2.2: Deficiencies Report Download from the SAMS Database, Processed to add Proprietor and Classification Code Fields

ID	District	Site BIS	Site Name	Building / Building Name	Room	Quantity	Classification	Type	Severity	Action	Deficiency Cost
0006-35703	District 2	00400	Marlin Luther King Jr. Outpatient Center	0006 MLK - Leroy Weekes Medical Support Building - North	302	2	Exterior Utility Doors	Rusted	Low	Repair	\$ 1,878.72
0006-35707	District 2	00400	Marlin Luther King Jr. Outpatient Center	0006 MLK - Leroy Weekes Medical Support Building - North	304	6	Low-Slope Roofing Cover	Peeling	Medium	Minor repair	\$ 275.55
0006-35710	District 2	00400	Marlin Luther King Jr. Outpatient Center	0006 MLK - Leroy Weekes Medical Support Building - North	101	600	Plaster and Gypsum Board	Peeling	Low	Minor repair	\$ 5,636.17
0006-35712	District 2	00400	Marlin Luther King Jr. Outpatient Center	0006 MLK - Leroy Weekes Medical Support Building - North	102	2	Cast-In-Place Concrete	Cracked	Low	Minor repair	\$ 793.24
0006-35734	District 2	00400	Marlin Luther King Jr. Outpatient Center	0006 MLK - Leroy Weekes Medical Support Building - North	151	36	Plaster and Gypsum Board	Bubbling	Low	Minor repair	\$ 793.24
0006-35877	District 2	00400	Marlin Luther King Jr. Outpatient Center	0006 MLK - Leroy Weekes Medical Support Building - North	302	1	Compressed-Air Equipment	Inoperable	Low	Remove	\$ 521.87
0006-35954	District 2	00400	Marlin Luther King Jr. Outpatient Center	0006 MLK - Leroy Weekes Medical Support Building - North	153	3	Cast-In-Place Concrete	Missing	Medium	Minor repair	\$ 793.24
0007-48167	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	103	54	Resilient Flooring	Cracked	Low	Replace	\$ 1,071.08
0007-48168	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	103	1	Air Outlets and Inlets	Rusted	Low	Replace	\$ 407.06
0007-48170	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	301	2	Metal Stair Treads and Nosings	Rusted	Low	Minor repair	\$ 1,189.86
0007-48172	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	401	1	Tree and Shrub Removal and Thinning	Blocked	Low	Routine Maintenance	\$ 1,148.11
0007-48173	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	102A	1	Interior Parking Gates	Missing	Low	Replace	\$ 8,809.13
0007-48175	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	102A	1	Interior Parking Gates	Missing	Low	Replace	\$ 8,809.13
0007-48176	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	EXT-N	1	Door Hardware	Inoperable	Medium	Reinstall	\$ 730.62
0007-48177	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	403	1000	Cast-In-Place Concrete	Efflorescence	Low	Minor repair	\$ 2,609.34
0007-48183	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	104	1	Exit Signs	Inoperable	Medium	Replace	\$ 730.62
0007-48184	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	502	8	Parking Bumpers	Broken	Low	Replace	\$ 1,920.47
0007-48185	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	403	8	Exit Signs	Missing	Medium	Replace	\$ 939.36
0007-48186	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	B01	1000	Cast-In-Place Concrete	Efflorescence	Low	Minor repair	\$ 2,609.34
0007-48187	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	B01	1	Interior Parking Gates	Missing	Low	Replace	\$ 8,809.13
0007-48189	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	401	1	Metal Railings	Rusted	Low	Repair	\$ 229.62
0007-48192	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	106	1	Interior Parking Fee Collection	EC Deteriorated	Low	Minor repair	\$ 991.55
0007-48193	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	504	2	Metal Railings	Rusted	Low	Minor repair	\$ 521.87
0007-48194	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	404	7500	Cast-In-Place Concrete	Efflorescence	Low	Minor repair	\$ 17,221.64
0007-48207	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	302	200	Post-Tensioned CIP RC Slab & A Cracking (pattern)	High	Major repair	\$ 6,262.41	
0007-48208	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	502	20	CIP RC Column Supporting a Be	Deteriorated	Medium	Routine Maintenance	\$ 939.36
0007-48209	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	403	200	CIP RC Shear Walls	Cracking (pattern)	High	Follow-up study (Structur	\$ 9,363.62
0007-48210	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007 Parking Structure (Marlin Luther King/Drew Medical Center)	D01	150	Post-Tensioned CIP RC Slab & A Cracking (shrinkage)	Medium	Minor repair	\$ 4,956.81	
0007-53164	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	P1	13	Metal Bolts	Peeling	Low	Repair	\$ -
0007-53165	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	Q3	60	Parking Lot Curb	Broken	Medium	Minor repair	\$ -
0007-53166	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	R5	20	Chain Link Fences and Gates	Broken	Medium	Minor repair	\$ -
0007-53167	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	P6	10	Parking Lot Curb	Cracked	Low	Minor repair	\$ -
0007-53168	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	L5	100	Parking Lot Curb	Worn	Low	Resurface	\$ -
0007-53176	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	F4	5	Parking Lot Lighting	Rusted	Medium	Repair	\$ -
0007-53177	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	D01	150	Parking Lot Pavement Markings	Worn	Low	Repair	\$ -
0007-53178	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	B5	4	Parking Bumpers	Broken	Low	Replace	\$ -
0007-53181	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	B5	3	Exterior Signage	Rusted	Low	Repair	\$ -
0007-53182	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	D01	150	Roadway Curb and Gutters	Cracked	Medium	Minor repair	\$ -
0007-53185	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-B MLK - Parking Lot B	D5	5	Rigid Pedestrian Pavement	Cracked	Low	Minor repair	\$ -
0007-53121	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-D MLK - Parking Lot D	D8	20	Parking Lot Curb	Cracked	Low	Minor repair	\$ -
0007-53123	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-D MLK - Parking Lot D	D7	500	Parking Lot Curb	Worn	Low	Repair	\$ -
0007-53130	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-D MLK - Parking Lot D	P7	40	Parking Lot Pavement Markings	Worn	Low	Repair	\$ -
0007-53138	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-D MLK - Parking Lot D	P7	1	Parking Bumpers	Cracked	Low	Minor repair	\$ -
0007-52965	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-E MLK - Parking Lot E	L6	4	Parking Lot Curb	Cracked	Low	Minor repair	\$ -
0007-52966	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-E MLK - Parking Lot E	H1	1600	Parking Lot Curb	Worn	Low	Repair	\$ -
0007-52967	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-E MLK - Parking Lot E	H1	10	Parking Lot Curb	Cracked	Low	Minor repair	\$ -
0007-52968	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-E MLK - Parking Lot E	D8	15	Parking Bumpers	Cracked	Low	Minor repair	\$ -
0007-52969	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-E MLK - Parking Lot E	G2	10	Parking Lot Pavement Markings	Worn	Low	Repair	\$ -
0007-53102	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-E MLK - Parking Lot E	G2	900	Decorative Metal Fences and Gates	Rusted	Low	Repair	\$ -
0007-52940	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-F MLK - Parking Lot F	J4	900	Parking Lot Curb	Worn	Low	Repair	\$ -
0007-52942	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-F MLK - Parking Lot F	J4	10	Parking Lot Gutters	Cracked	Low	Minor repair	\$ -
0007-52945	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-F MLK - Parking Lot F	J4	10	Parking Lot Gutters	Cracked	Low	Minor repair	\$ -
0007-52954	District 2	00400	Marlin Luther King Jr. Outpatient Center	0007-F MLK - Parking Lot F	A3	600	Decorative Metal Fences and Gates	Rusted	Low	Repair	\$ -
0008-60638	District 5	00061	RM02 - RD524	0008 Office	05	550	Composite Paneling	Uneven	Low	Replace	\$ 19,288.24
0008-60641	District 5	00061	RM02 - RD524	0008 Office	Ext-N	1	Switchgear and Switchboards	Missing	High	Install	\$ 167.00
0008-60642	District 5	00061	RM02 - RD524	0008 Office	01	1	Plaster and Gypsum Board	Punctured	Low	Minor repair	\$ 323.56
0008-60643	District 5	00061	RM02 - RD524	0008 Office	01	1	Plaster and Gypsum Board	Punctured	Low	Minor repair	\$ 323.56
0008-60644	District 5	00061	RM02 - RD524	0008 Office	21	800	Roofing Shingles and Shakes	Beyond Useful Life	Medium	Replace	\$ 11,856.84
0008-60648	District 5	00061	RM02 - RD524	0008 Office	Ext-N	1	Panelboards	Missing	High	Install	\$ 125.25
0008-60649	District 5	00061	RM02 - RD524	0008 Office	Ext-N	150	Siding	Deteriorated	Low	Replace	\$ 3,089.90
0008-60652	District 5	00061	RM02 - RD524	0008 Office	04	1	Interior Swinging Doors	Broken	Low	Minor repair	\$ 772.36
0008-60653	District 5	00061	RM02 - RD524	0008 Office	Ext-E	10	Siding	Broken	Medium	Repair	\$ 167.00
0008-60654	District 5	00061	RM02 - RD524	0008 Office	04	5	Tile Wall Finish	Punctured	Low	Replace	\$ 688.87
0008-60655	District 5	00061	RM02 - RD524	0008 Office	Ext-S	15	Joint Sealant	Missing	Medium	Reinstall	\$ 313.12
0008-60657	District 5	00061	RM02 - RD524	0008 Office	Ext-N	2	Wire Devices	Dangerous	High	Install	\$ 83.50
0008-60658	District 5	00061	RM02 - RD524	0008 Office	Ext-N	1	Fuel-Fired Domestic Water Heater	Missing	Medium	Install	\$ 366.62
0008-60659	District 5	00061	RM02 - RD524	0008 Office	21	2	Downspouts	Broken	Medium	Minor repair	\$ 334.00
0008-60660	District 5	00061	RM02 - RD524	0008 Office	21	200	Outlets	Dirty	Low	Clean	\$ 417.49
0008-60661	District 5	00061	RM02 - RD524	0008 Office	Ext-N	1	Exterior Utility Doors	Chipped	Low	Minor repair	\$ 626.24
0008-60662	District 5	00061	RM02 - RD524	0008 Office	Ext-N	1	Wiring Devices	Noncompliant	High	Reinstall	\$ 271.37
0008-60663	District 5	00061	RM02 - RD524	0008 Office	Ext-N	2	Finish Grading	Eroded	High	Resurface	\$ 146.12

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SAMS Deficiency Module Download 2019-09-10

Figure 2.3: All Buildings Report Download from the SAMS Database

Site BIS	Site Name	Building LACO	Building Name	District	Proprietor	Gross Square Feet	Building Use	Building Consequence	Disposition	FCI	PRV	Year Built
00387	El Monte Comprehensive	3808	Parking Lot (DHS-El Monte Com Health C	1	Health Services	63474	5210 Surface parking, open	1	1	711752		1983
00380	Harbor-UCLA Medical	C-2063-3	Harbor-N-14 Storage Structure	2	Health Services	365	2710 Mini-warehouse	1	1	215553		1943
00330	JAC-USC Medical	3689-1	Medical Center - Parking Lot 6A Shed	1	Health Services	790	6440 Electric substation and distribut	2	Active	862800		1965
08171	Enterprise Park	3028	Enterprise Service Building	2	Parks and Recreation	1055	2810 Light industrial structures and fa	2	Active	508102		1957
01100	Mira Loma Detention	4168	BOQ Pool Restrooms	5	Sherrif	1024	1600 Jails, penitentiaries, detention c	3	Unoccupied	967196		1970
01290	Oliver View Medical Center	6269-2	Oliver View-General Maintenance Storage S	5	Health Services	127	2700 Warehouse or storage facility	1	Active	116951		1964
08762	Topanga Beach	X095-W	Topanga Beach - Parking Lot West (unpave)	3	Beaches & Harbors	32900	5210 Surface parking, open	1	Active	123795		1970
08336	Reginald Park	Typ 1-52	BRP Shade Structure - Type 3	5	Parks and Recreation	301	2700 Shade structure	1	Active	16722		1973
01290	Oliver View Medical Center	2243	Oliver View-Transformer Vault	5	Health Services	72	6440 Electric substation and distribut	2	Closed	108297		1930
0761	Star Center	Y533-25	Star Center Parking Lot 4	4	Sherrif	52786	5210 Surface parking, open	1	Active	560710		1988
07961	Whittier Narrows Regional	42746	Whittier Narrows Parks Bureau Police Statio	1	Parks and Recreation	89	2100 Office building	3	Active	108378		1939
08880	Santa Fe Dam Recreation	P005-44	SFD - Maintenance Storage Building 2	1	Parks and Recreation	160	2710 Mini-warehouse	3	Active	35173.4		1970
08880	Santa Fe Dam Recreation	P005-45	SFD - Maintenance Storage Building 3	1	Parks and Recreation	240	2710 Mini-warehouse	1	Active	58313.7		1970
01290	Oliver View Medical Center	6182-4	Oliver View Medical Center Fitness Center	5	Health Services	208	5200 Indoor games facility	3	Unoccupied	1987240		1977
01290	Oliver View Medical Center	6182-4	Oliver View-Metal/Mechanical Shop	5	Health Services	226	2710 Mini-warehouse	1	Unoccupied	143331		1970
11070	Carrie Test	3007-C	Test - Parking Lot C	2	Health Services	10627	5210 Surface parking, open	1	Active	13568.8		1970
01001	Action Rehabilitation Center	2915-2	Action Rehab - 2915-2	5	Public Health	480	2710 Mini-warehouse	1	Unoccupied	275023		1938
00380	Harbor-UCLA Medical	C-2103	Harbor-Rel Psychiatry F-5.5	2	Health Services	1526	2111 Manufactured Office	2	Closed	389178		1970
00320	JAC-USC Medical	3506-3	JAC - USC Parking Lot 5W	1	Health Services	31839	5210 Surface parking, open	1	Active	447408		1958
00320	JAC-USC Medical	3506-3	JAC - USC Parking Lot 5W	1	Health Services	3041	5210 Surface parking, open	1	Active	783715		1950
00320	JAC-USC Medical	3506-3	JAC - USC Parking Lot 4A	1	Health Services	22593	5210 Surface parking, open	1	Active	394390		1978
00320	JAC-USC Medical	4833-2	JAC - USC Parking Lot 4A	1	Health Services	59362	5210 Surface parking, open	1	Active	1856530		1950
10748	Clayton Hudson Center	4173-1	Clayton Hudson Comp Health Center Park	1	Health Services	5661	5210 Surface parking, open	1	Active	1086130		1970
01001	Mira Loma Detention	4165	Mira Loma Kitchen and Mess Hall	5	Sherrif	43900	2220 Restaurant building	2	Unoccupied	27742500		1962
06456	NHM Warehouse	Y399	NHM Warehouse	1	Natural History Museum	36776	2700 Warehouse or storage facility	1	Active	1803210		1933
01290	Oliver View Medical Center	2222-1	Oliver View-Bungalow / Storage	5	Health Services	130	2710 Mini-warehouse	1	Active	102496		1970
01290	Oliver View Medical Center	2242	Oliver View-Film Storage Vault	5	Health Services	280	2700 Warehouse or storage facility	1	Unoccupied	189992		1967
01001	Mira Loma Detention	4162	Mira Loma Outdate Maintenance & Storage	5	Sherrif	500	2100 Office building	3	Unoccupied	64245		1940
01001	Mira Loma Detention	4161	BOQ Pool Restrooms	5	Probation	500	600 Public Restrooms	1	Rehabilitated	195033		1937
01001	Mira Loma Detention	4162-2	BOQ Pool Shed	5	Sherrif	200	6310 Storage or pumping station faci	2	Unoccupied	87379.8		1950
01001	Mira Loma Detention	4162-3	BOQ Pool Shade Structure	5	Probation	800	3700 Shade structure	1	Unoccupied	8366.2		1950
00320	JAC-USC Medical	3535-1	Medical Center - Electrical Vault #3	1	Health Services	150	6440 Electric substation and distribut	2	Active	24523		1970
00320	JAC-USC Medical	3535	Medical Center-General Hospital (Former H	1	Health Services	1424000	4110 Hospital building	5	Active	143847000		1932
01001	Mira Loma Detention	4162-3	Vocational Courtyard	6	Probation	600	6310 Storage or pumping station faci	2	Active	132298		1945
01001	Mira Loma Detention	4161-1	BOQ Oven Structure	5	Probation	50	3700 Shade structure	2	Unoccupied	3742.6		1940
01001	Mira Loma Detention	4162-3-1	Bungalow Storage Shed	5	Probation	200	2700 Warehouse or storage facility	1	Unoccupied	116027		1940
00320	JAC-USC Medical	4844-4	Medical Center-Norman's And Children's Ho	1	Health Services	670000	4110 Hospital building	5	Closed	4953300		1950
00320	JAC-USC Medical	4844-3	Medical Center-Incremental And Off	1	Health Services	300	2610 Laboratory or specialized indu	1	Closed	150		1950
00320	JAC-USC Medical	4844-2	Mira Loma - Shade Structure 11	5	Probation	100	3700 Shade structure	1	Unoccupied	4086.2		1940
00320	JAC-USC Medical	4844-1	JAC - USC Loading Dock 2	1	Health Services	10748	5210 Surface parking, open	1	Active	172347		1970
08213	Hart Park	3281-20	Fire Gas Storage	5	Parks and Recreation	120	2700 Warehouse or storage facility	1	Active	129275		1970
08440	Cascata Lake	X230	Comfort Station C	5	Parks and Recreation	331	6930 Public Restrooms	2	Unoccupied	21333		1970
08440	Cascata Lake	X423	Comfort Station D	5	Parks and Recreation	483	6930 Public Restrooms	2	Unoccupied	21852		1970
08440	Mira Loma Detention	3618	Mira Loma - Outdate Maintenance & Storage	5	Sherrif	100	2100 Office building	3	Unoccupied	770320		1940
4061	RMDD - RDS24	0039-6	Material Storage	5	Public Works	1263	8310 Storage or pumping station faci	2	Active	451005		1954
00320	JAC-USC Medical	3627-2	Mira Loma - Old Side Canteen	1	Health Services	160	2700 Warehouse or storage facility	1	Active	8969		1969
01001	Mira Loma Detention	4162-2	Mira Loma - Old Side Canteen	5	Public Works	727	4600 Jails, penitentiaries, detention c	3	Unoccupied	87376		1980
00320	JAC-USC Medical	4844-3	JAC - USC Parking Lot 1	1	Health Services	1191	5210 Surface parking, open	1	Closed	993996		1956
00320	Camp Murr	5884-1	Murr and Mendocino - Site	1	Public Health	132754	6000 Jails, penitentiaries, detention c	1	Closed	10776500		1970
00320	North County Correction	584-24	PDC Facilities Services Bureau Manager	5	Sherrif	322	2100 Office building	3	Closed	341820		1941
04503	LA County Arboretum	an 894	Santa Anita Depot	5	Parks and Recreation	184	4400 Museum, exhibition, or similar fa	3	Active	87788		1990
01001	Clayton Hudson Center	4173-1	Clayton Hudson Comp Health Center Park	1	Health Services	202	5210 Surface parking, open	1	Active	102910		1970
08440	Arcaida Park	0163-3	Arcaida Storage Building	5	Parks and Recreation	29	6440 Electric substation and distribut	2	Active	97924		1978
10748	LA County Arboretum	67-32	LA Cluade Hudson Lot 3	1	Health Services	25179	5210 Surface parking, open	1	Active	966203		1979
01001	Clayton Hudson Center	4173-1	Clayton Hudson Comp Health Center Park	1	Health Services	5	5210 Surface parking, open	1	Active	9372.6		1978
08120	Charter Oak	8233-1	Charter Oak Health Lot 3	5	Parks and Recreation	20	6440 Electric substation and distribut	2	Active	105138		1950
08120	Charter Oak	8233-2	Charter Oak Health Lot 3	5	Parks and Recreation	20	6440 Electric substation and distribut	2	Active	105940		1950
00320	JAC-USC Medical	4769	Medical Center-Radiation Substation Vault	1	Health Services	304	6440 Electric substation and distribut	2	Active	954112		1932
00320	JAC-USC Medical	5099	Medical Center-Laboratory	1	Health Services	2900	2615 Laboratory or specialized indu	4	Unoccupied	959392		1970
04503	LA County Arboretum	an 894	LA County Arne Cottage	5	Parks and Recreation	494	4400 Museum, exhibition, or similar fa	3	Active	941746		1981
00320	JAC-USC Medical	4809	Medical Center-Thrift Shop	1	Health Services	2900	2200 Standalone store or shop buildi	2	Active	996292		1950
01001	Mira Loma Detention	4268-1	Northwest Guard Shack (86)	5	Sherrif	69	6910 Jails	1	Unoccupied	944550		2003
08760	Whittier Golf Course	4268-2	Whittier Golf C - Storage Building	5	Parks and Recreation	9	2710 Mini-warehouse	1	Unoccupied	103697		1987
08580	Whittier Narrows Regional	42535	Whittier Narrows Pumphouse 2	1	Parks and Recreation	150	6310 Storage or pumping station faci	2	Active	938571		1960
08307	Parks & Recreation	4269-1	East Services Agency West	1	Parks and Recreation	1600	2610 Light industrial structures and fa	2	Unoccupied	665758		1950
08307	Franklin D Roosevelt Park	4269-2	Franklin D Roosevelt Park	1	Parks and Recreation	161	6440 Electric substation and distribut	1	Active	948775		1960
00320	JAC-USC Medical	4256-2	JAC - USC Parking Lot 8 MRU/Expense	1	Health Services	1024	5210 Surface parking, open	1	Active	158336		1950
10200	Pasadena Shops	999	Pasadena Mechanical Shop	3	Fire Department	458	5400 Bus or truck maintenance bui	2	Active	928525		1920
01290	Oliver View Medical Center	6182-7	Oliver View Main Hospital-Expenditure	5	Health Services	161	6201 Jails	1	Active	8847.2		1960
04500	LA County Arboretum	an 894	Coach Barn	5	Parks and Recreation	6150	4400 Museum, exhibition, or similar fa	3	Active	927318		1870
02200	Camp Affertag	4395	Camp Affertag/Paige- Electrical Vault	5	Probation	38	6440 Electric substation and distribut	2	Active	923483		1986
00320	JAC-USC Medical	4844	Medical Center-Pharmacy Building	1	Health Services	5800	2700 Warehouse or storage facility	1	Active	58415		1987

Figure 3.1: Potential Opportunities for ISD In-House Crafts, by District

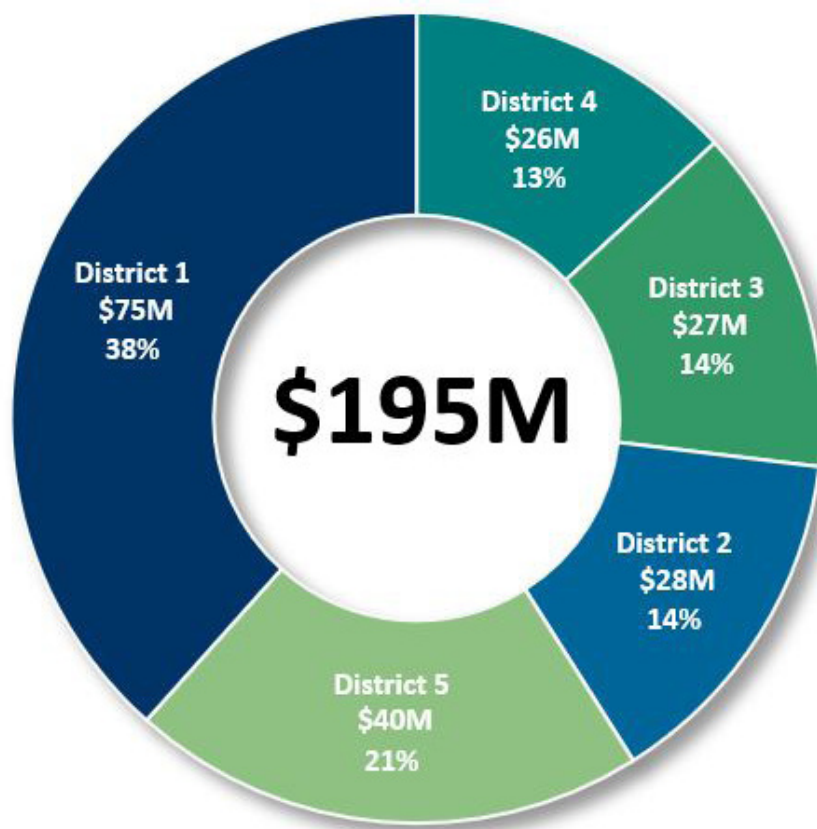


Figure 3.2: County Assets Gross Square Feet, by District

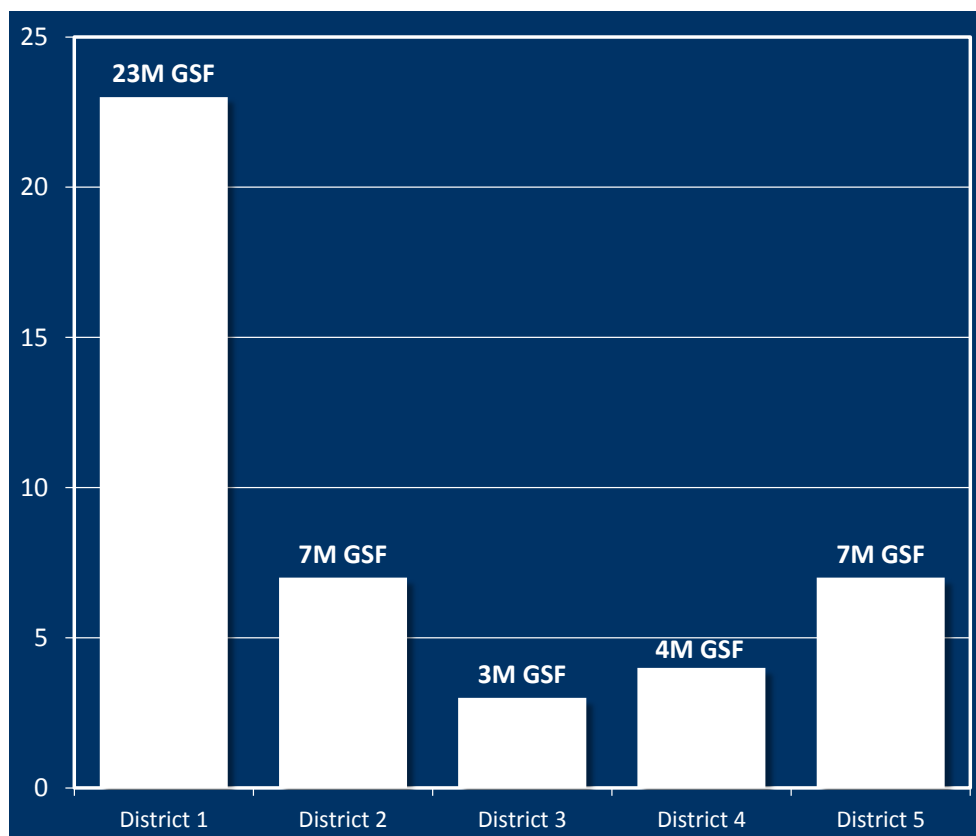


Figure 3.3: Potential Opportunities for ISD In-House Crafts, by Craft

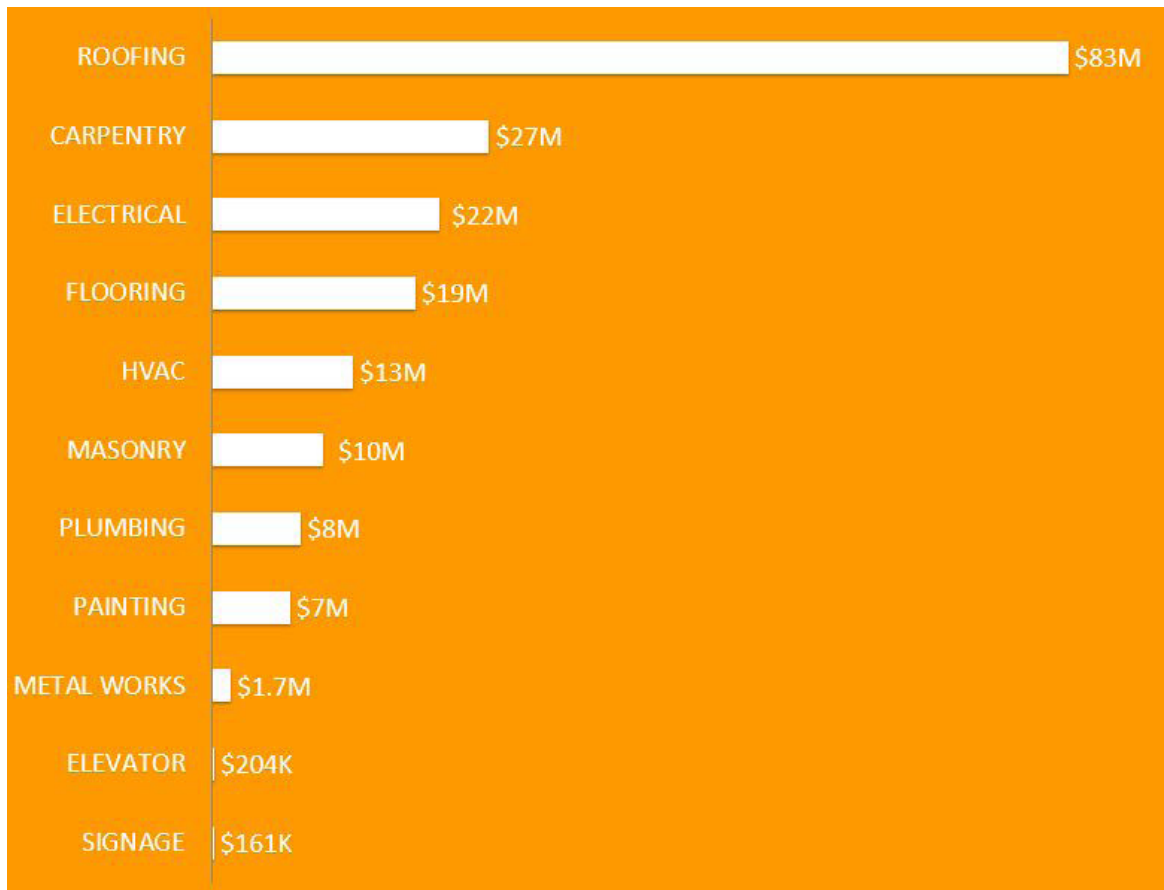


Figure 3.4: Potential Opportunities for ISD In-House Crafts, by District, by Craft

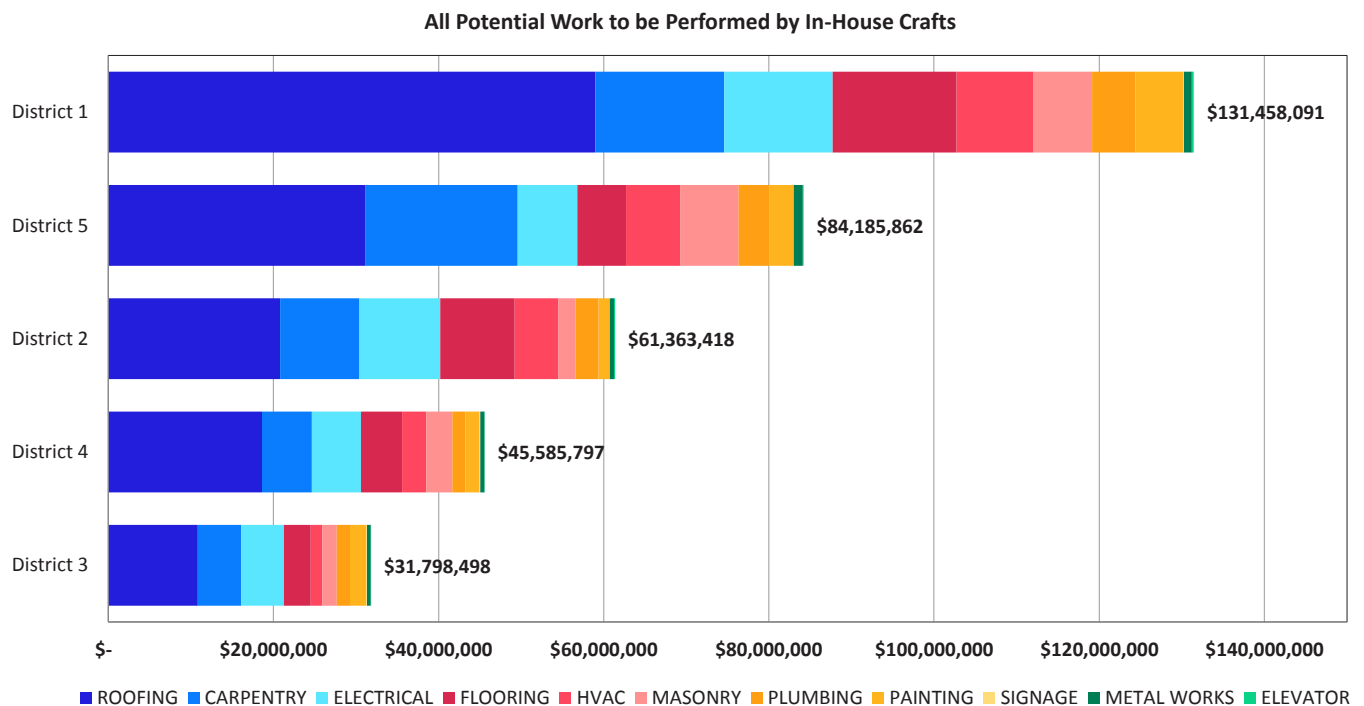


Figure 3.5: Potential Opportunities for ISD In-House Crafts, by Tenant Department

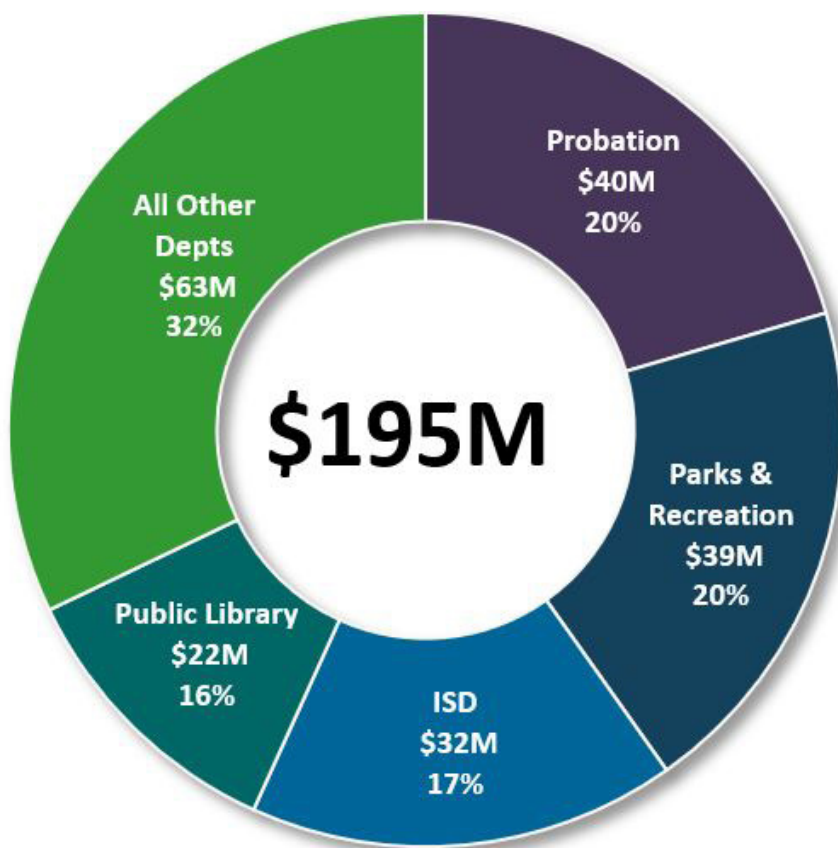


Figure 3.6: County Assets Gross Square Footage (including DHS, LASD, DPW, and DHS), by Tenant Department



Figure 3.7: Potential Opportunities for ISD In-House Crafts, by Tenant Department

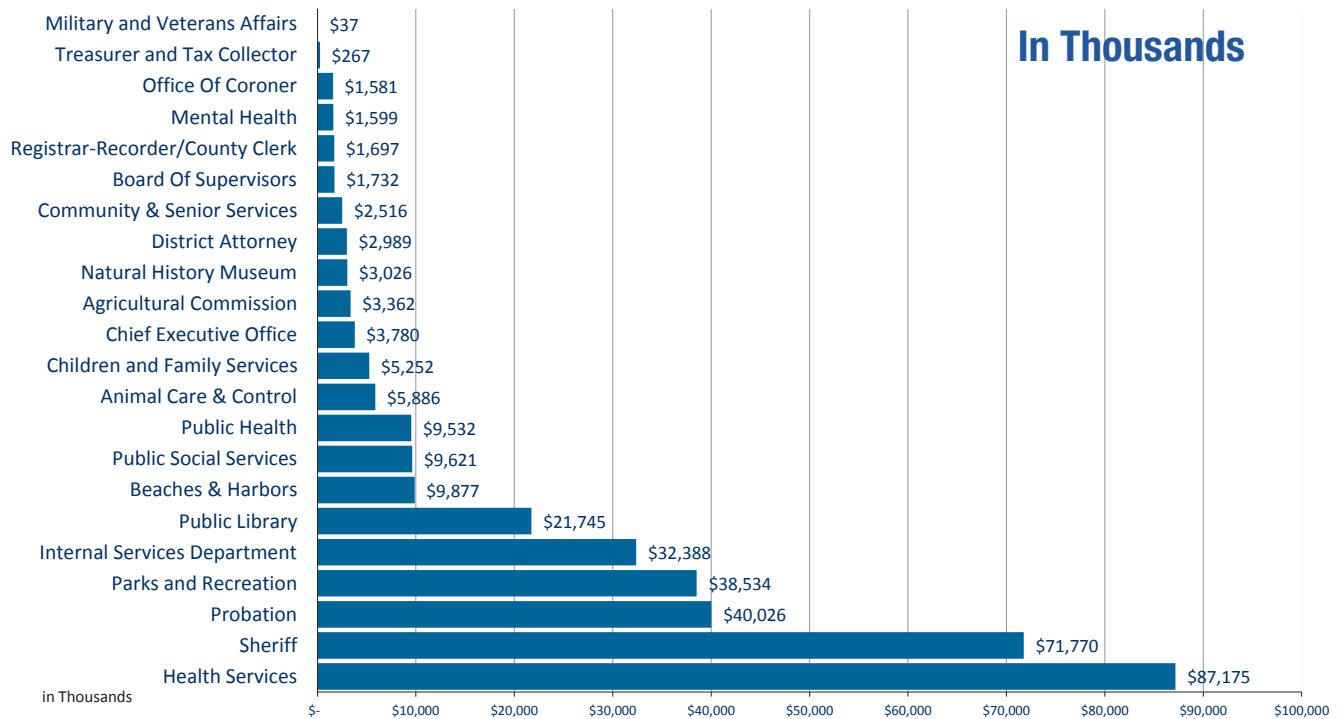


Figure 3.8: Potential ISD Craft Opportunities by Severity Classification, of the \$195M Total

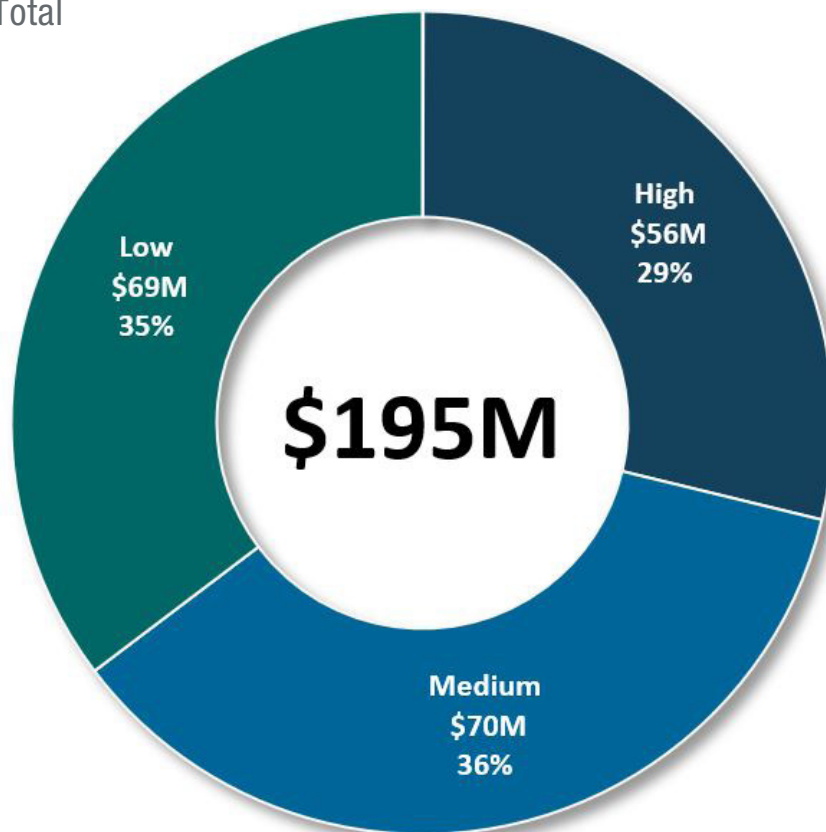


Figure 3.9: Potential Opportunities, by Severity Classification and District

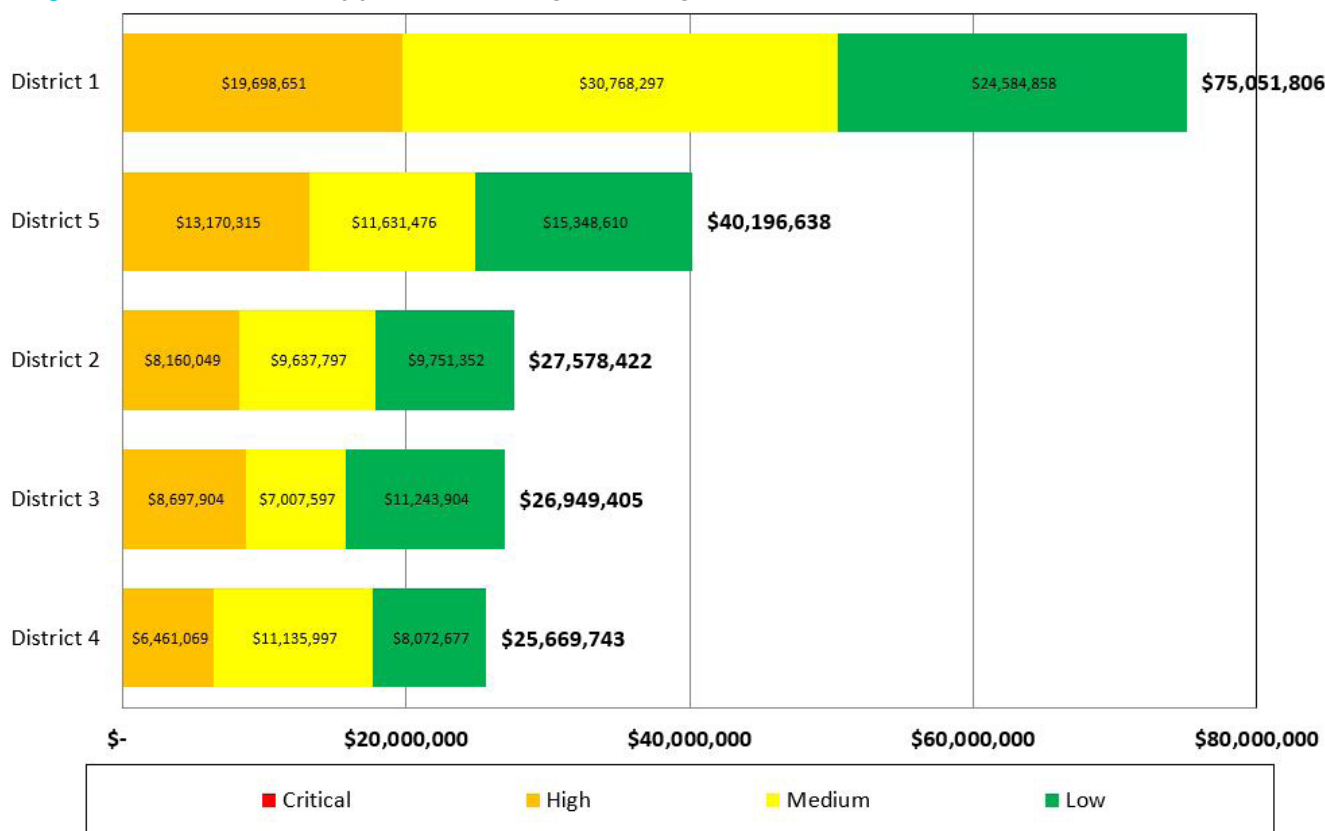


Figure 3.10: Potential Opportunities for Roofing by District

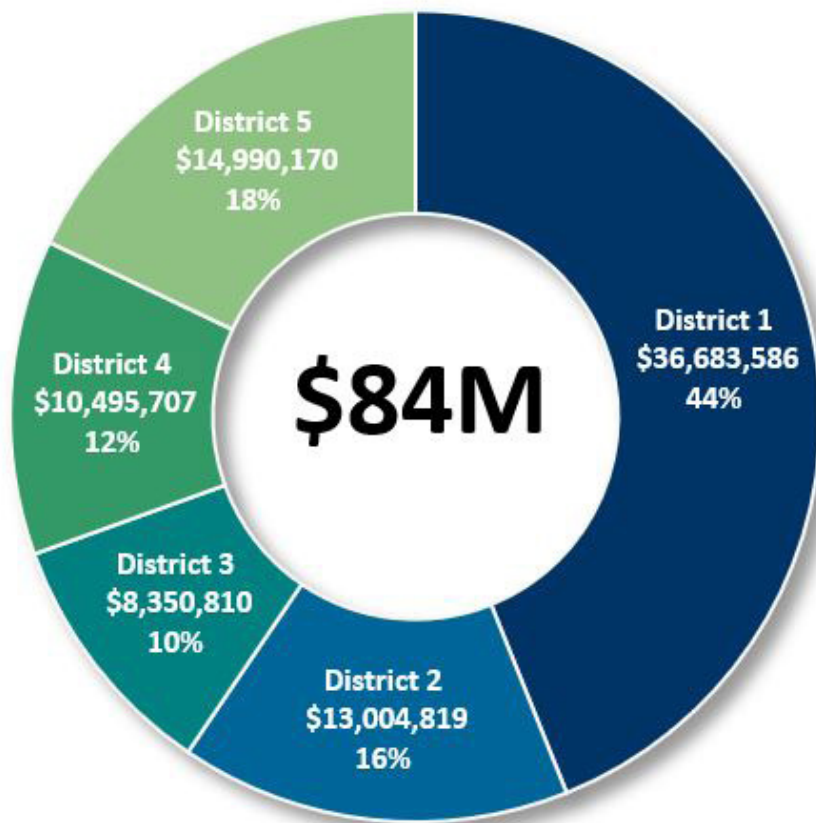


Figure 3.11: Potential Opportunities for Roofing, by Tenant Department

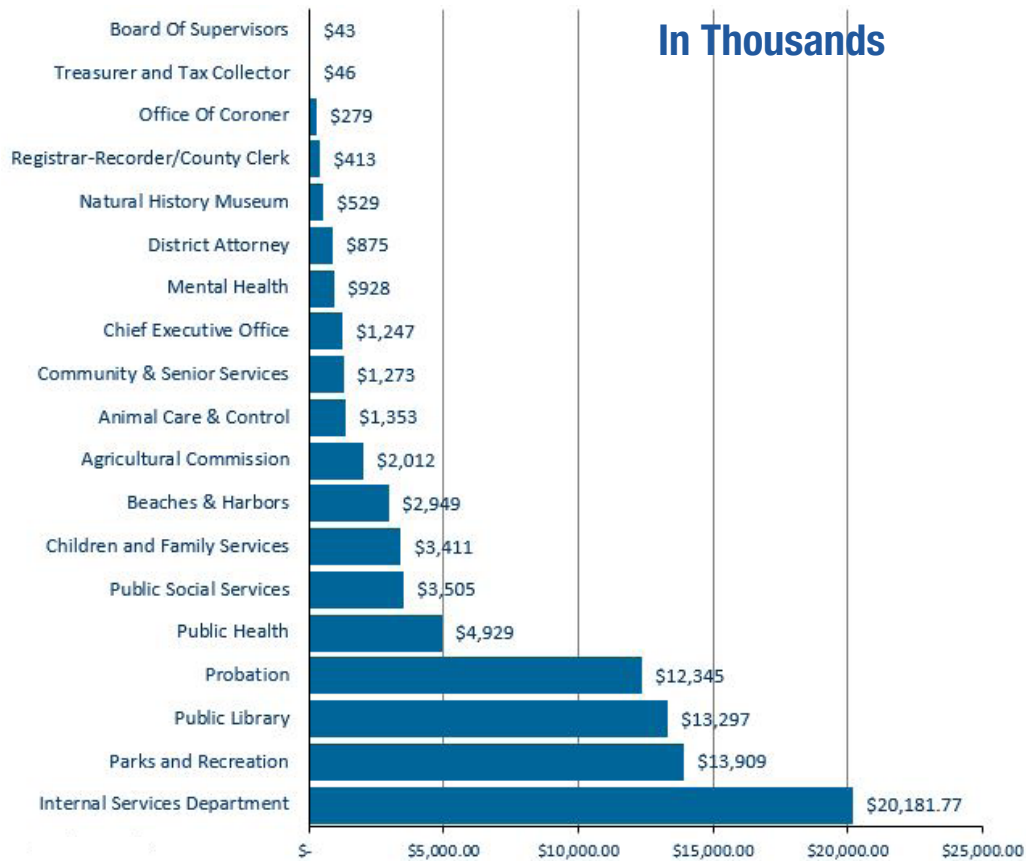


Figure 3.12: Roofing Craft FTE to meet ISD Facilities Craft Program Demand

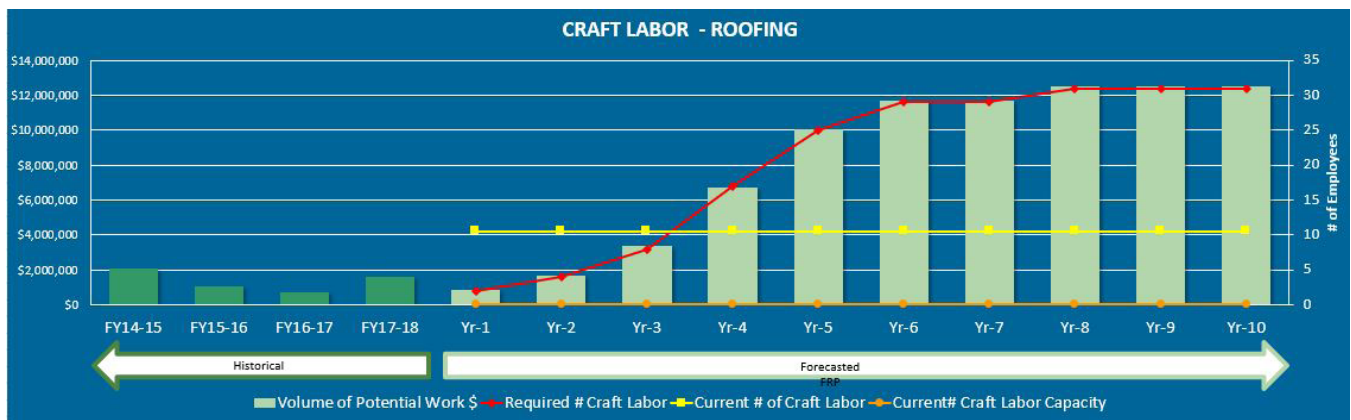


Figure 3.10.1: Potential Opportunities for Roofing by District

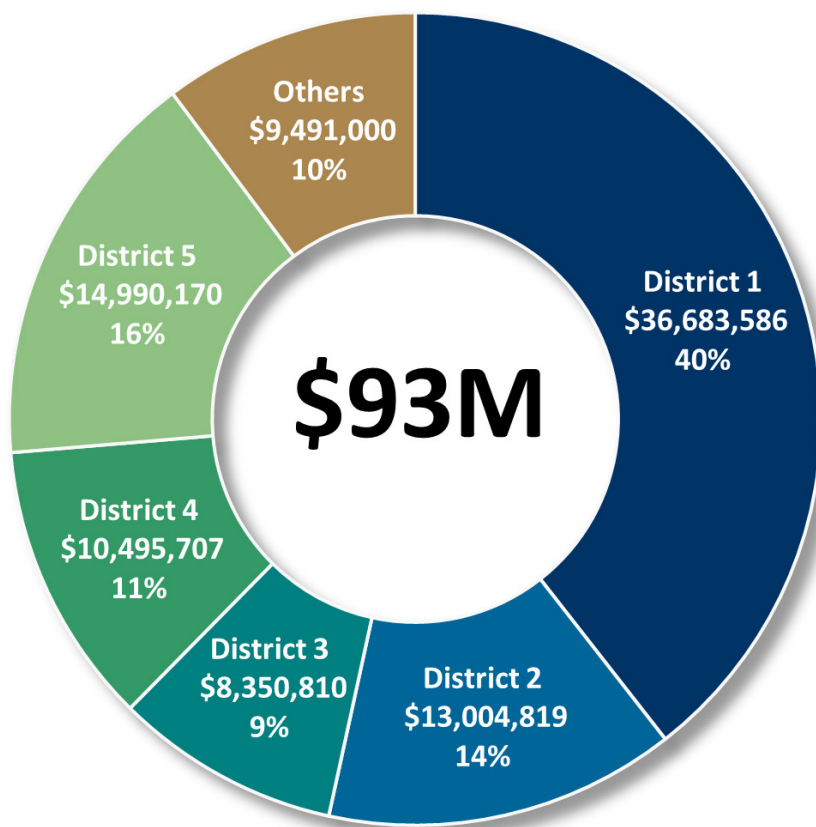


Figure 3.11.1: Potential Opportunities for Roofing, by Tenant Department (inclusive of Cohort 1 & Cohort 2)

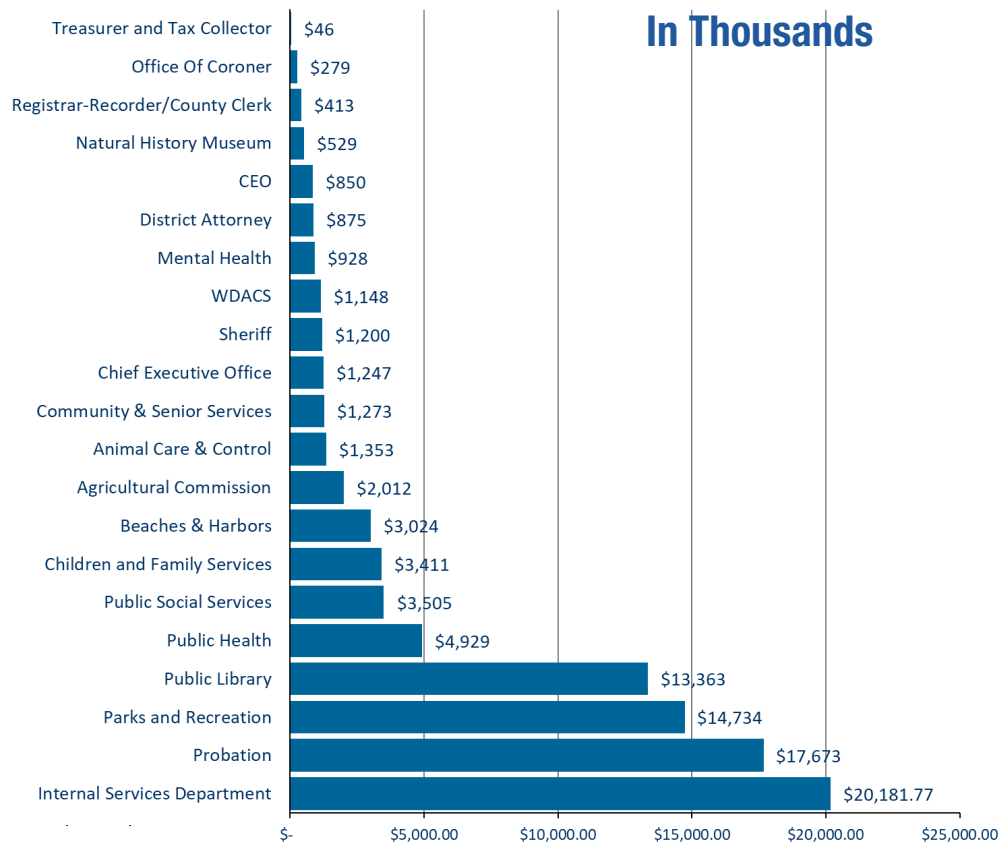


Figure 3.12.1: Roofing Craft FTE to meet ISD Facilities Craft Program Demand (inclusive of Cohort 1 & Cohort 2)

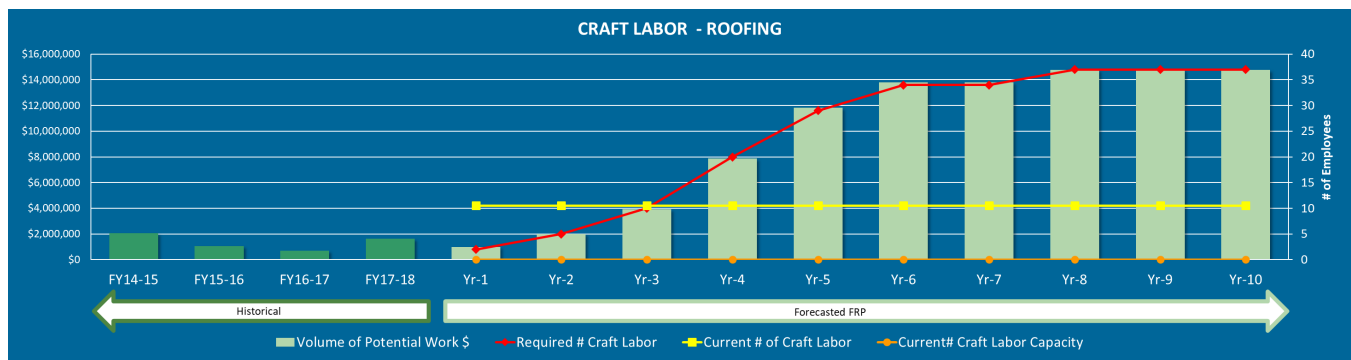


Figure 3.13: Potential Opportunities for Carpentry by District

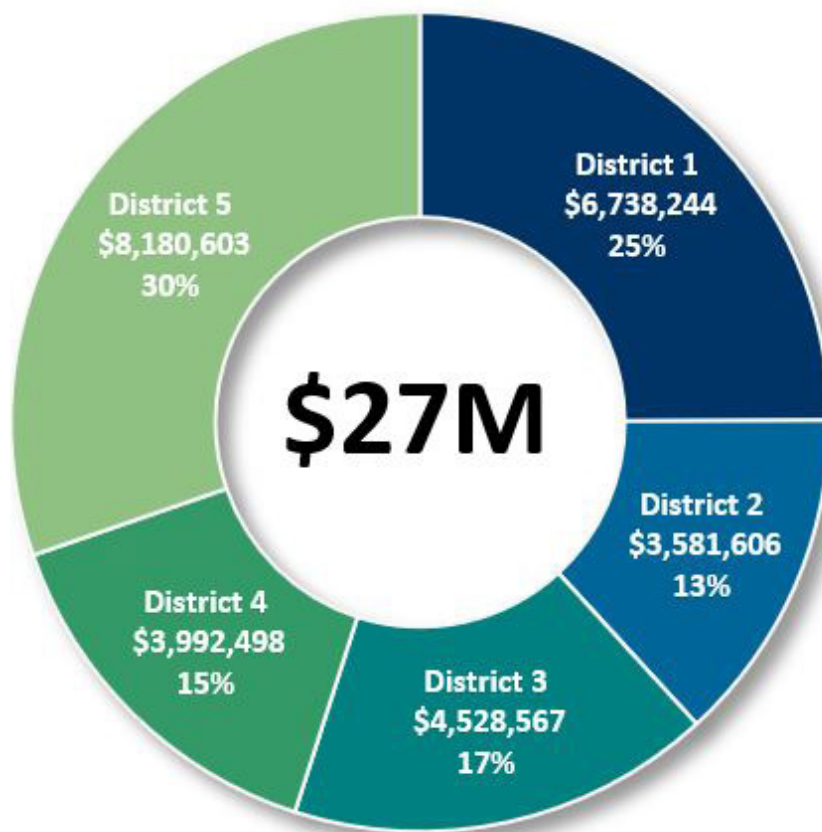


Figure 3.14: Potential Opportunities for Carpentry, by Tenant Department

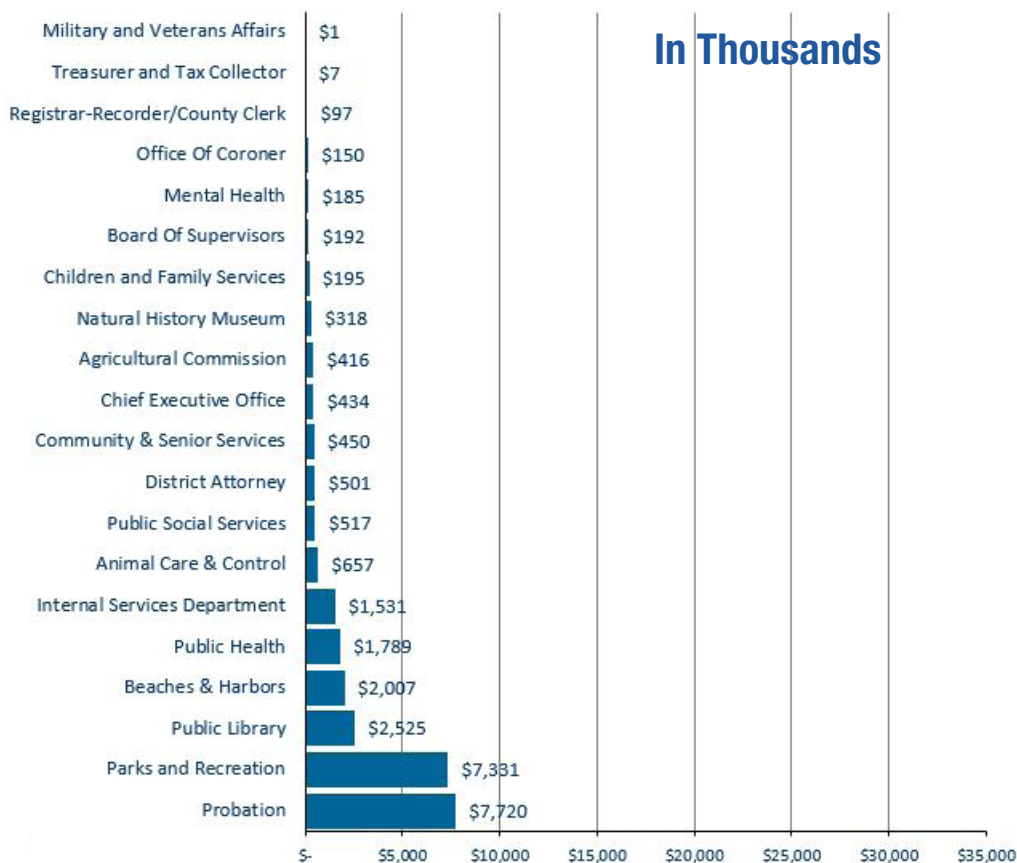


Figure 3.15: Carpentry Craft FTE to meet ISD Facilities Craft Program Demand

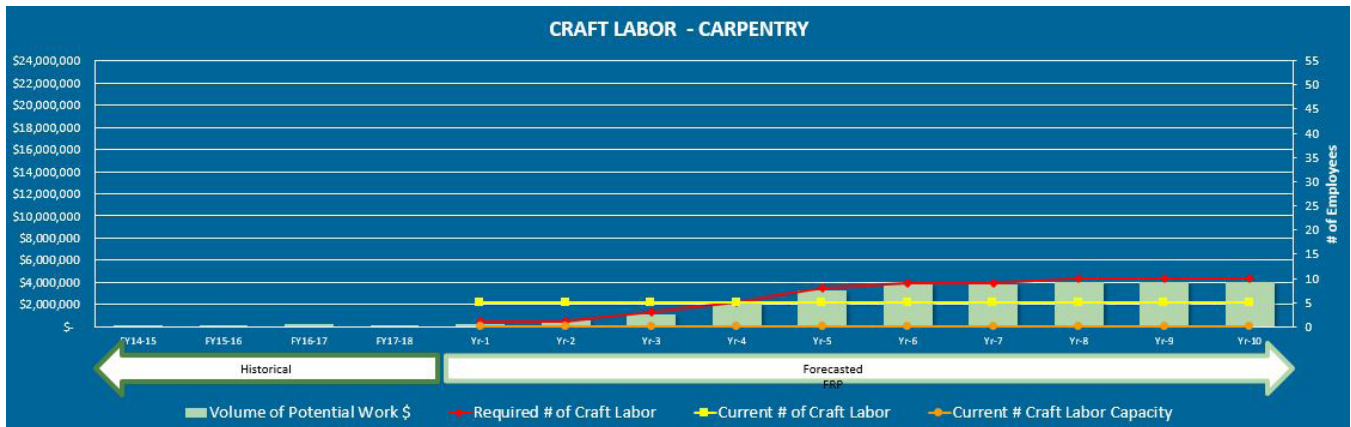


Figure 3.16: Potential Opportunities for Electrical by District

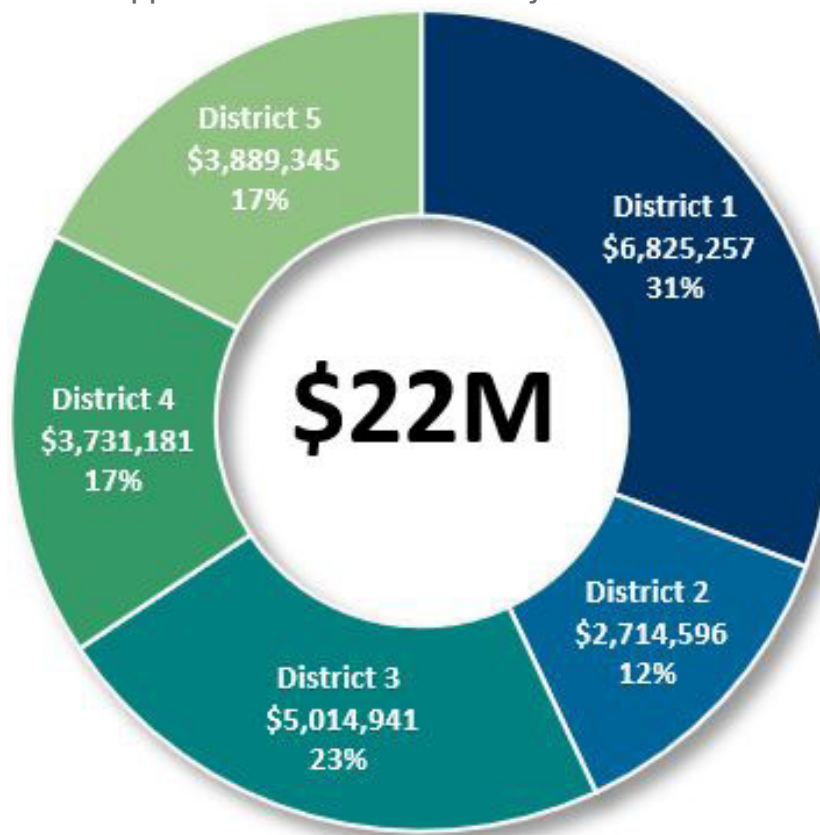


Figure 3.17: Potential Opportunities for Electrical, by Tenant Department

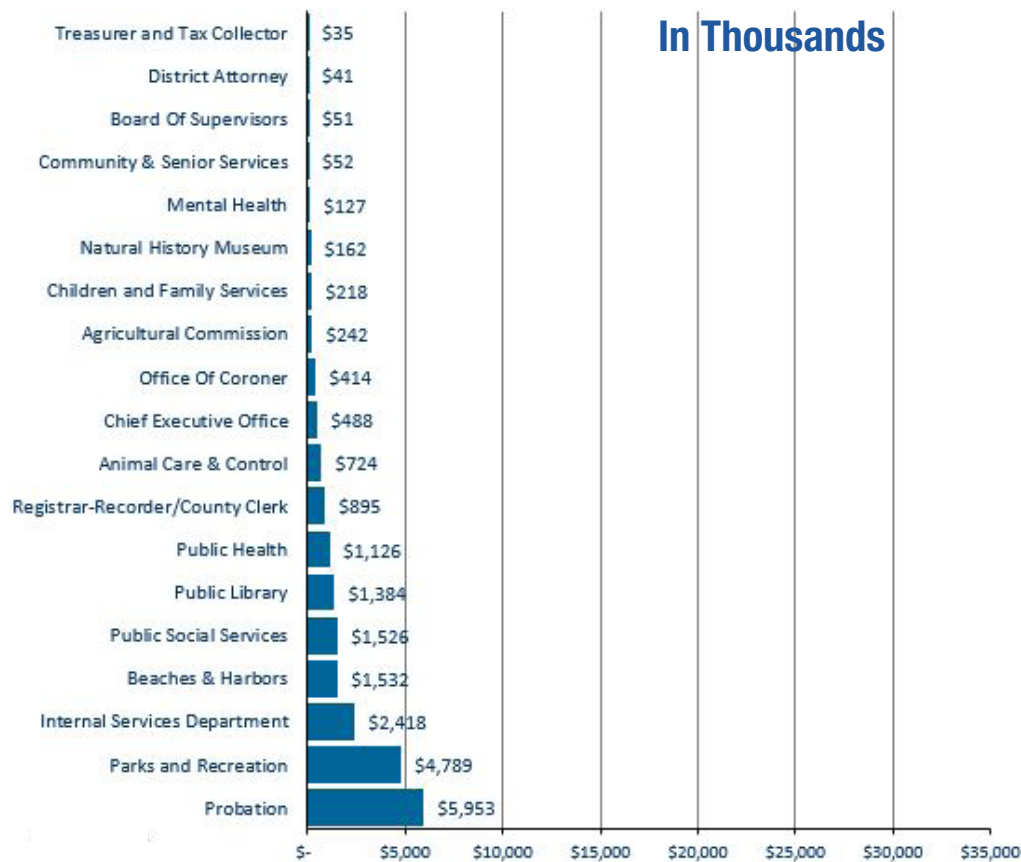


Figure 3.18: Electrical Craft FTE to meet ISD Facilities Craft Program Demand

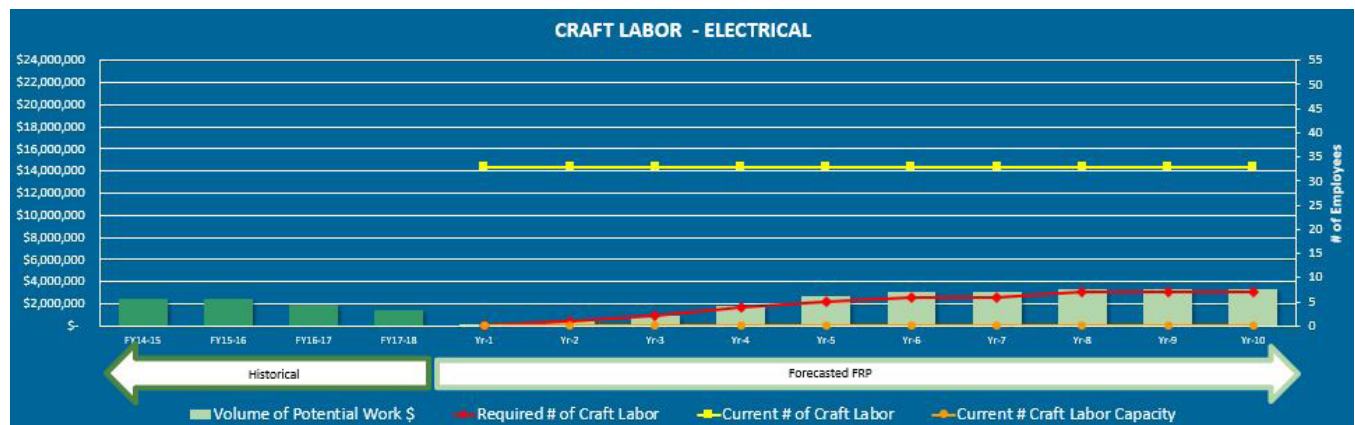


Figure 3.19: Potential Opportunities for Flooring by District

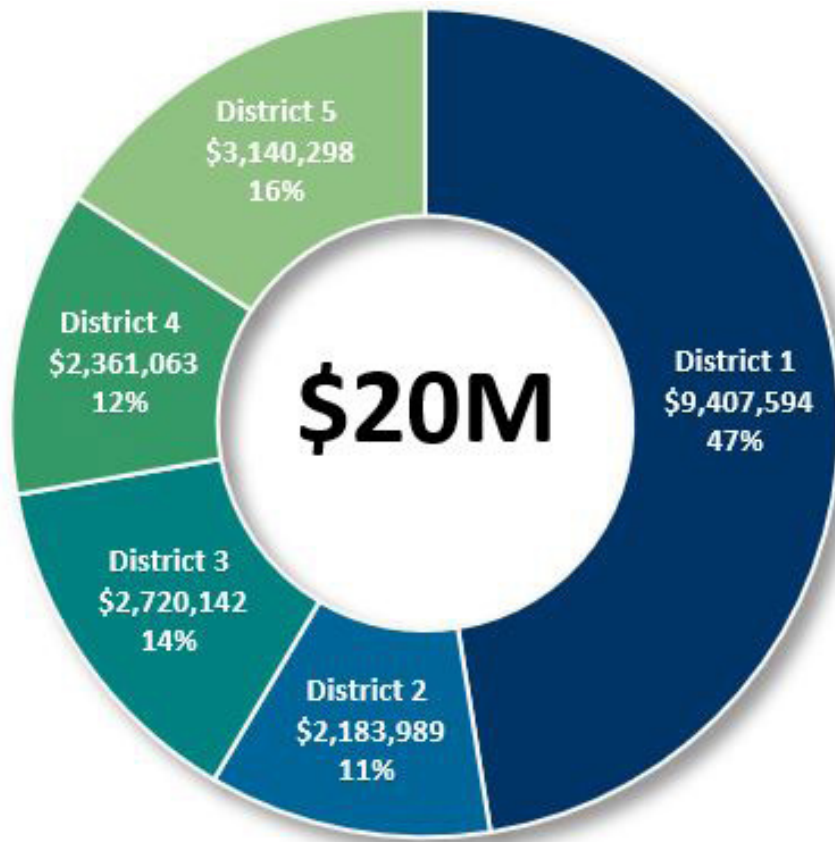


Figure 3.20: Potential Opportunities for Flooring, by Tenant Department

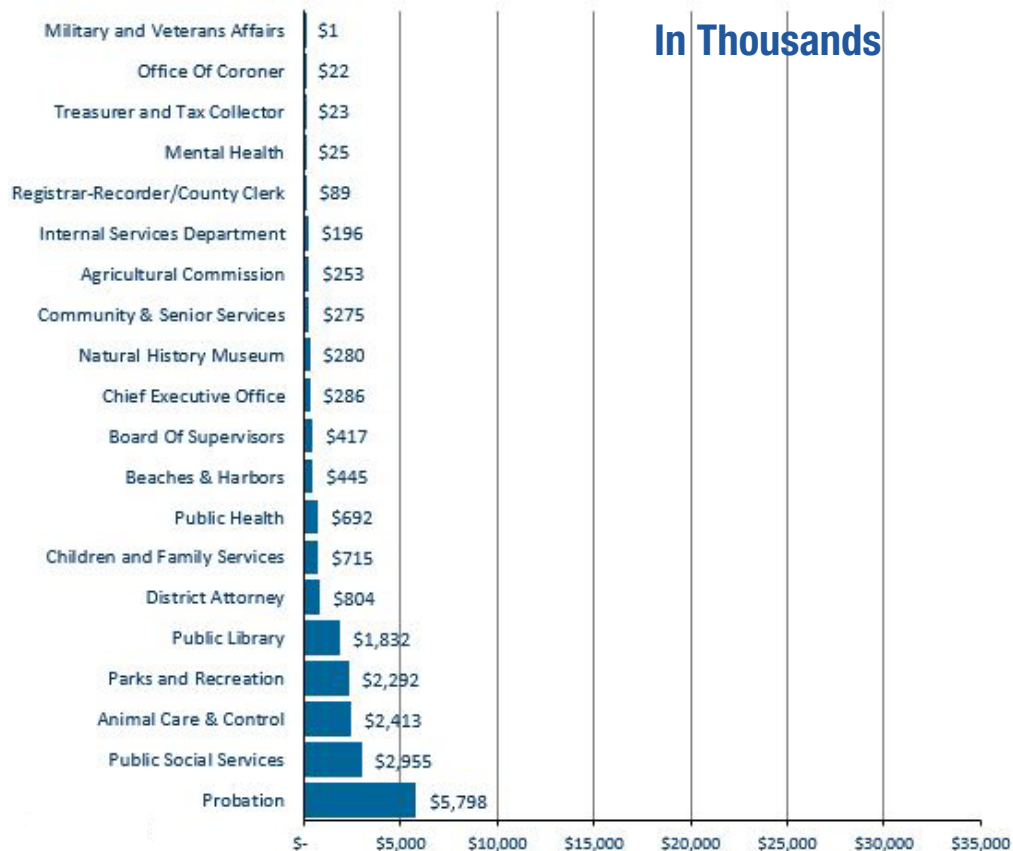


Figure 3.21: Flooring Craft FTE to meet ISD Facilities Craft Program Demand

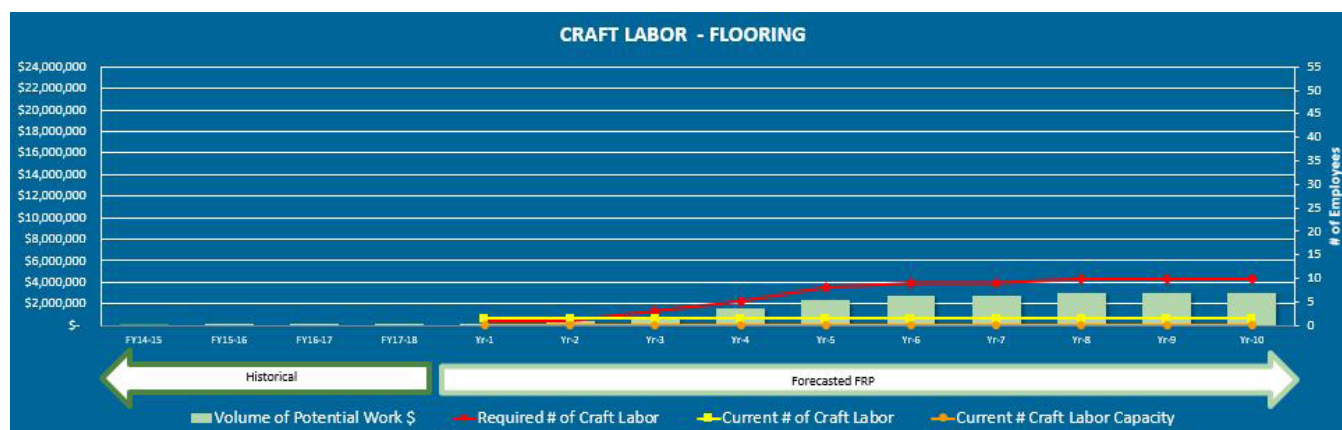


Figure 3.22: Potential Opportunities for HVAC by District

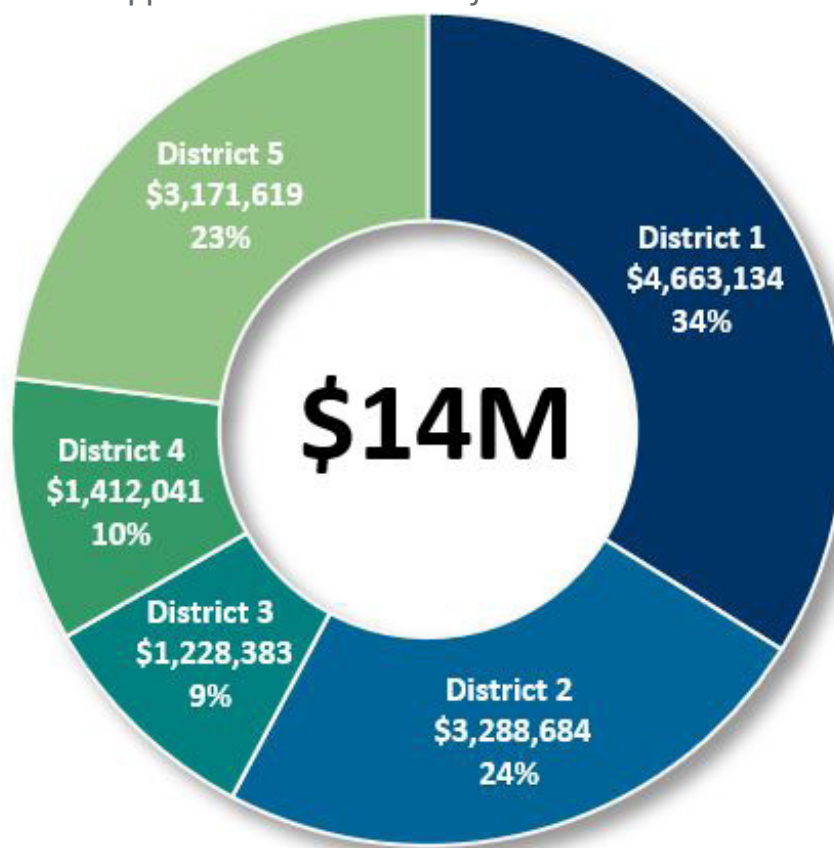


Figure 3.23: Potential Opportunities for HVAC, by Tenant Department

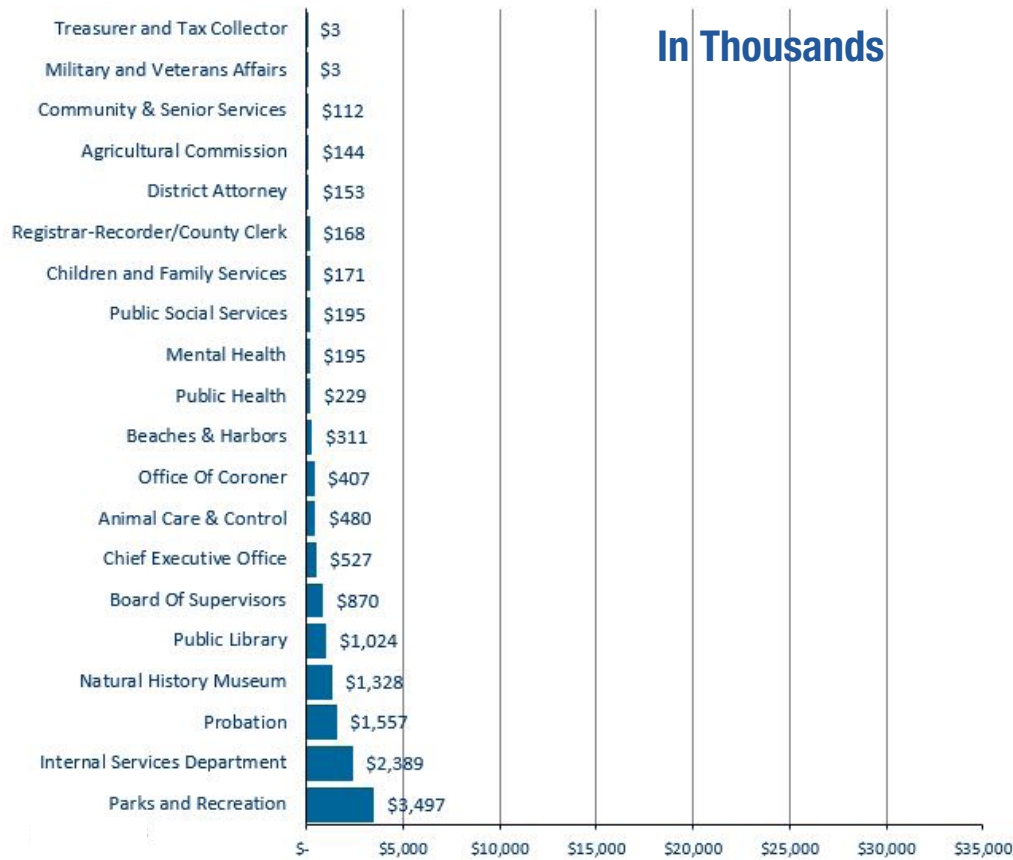


Figure 3.24: HVAC Craft FTE to meet ISD Facilities Craft Program Demand

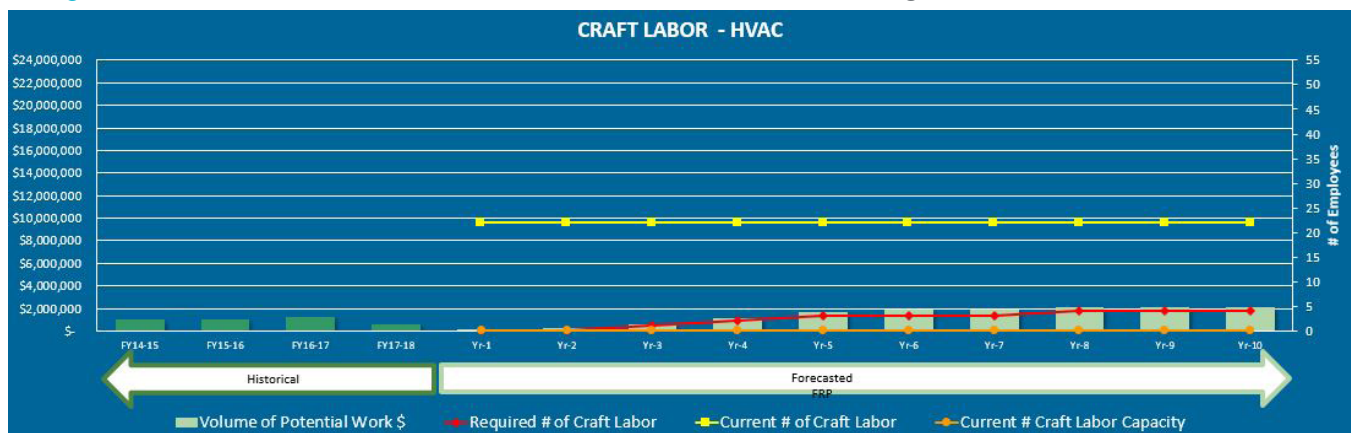


Figure 3.25: Potential Opportunities for Masonry by District

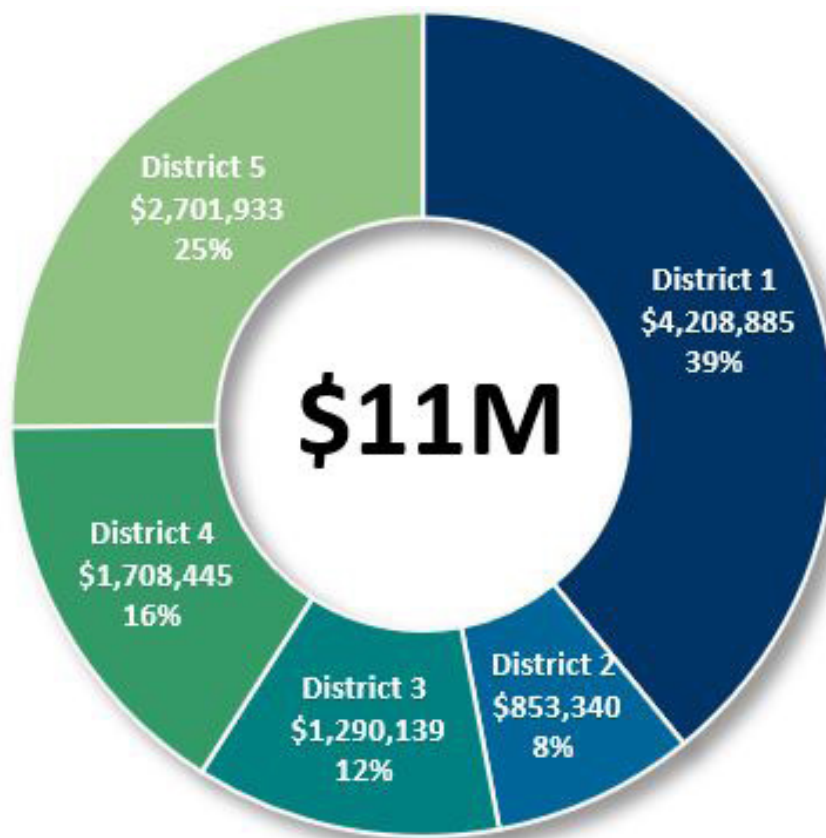


Figure 3.26: Potential Opportunities for Masonry, by Tenant Department

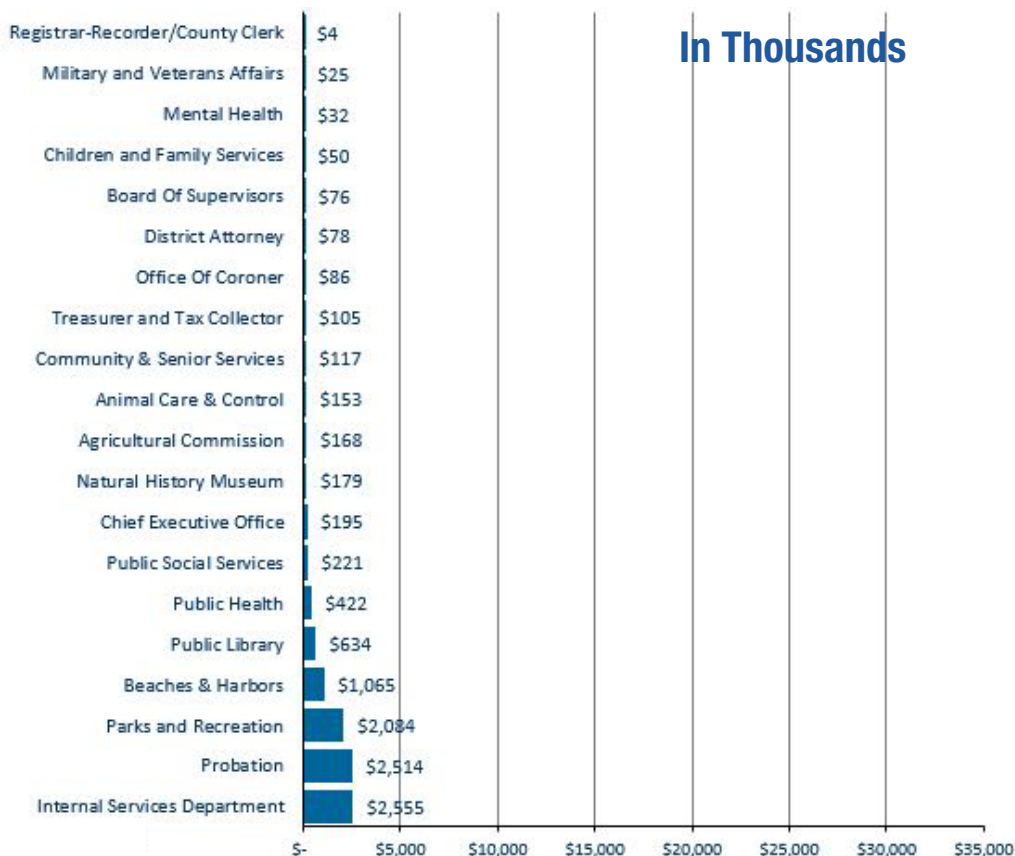


Figure 3.27: Masonry Craft FTE to meet ISD Facilities Craft Program Demand

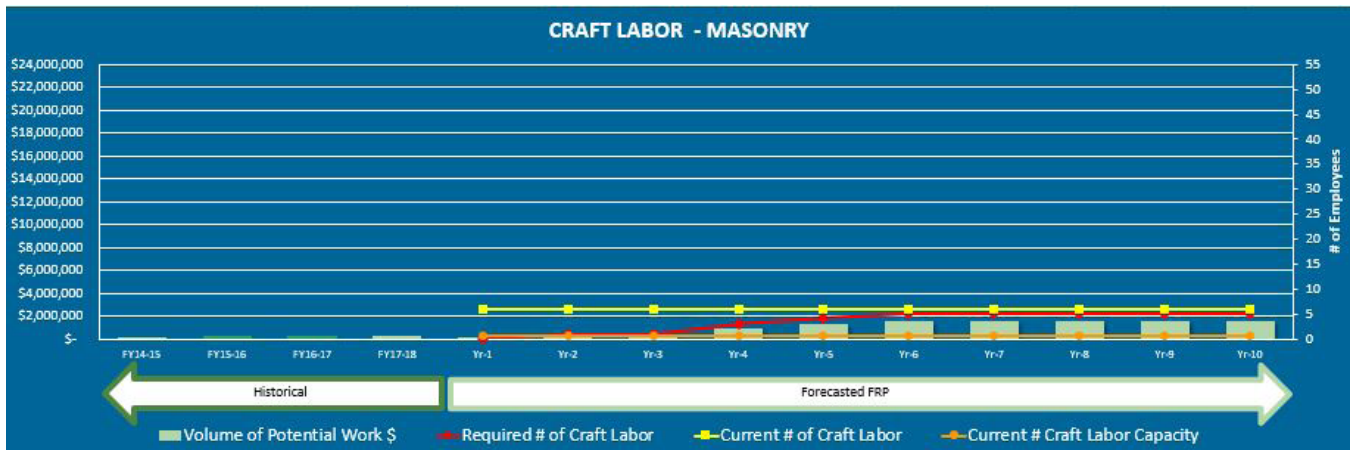


Figure 3.28: Potential Opportunities for Plumbing by District

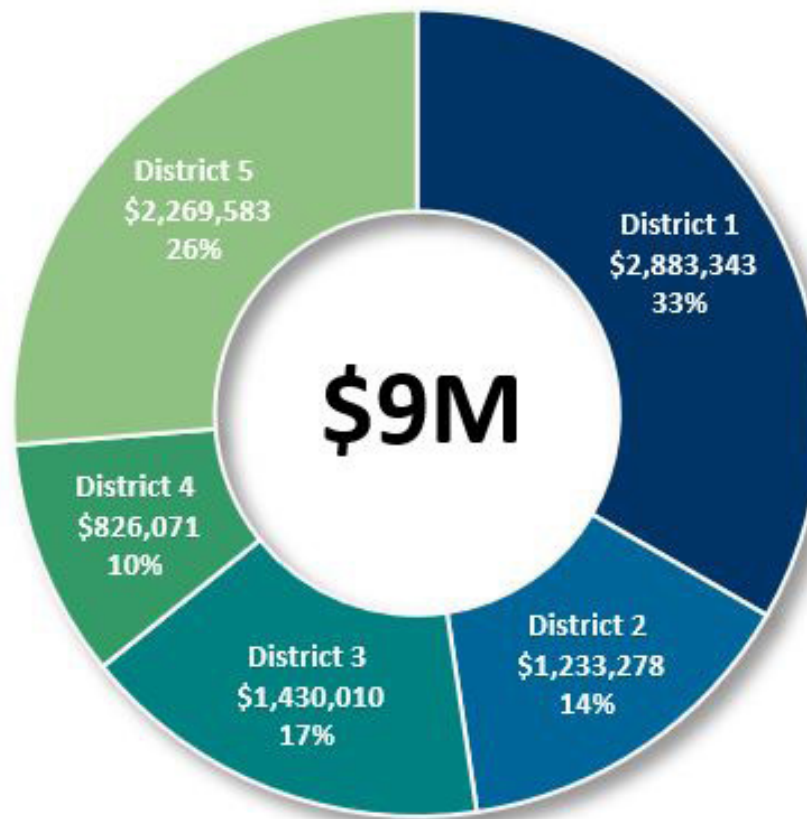


Figure 3.29: Potential Opportunities for Plumbing, by Tenant Department

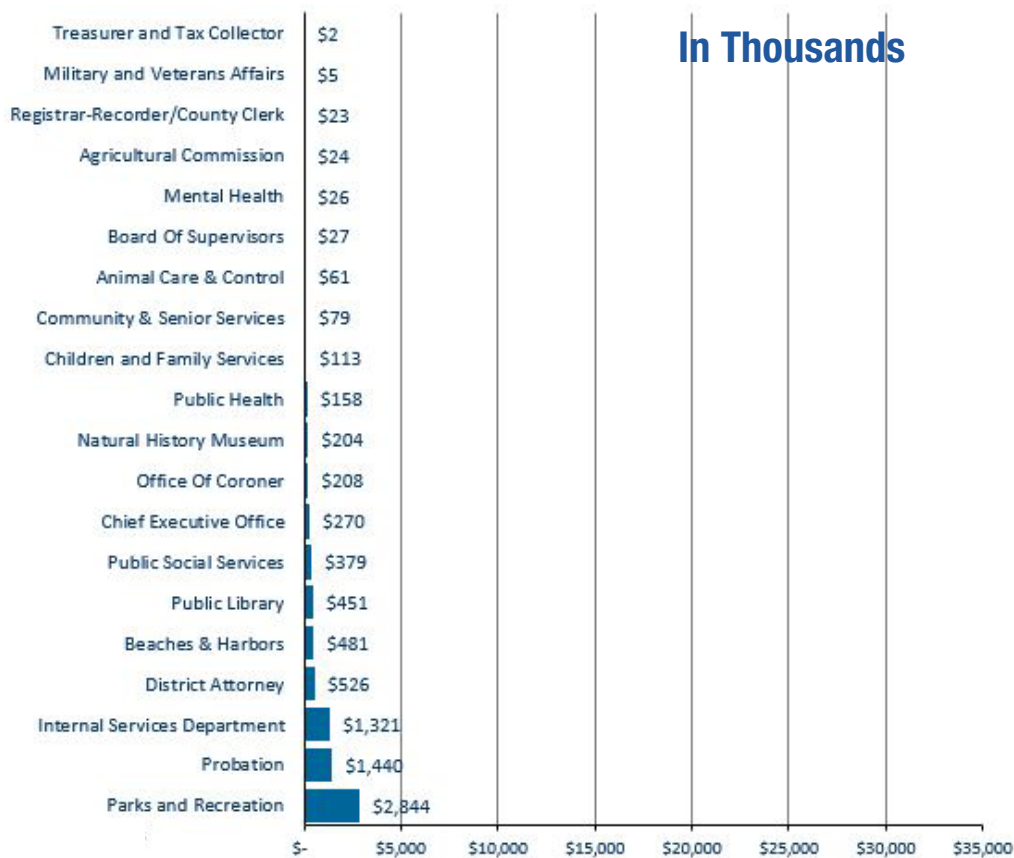


Figure 3.30: Plumbing Craft FTE to meet ISD Facilities Craft Program Demand

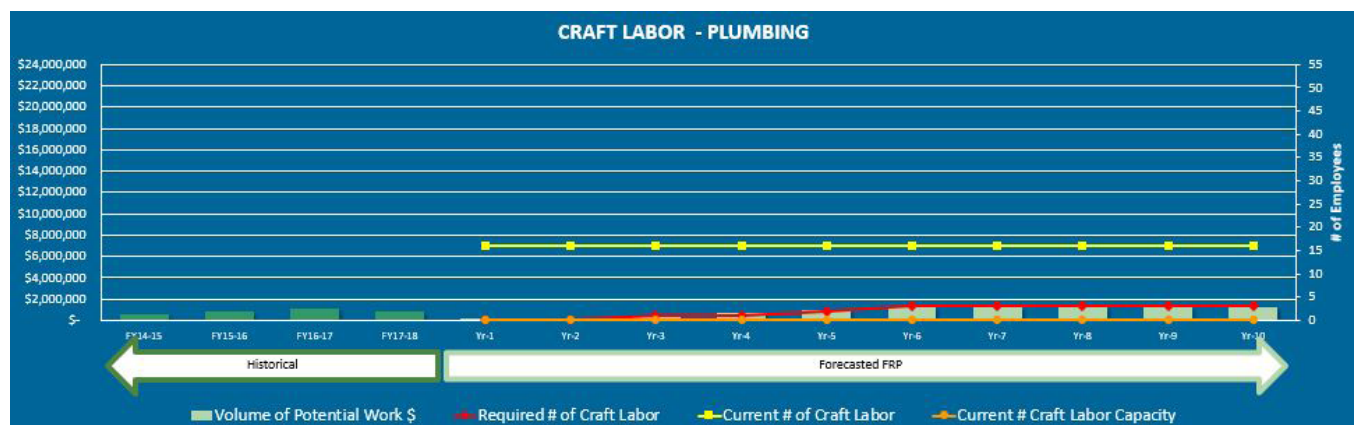


Figure 3.31: Potential Opportunities for Painting/Signage by District

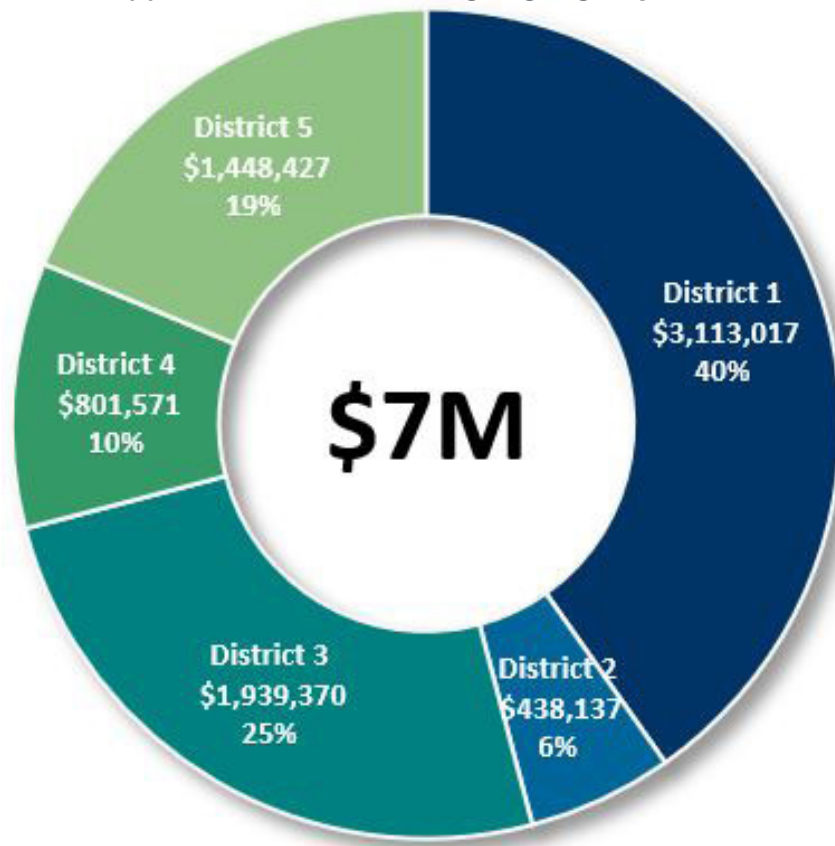


Figure 3.32: Potential Opportunities for Painting/Signage, by Tenant Department

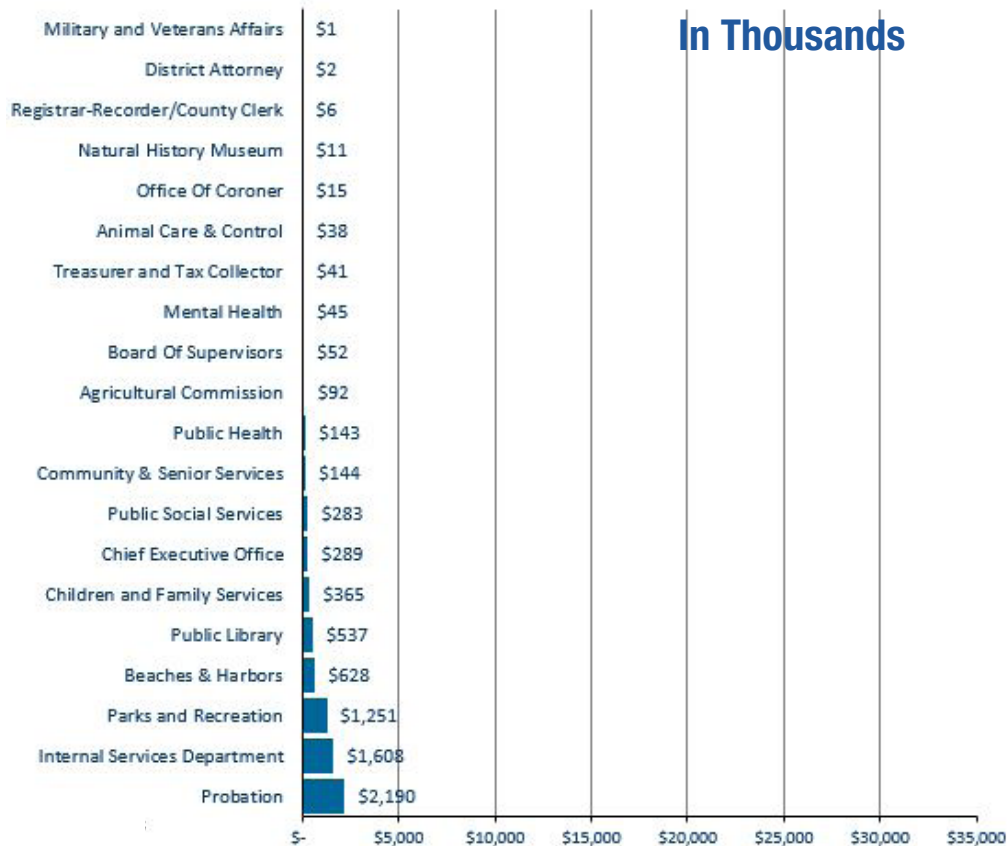


Figure 3.33: Painting/Signage Craft FTE to meet ISD Facilities Craft Program Demand

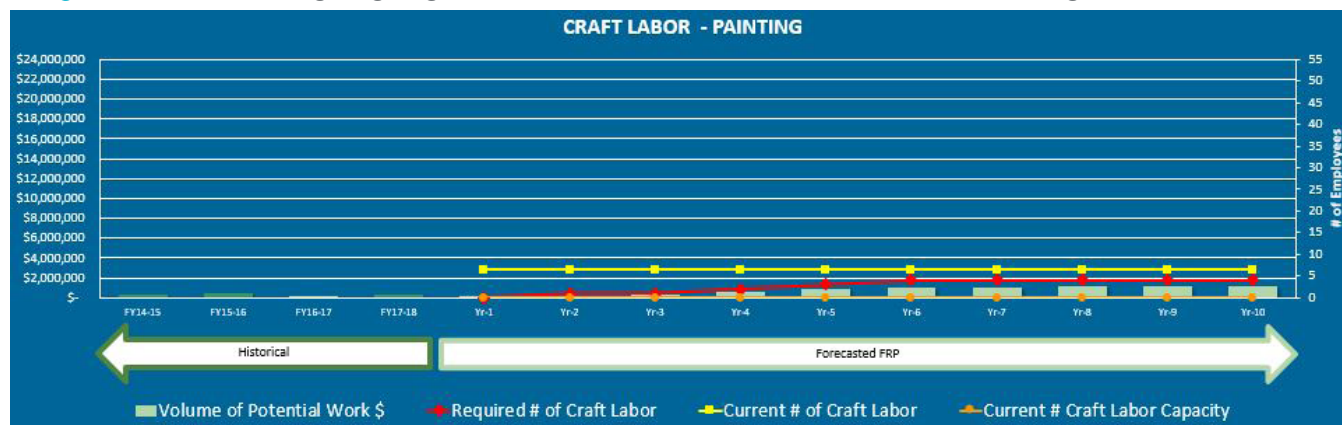


Figure 3.34: Potential Opportunities for Metal Works by District

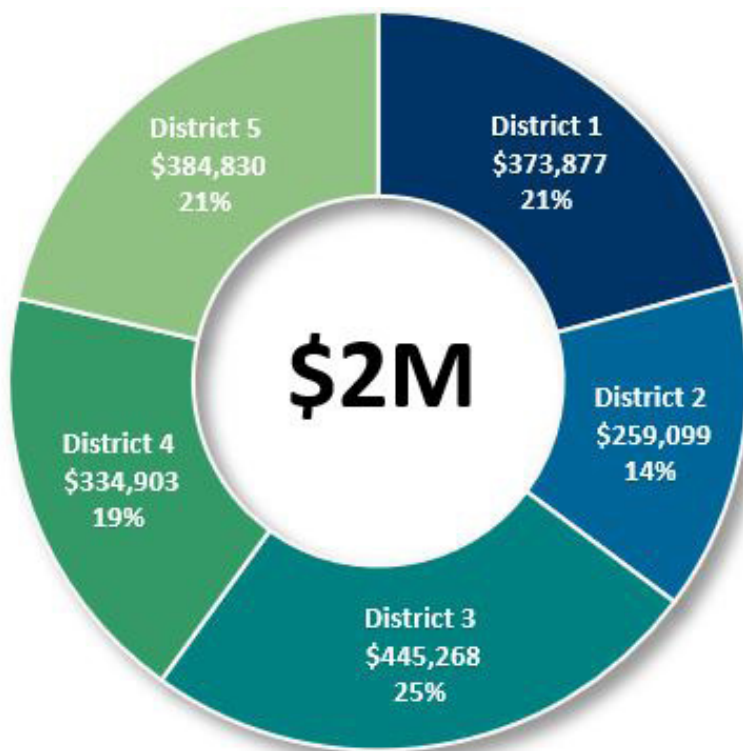


Figure 3.35: Potential Opportunities for Metal Works, by Tenant Department

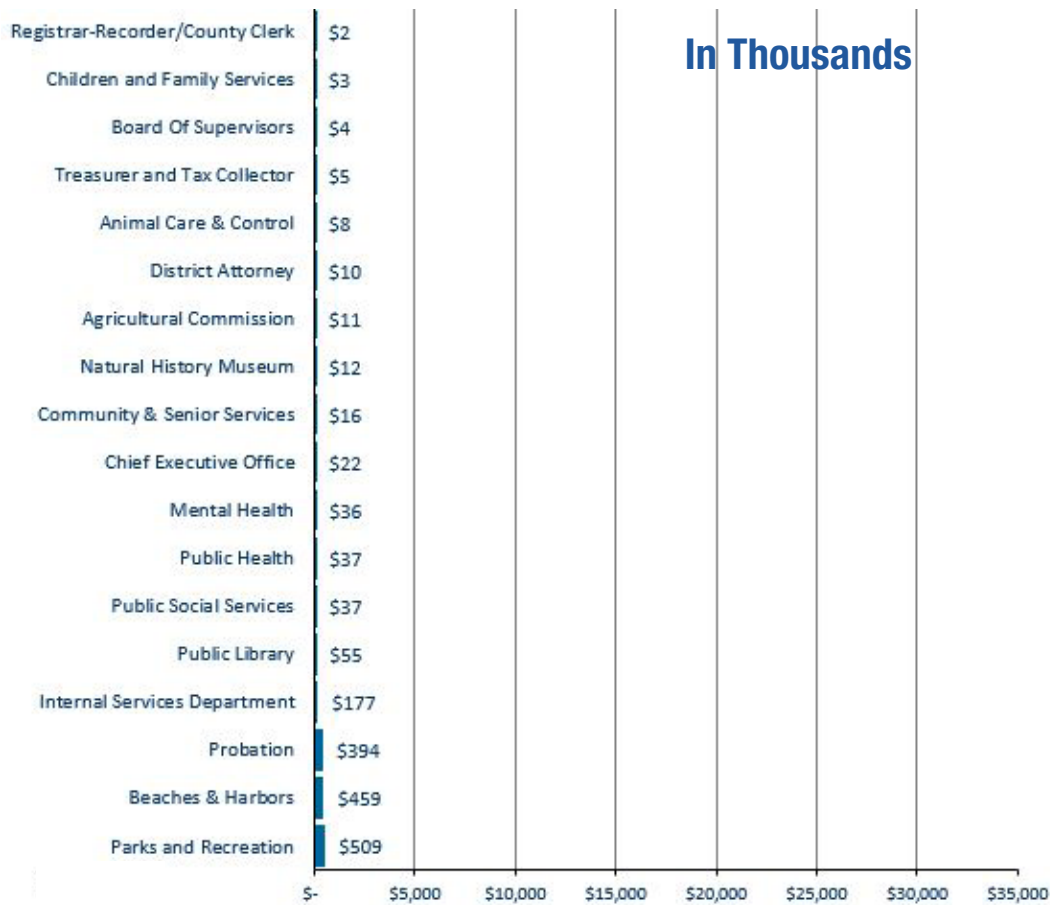


Figure 3.36: Metal Works Craft FTE to meet ISD Facilities Craft Program Demand

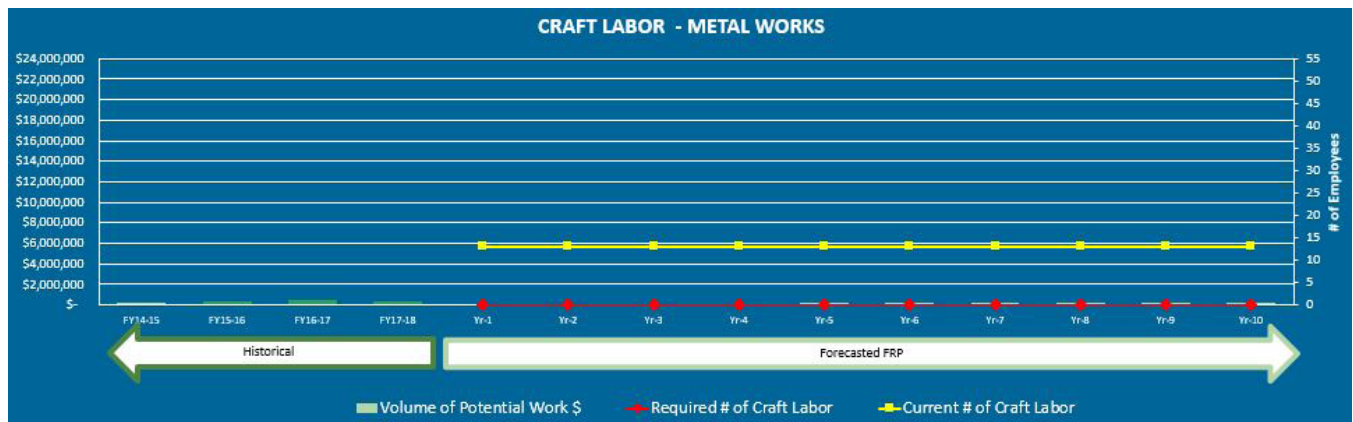


Figure 3.37: Potential Opportunities for Elevators by District

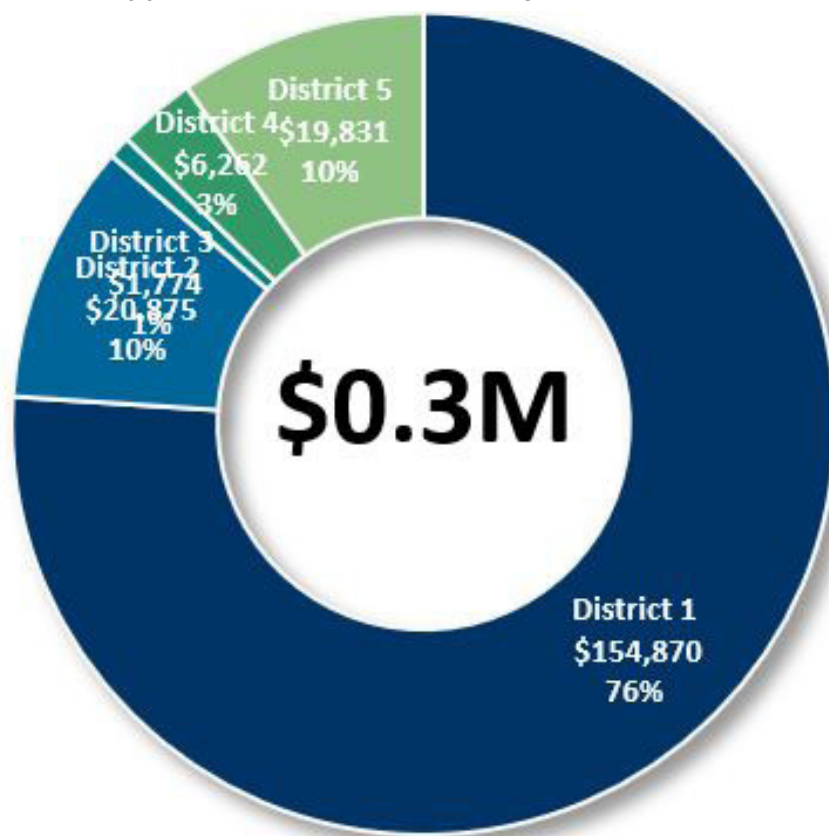


Figure 3.38: Potential Opportunities for Elevators, by Tenant Department

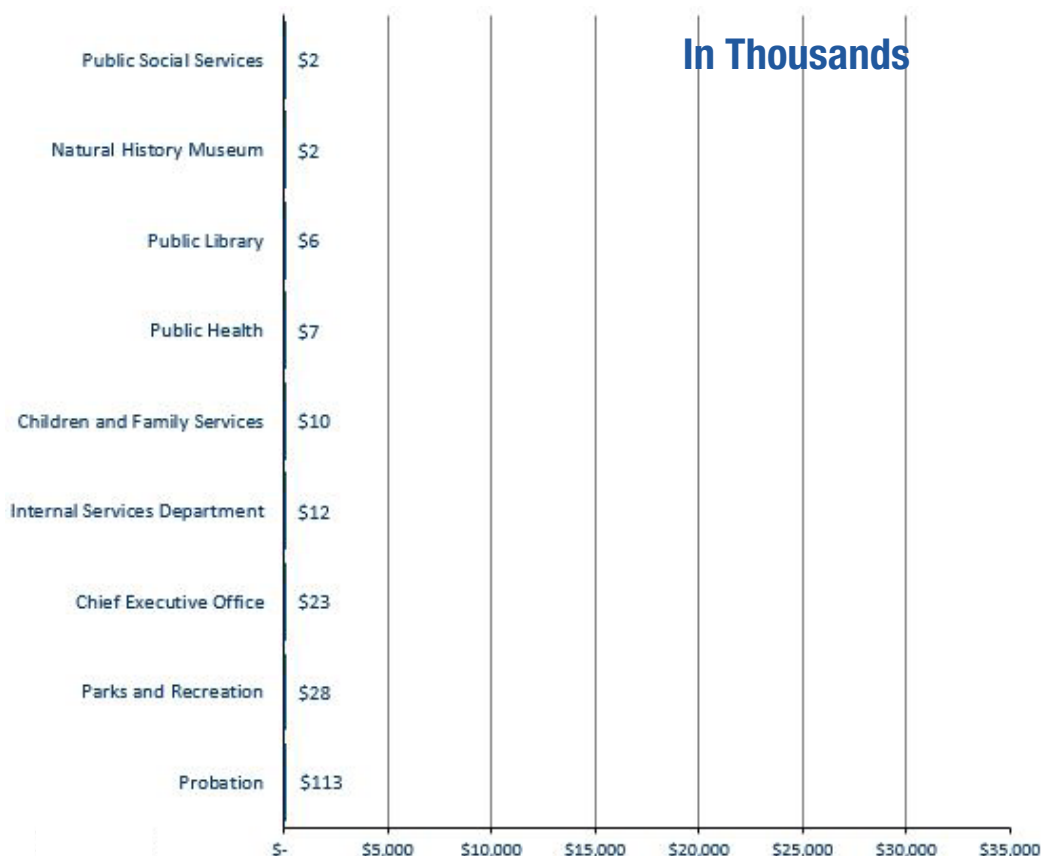
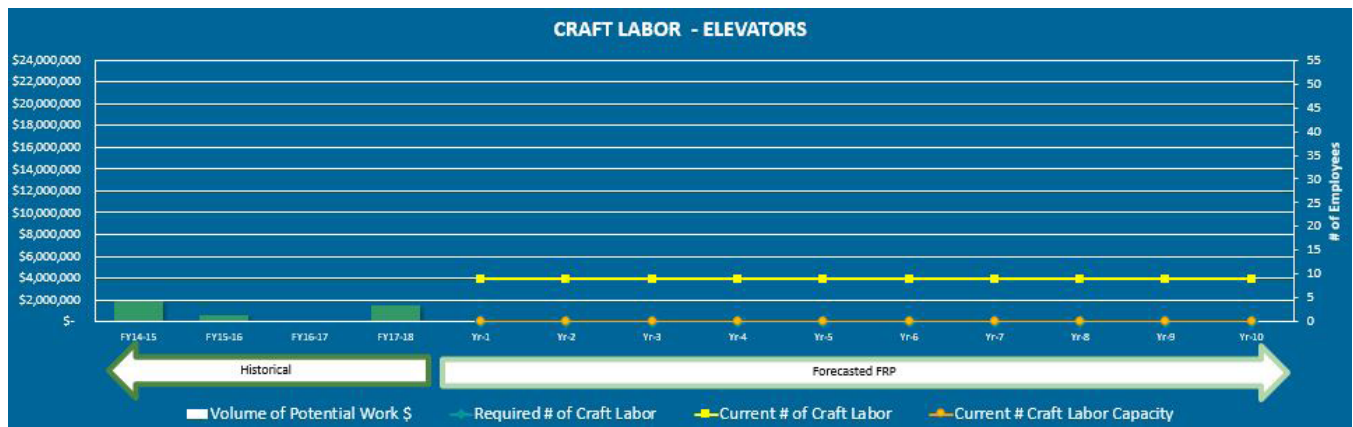


Figure 3.39: Metal Works Craft FTE to meet ISD Facilities Craft Program Demand



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