

Puerto Rico Occupational Licenses Analysis Project

University of Puerto Rico

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Characterization of PR’s Occupational Licenses

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Acronyms

CJ	Comisión de Juegos	Game Commission
CT	Compañía de Turismo	Department of Tourism
DACO	Departamento de Asuntos del Consumidor	Department of Consumers Affairs
DH	Departamento de Hacienda	Department of the Treasury
DE	Departamento de Estado	State Department
DF	Departamento de la Familia	Department of Family Affairs
DRD	Departamento de Recreación y Deportes	Department of Sports and Recreation
DRNA	Departamento de Recursos Naturales y Ambientales	Department of Natural and Environmental Resources
DS	Departamento de Salud	Health Department
DSP	Departamento de Seguridad Pública	Department of Public Safety
NTSP	Negociado de Transporte y otros Servicios Públicos	Office of Transportation and other Public Services
OCIF	Oficina del Comisionado de Instituciones Financieras	Office of the Commissioner of Financial Institutions
OCS	Oficina del Comisionado de Seguros	Office of the Commissioner of Insurance
PJ	Poder Judicial	Department of Justice

Abstract

This report was developed under an agreement between the University of Puerto Rico and Puerto Rico's Departamento de Estado (DE). The agreement is aligned with the Ease of Doing Business division of Puerto Rico's Financial Oversight & Management Board for Puerto Rico. This report provides an analysis of the burden associated with occupational licenses in the Commonwealth of Puerto Rico. The analysis is initially based on the methods presented in the Second Edition of the study titled: *License to Work: A National Study of Burdens from Occupational Licensing* (LtW) completed by the non-profit public interest law firm Institute for Justice (www.ij.org).

1.Introduction

The following report presents the results of research conducted over a 13-week period¹ to characterize the licensing requirements of the Commonwealth of Puerto Rico. This report considers the occupations pursued by the general community. The reason a few occupations with licensing requirements were not included was their rarity among the general public, as for examples those related to horse racing and extreme sports.

This report follows the approach used in the Second Edition of study titled: *License to Work: A National Study of Burdens from Occupational Licensing* (LtW) completed by the non-profit public interest law firm Institute for Justice. This approach emphasizes characterizing the burden

¹ July 5 – September 17, 2021

placed on the individuals by the licensing regulations. The LtW report identifies six areas of burden: fees, exams, minimum age, minimum grade, experience requirements and educational requirements, with the last two being additionally combined into a single time lost measure. The analysis described in this report expands significantly on what was considered in the LtW study as it considers the documents required, additional information about the exams, requirements to renewal including continuing education, and requirements related to professional organizations. In addition, the LtW report includes only low and middle income occupations while this report includes all occupations in Puerto Rico that require a license, regardless of occupational income.

The report is organized as follows. Section 2 describes the methodology used including all the variables used to characterize the licenses. Section 3 provides the characterization of Puerto Rico's occupational licenses, and Section 4 presents the relationships between licensing burdens, examination boards and professional organizations. Section 5 presents the concluding remarks.

2.Methods

This research and analysis are based on the methods used by researchers from the *Institute for Justice* although expands on its scope significantly. The LtW report includes a section on methods that define what factors/elements should be considered in estimating burden including education and experience requirements. An emphasis is placed on selecting the requirement with the minimum burden when alternatives exist as not to overrepresent the requirement. It is noted that multiple meetings took place with Dr. Dick M. Carpenter II, project leader for the LtW study, to clarify issues and obtain recommendations on general methodology and particular cases.

Research into the requirements of licensing in Puerto Rico was conducted by students from the University of Puerto Rico's system under the supervision of one of three project investigators. Two of the researchers have PhD degrees (respectively, business and engineering) and the other researcher is a DrPH candidate with MPH in Epidemiology and JD degrees. Students reviewed licensing requirements from documents and websites publicly available and communicated with regulatory agencies to obtain and verify information. The information was entered into a template and then revised by one of the project investigators. Finally, the information was uploaded and entered into a database/spreadsheet. The following subsections describe all the characteristics researched per license.

2.1 Characteristics defined by LtW

The basic burden characteristics used in the LtW study and included in our study are the following:

- **Fees:** this includes payments to the regulatory agency, fees for documents directly related to the application, and professional organization membership fees².

² Fees in the LtW report typically do not include association fees as membership is rarely required in US jurisdictions.

- **Educ(d)**: this indicates the days required to obtain the necessary education to qualify for the license. For example, these could be academic degrees or professional short courses.
- **Exp(d)**: this indicates the days required in professional/apprentice type experience to qualify for the license.
- **CDL**: this is a combined measure of time lost to qualify for the license and is the sum of Educ(d) + Exp(d).
- **Exams**: number of exams that must be passed to qualify for the license.
- **Min Grade**: educational level required to qualify for the license. For example, 10th grade (10), high school diploma (12) or a bachelor's degree (16). This is sometimes not defined (0 value).
- **Min Age**: minimum age required to qualify for the license. This is sometimes not defined (0 value).

2.2 System and overall process

Two variables that describe the application system and the overall licensing process.

- **Type of application system**: this characterizes the agency's application system used by the public to apply and renew the license. The alternatives are: web based, email based, and in-person (at least some portion is in this mode).
- **Process type**: There are six general processes that all the occupational licenses follow.

Flow 1

1. Complete the application and submit documents to the agency
2. Receive approval to take the exam
3. Pass the exam

Flow 2

1. Pass the exam
2. Complete the application and submit documents to the agency.

Flow 3

1. Complete the application and submit the documents to the agency

Flows 1C, 2C, and 3C have as a final step joining a professional organization ("Colegio" by its name in Spanish).

It is noted that there could be additional steps associated with taking the exams, which are not included in this top level view.

2.3 Documents

This relates to the set of documents/reports/ evidence required to apply for a new license. The list of options is presented in Table 1. Each license could have from none to multiple documents. Another variable tracked the number of required documents/items not identified in the list presented in Table 1.

Table 1. List of documents and other evidence.

01. Affidavit ³ (other type)
02. Affidavit of identification
03. Apprenticeship documents (as substitute to diploma)
04. Administration for the Child Support ⁴ certificate
05. Background check report
06. Bank account certification/financial document
07. Birth certificate
08. Business registration
09. Certificate of studies/of training
10. "Ley 300" ⁵ Certification
11. Professional association ("Colegio" by its name in Spanish) certificate
12. Diploma
13. Doping certificate
14. Driver record certificate
15. Employment Certificate
16. Envelope or mailer
17. Evidence of liability insurance
18. Evidence of residence in Puerto Rico
19. Exam results
20. Financial information/records
21. Good conduct certificate
22. Health certificate
23. Medical certificate
24. Moral reputation certificate
25. Passport or other document to determine nationality/residence status
26. Payment to government ("Comprobante de Rentas Internas") ⁶
27. Photo
28. Professional license(s) including apprentice, temporary, or other state.
29. Recommendation/reference letters
30. Resume or CV or experience/performed task summary
31. Tax records
32. Transcripts

³ A legal document to legitimize a declaration under oath.

⁴ ASUME by its acronym in Spanish, under the Puerto Rico's Department of Family.

⁵ Act No. 300 of September 2, 1999, as amended, known as: "Law of Verification of Credentials and Criminal History of Suppliers to Children, People with Disabilities and Health Professionals"; established as public policy of the Commonwealth of Puerto Rico.

⁶ As evidence of the authorization on rights of use issued by the Puerto Rico's Department of Treasury.

2.4 Colegios, Examination Boards and Exams

Licenses in Puerto Rico may require membership in state-level professional organizations. These are often called “Colegios”, but the term “Asociación” is also used (translations in Spanish). These “Colegios/ Asociaciones” have roles in the management and oversight of occupations and some of the licenses. Licenses in Puerto Rico are often regulated by an examination board that works in collaboration with agencies to establish licensing requirements, guidelines and examinations. The boards may be in charge of developing and/or offering the exams.

- **Colegio:** this tracks if there is professional organization related to the license.
- **Mandatory membership** (“colegiación” by its name in Spanish): this tracks if the individual must be a member of the “Colegio” to have a license.
- **Junta Examinadora:** this tracks if there is a law that establishes a board of examiners (“Junta Examinadora” by its name in Spanish) for the license.
- **Exam design:** this tracks what entity designs/prepares the exam(s); options are “Junta Examinadora”, *Didaxis*⁷, external.
- **Exam offer:** this track what entity offers/gives the exam(s); options are Agency, *Didaxis*, external.

2.5 Reciprocity

Some licenses allow the applicant to replace examination or other requirements by presenting a valid license from another jurisdiction.

- **Reciprocity:** this tracks if the license can be obtained by the applicant turning in a valid license in the same occupation from another jurisdiction.
- **Limited to certain states:** this tracks if there are regulations that specify the states/jurisdiction or country where this option would apply (only licenses from those states/jurisdiction or country will be recognized in PR).
- **Professional organization:** this tracks if there is an option to obtain the license by having a license or accreditation from a national professional organization.
- **Reciprocity by education:** this tracks if there is an option to obtain the license by an academic degree or other educational type certificate in addition to the basic educational requirements.

2.6 Provisional and Temporary Licensing Requirements

Some licenses require the applicant to perform the occupation with a provisional or temporary license first, while in some cases it can be an option as to be allowed to perform the occupation while waiting for exam results or other requirements.

- **Provisional/temporary required:** this tracks if a provisional/temporary license is required.
- **Provisional temporary available:** this tracks if a provisional/ temporary license be obtained.

⁷ *Didaxis* describes itself as a private company that is specialized “in providing planning and administration services for Professional Bar Examinations”. (<https://www.didaxispr.com/sobre-didaxis/>)

- **Time validity:** this defines the time validity of provisional/ temporary licenses, if applicable, (in calendar days).

2.7 Renewal

A majority of the license must be renewed to perform the occupation, although a few are permanent, and a few can only be obtained once, for example some apprenticeship licenses can only be obtained once.

- **Type of renewal:** there are three options; 1. license is permanent (no renewal needed), 2. license cannot be renewed, and 3. licensee can be renewed.
- **Renewal period:** the renewal period in years (only if license can be renewed).
- **Fees:** the direct renewal fees.
- **Continuing education (CE):** the continuing education credit hours required to renew.

3. Puerto Rico’s occupational licenses

3.1 Overview

A total of 140 licenses regulated by 14 agencies were identified as Puerto Rico’s occupational license inventory. A breakdown of these licenses by agency is presented in Table 2. Table A in the Appendix provides a list of the full inventory of occupational licenses by name and agency. Table A also has the burdens associated with the LtW study and an indication if the license has a benchmark in one of the existing databases. The full data set referenced in this report is provided in the Excel spreadsheet named OLP_FullDataSet.xls, to be delivered with this report.

Table 2. Number of licenses per agency.

Code	Agency Name	Number of Licenses
CJ	Comisión de Juegos	4*
CT	Compañía de Turismo	2
DACO	Departamento de Asuntos del Consumidor	8
DE	Departamento de Estado	35
DF	Departamento de la Familia	1
DH	Departamento de Hacienda	1
DRD	Departamento de Recreación y Deportes	3
DRNA	Departamento de Recursos Naturales y Ambientales	4
DS	Departamento de Salud	61
DSP	Departamento de Seguridad Pública	2
NTSP	Negociado de Transporte y otros Servicios Públicos	6
OCIF	Oficina del Comisionado de Instituciones Financieras	6
OCS	Oficina del Comisionado de Seguros	5
PJ	Poder Judicial	2

* The CJ has three unique licenses, but one of them has two set of requirements based on the functions of the individual, therefore considered two separate licenses for the purpose of this study.

3.2 LtW related burden

As an initial reference point, a summary of the LtW measures per agency are presented in Table 3, noting the averages calculated for the Age and Grade metrics do not count the undefined values. The last row provides the average value for all 140 licenses. The reported averages serve as initial benchmarks for future initiatives that would reduce the burdens per agency.

Table 3. Averages for the LtW Measures of burden.

Agency	#L	Age	Grade	Exp(d)	Edu(d)	CDL	Fees	Exams
CJ	4	18.0		0.0	35.0	35.0	\$ 233	0.0
CT	2	18.0	12.0	365.0	46.5	411.5	\$ 153	1.0
DACO	8	18.0		0.0	0.0	0.0	\$ 284	0.1
DE	35	17.8	13.8	208.6	851.5	1,060.1	\$ 403	1.2
DF	1	21.0		0.0	1.3	1.3	\$ 35	0.0
DH	1	21.0		0.0	0.0	0.0	\$ 565	0.0
DRD	3	18.0	12.0	38.3	11.3	49.7	\$ 83	0.3
DRNA	4	18.0		0.0	1.6	1.6	\$ 558	0.0
DS	61	19.9	17.4	146.3	1,711.1	1,857.4	\$ 438	1.0
DSP	2	21.0		0.0	130.7	130.7	\$ 114	0.5
NTSP	6	18.6		0.0	0.6	0.6	\$ 150	0.0
OCIF	6			304.9	0.0	304.9	\$ 1,246	2.2
OCS	5	18.0		0.0	0.0	0.0	\$ 446	1.0
PJ	2	21.0	19.0	0.0	2,555.0	1,095.0	\$ 300	1.0
All	140	19.0	16.1	135.0	998.8	1,112.9	\$ 420	0.9

Overall characteristics for the age and grade measures are presented in Table 4 and Table 5, respectively. In these and subsequent tables, each row indicates the number of licenses within each category, and the percent inside the parenthesis relates to the proportion of licenses within that category for that agency. Blank spaces indicate no license falls within that category for that agency.

The most common age requirement is 18 (49% of the licenses), while 21 licenses (15%) do not specify an age minimum. There are 7 licenses (5%) that enable individuals 16 years of age or below to engage in an occupation. The two agencies that have the most licenses with no age requirements are DACO and OCIF. Regarding a minimum educational level, 44 licenses (31%) have no requirement, while 80 licenses (57%) require a university degree. The agencies with the highest grade requirements are DS and PJ.

Table 4. Age related burden by agency.

Agency	#L	Minimum age (#L)				
		Avg.	Not defined	16 or below	18	21
CJ	4	18.0			4(100%)	
CT	2	18.0			2(100%)	
DACO	8	18.0	5(63%)		3(38%)	
DE	35	17.8		7(20%)	27(77%)	1(3%)
DF	1	21.0				1(100%)
DH	1	21.0				1(100%)
DRD	3	18.0			3(100%)	
DRNA	4	18.0	2(50%)		2(50%)	
DS	61	19.9	7(11%)		19(31%)	35(57%)
DSP	2	21.0				2(100%)
NTSP	6	18.6	1(17%)		4(67%)	1(17%)
OCIF	6		6(100%)			
OCS	5	18.0			5(100%)	
PJ	2	21.0				2(100%)
All	140	19.0	21(15%)	7(5%)	69(49%)	43(31%)

Table 5. Grade related burden by agency.

Agency	#L	Avg.	Minimum Grade: #L (%L)				
			No grade specified	below HS Diploma	HS Diploma	University Undergrad	University Graduate
CJ	4		4(100%)				
CT	2	12.0	1(50%)		1(50%)		
DACO	8		8(100%)				
DE	35	13.8	2(6%)	4(11%)	10(29%)	17(49%)	2(6%)
DF	1		1(100%)				
DH	1		1(100%)				
DRD	3	12.0	2(67%)		1(33%)		
DRNA	4		4(100%)				
DS	61	17.4	2(3%)			25(41%)	34(56%)
DSP	2		2(100%)				
NTSP	6		6(100%)				
OCIF	6		6(100%)				
OCS	5		5(100%)				
PJ	2	19.0					2(100%)
All	140	16.1	44(31%)	4(3%)	12(9%)	42(30%)	38(27%)

Time related requirements to obtain a license are divided in two components: experience days and education days, and then added into a single measure called calendar days lost (CDL). Tables 6, 7, and 8 present the experience, education, and CDL metrics, respectively.

As documented by Table 6, experience is not required in a majority of the licenses in Puerto Rico (90 licenses, 64%, have no experience requirement). Out of the 50 licenses that require experience, 40 (28% of the total) require a year or less, seven licenses (5% of the total) require between one and two years, and three licenses (2% of the total) have experience requirements over 2 years; *Agente Emisor* (OCIF, 5 years) *Maestro Plomero* (DE, 4 years), and *Técnico en Radioterapia* (DS, estimated at 2.7 years based on the hours of supervised work).

As can be observed in Table 7, a majority of the licenses in Puerto Rico have an educational requirement (109 licenses, 78%), with 57 licenses (41%) requiring 4 or more years of education. It is notable that a majority of the licenses in DACO, DRNA, NTSP, OCIF, and OCS have no educational requirement. As could be expected, the most burdensome licenses, requiring 7-8 years of education are in PJ and DS.

Table 6. Experience related burden by agency.

Agency	#L	Experience requirements in days: #L (%L)					
		Avg. Exp(d)	0	1 – 182 days (Up to 6 months)	183-360 days (1/2 to a year)	361-730 days (1 to 2 years)	730+ days (More than 2 years)
CJ	4	0.0	4(100%)				
CT	2	365.0	1(50%)			1(50%)	
DACO	8	0.0	8(100%)				
DE	35	208.6	23(66%)		6(17%)	5(14%)	1(3%)
DF	1	0.0	1(100%)				
DH	1	0.0	1(100%)				
DRD	3	38.3	1(33%)	2(67%)			
DRNA	4	0.0	4(100%)				
DS	61	146.3	28(46%)	14(23%)	17(28%)	1(2%)	1(2%)
DSP	2	0.0	2(100%)				
NTSP	6	0.0	6(100%)				
OCIF	6	304.9	4(67%)	1(17%)			1(17%)
OCS	5	0.0	5(100%)				
PJ	2	0.0	2(100%)				
All	140	135.0	90(64%)	17(12%)	23(16%)	7(5%)	3(2%)

Table 7. Education related burden by agency.

Agency	#L	Avg. Edu(d)	Education requirements: #L (%L)						
			0	1-90d	91 – 364d	1-3y	4	5-6y	7-8y
CJ	4	35.0		4(100%)					
CT	2	46.5	1(50%)		1(50%)				
DACO	8	0.0	8(100%)						
DE	35	851.5	2(6%)	2(6%)	12(34%)	4(11%)	10(29%)	5(14%)	
DF	1	1.3		1(100%)					
DH	1	0.0	1(100%)						
DRD	3	11.3	1(33%)	2(67%)					
DRNA	4	1.6	3(75%)	1(25%)					
DS	61	1,711.1		2(3%)	1(2%)	18(30%)	7(11%)	19(31%)	14(23%)
DSP	2	130.7		1(50%)	1(50%)				
NTSP	6	0.6	4(67%)	2(33%)					
OCIF	6	0.0	6(100%)						
OCS	5	0.0	5(100%)						
PJ	2	2,555.0							2(100%)
All	140	998.8	31(22%)	15(11%)	15(11%)	22(16%)	17(12%)	24(17%)	16(11%)

The per agency results for the combination of experience and education requirements are presented in Table 8 as a Calendar Days Lost (CDL) average burden metric. As can be expected, the results in this table are highly related to those associated to the education burden, as most licenses do not have an experience requirement. There are 27 licenses (19%) with no CDL burden, while a majority of the licenses (68 licenses, 49%) have a CDL of more than two years, in most cases due to educational requirements. Table B in the Appendix lists all the licenses with a CDL measure of 1,460 days or more (four years or more).

Table 8.CDL burden by agency.

Agency	#L	Calendar days lost: #L (%L)					
		Avg.	0	1 – 182 days (Up to 6 months)	183-360 days (1/2 to a year)	361-730 days (1 to 2 years)	730+ days (More than 2 years)
CJ	4	35.0		4(100%)			
CT	2	411.5	1(50%)				1(50%)
DACO	8	0.0	8(100%)				
DE	35	1,060.1	1(3%)	5(14%)	7(20%)	5(14%)	17(49%)
DF	1	1.3		1(100%)			
DH	1	0.0	1(100%)				
DRD	3	49.7		3(100%)			
DRNA	4	1.6	3(75%)	1(25%)			
DS	61	1,857.4		2(3%)	3(5%)	9(15%)	47(77%)
DSP	2	130.7		1(50%)	1(50%)		
NTSP	6	0.6	4(67%)	2(33%)			
OCIF	6	304.9	4(67%)	1(17%)			1(17%)
OCS	5	0.0	5(100%)				
PJ	2	2,555.0					2(100%)
All	140	1,133.8	27(19%)	20(14%)	11(8%)	14(10%)	68(49%)

All licenses in Puerto Rico require direct payments to the agencies and in most cases, other documents and evidence that involve a payment to the agency or a third party (for example, a notarized affidavit). Table 9 provides the fees related burden by agency. Close to half the licenses in Puerto Rico have fees below \$200 (69 licenses, 49%), while there are 14 “Cadillac” licenses (10%) that have fees that surpass the \$1,000 mark. The agencies with the largest representation on the high fees area are DS and OCIF. Appendix C (Table C) lists all the licenses with fees of \$400 or more.

Table 9. Fees burden by agency.

Agency	#L	Avg.	Fees: #L (%L)				
			Less than \$100	\$101-\$200	\$201-\$400	\$401-\$1,000	More than \$1,000
CJ	4	\$ 233	2(50%)	1(25%)		1(25%)	
CT	2	\$ 153		2(100%)			
DACO	8	\$ 284	1(13%)	1(13%)	5(63%)	1(13%)	
DE	35	\$ 403	5(14%)	7(20%)	14(40%)	6(17%)	3(9%)
DF	1	\$ 35	1(100%)				
DH	1	\$ 565				1(100%)	
DRD	3	\$ 83	2(67%)	1(33%)			
DRNA	4	\$ 558	2(50%)	1(25%)			1(25%)
DS	61	\$ 438	9(15%)	26(43%)	10(16%)	10(16%)	6(10%)
DSP	2	\$ 114	1(50%)	1(50%)			
NTSP	6	\$ 150	3(50%)	2(33%)	1(17%)		
OCIF	6	\$ 1,246		1(17%)		1(17%)	4(67%)
OCS	5	\$ 446			3(60%)	2(40%)	
PJ	2	\$ 300			2(100%)		
All	140	\$ 420	26(19%)	43(31%)	35(25%)	22(16%)	14(10%)

The last burden discussed in this section (an element of the LtW study) relates to the examinations required to obtain a license. The examinations related burden is presented in Table 10. It is important to note that multi-section, multi-part exams are considered as a single exam. Six of the agencies require no examinations (CJ, DACO, DF, DH, DRNA, and NTSP), while two of the agencies require at least one examination for all their licenses (OCS and PJ). The majority of the licenses require at least one exam (102 licenses, 73%), but only 20 licenses (14% of the total) require more than one exam. It is noted that the agencies (and their associated examination boards) develop the exams for 83 out of the 102 licenses that require exams. Furthermore, exams, including those developed/prepared by the agencies, are for the most part offered by external third-party providers (for 70 out of the 102 licenses that require exams), such as Didaxis.

Table 10. Examinations burden by agency.

Agency	#L	Number of Exams: #L (%L)				
		Avg.	0	1	2	3+
CJ	4	0.25	3(75%)	1(25%)		
CT	2	1.00	1(50%)		1(50%)	
DACO	8	0.13	7(88%)	1(13%)		
DE	35	1.20	8(23%)	16(46%)	8(23%)	3(9%)
DF	1	0	1(100%)			
DH	1	0	1(100%)			
DRD	3	0.33	2(67%)	1(33%)		
DRNA	4	0.0	4(100%)			
DS	61	1.02	3(5%)	54(89%)	4(7%)	
DSP	2	0.50	1(50%)	1(50%)		
NTSP	6	0	6(100%)			
OCIF	6	2.17	1(17%)	1(17%)		4(67%)
OCS	5	1.00		5(100%)		
PJ	2	1.00		2(100%)		
All	140	0.92	38(27%)	82(59%)	13(9%)	7(5%)

3.3 Systems

The evaluation included two characterizations related to the system used by applicants. The first identified the “overall approach” used to manage the interaction and information flow processes. This characterization was based on three options: a) web-based, b) email-based, c) in person or a combination. The second characterization was the ease of the interaction in terms of information availability and organization. This characterization was based on a 4-point Likert scale where a 1 was defined as “relatively easy / all information available in one location”, and a 4 defined as “complicated / missing information / highly disorganized”.

The results for the types of approaches are presented in Table 11. A majority of the licenses (105 licenses, 75%) are “managed” by web-based systems, while a small, but still a significant percentage, require in person processes (30 licenses, 21%). Only three agencies have all their licenses under the web-based approach (DACO, DE, and OCS), while seven agencies have all their licenses managed with an in-person approach. Table 12 presents the results for the ease of use and information availability characterization. A majority of the licenses (77 licenses, 55%) are characterized with a 1 or 2 score, the system is relatively easy to use and the information is organized, therefore with a “favorable” assessment. The agencies with the best performance are DACO, DE, DRD, and OCS. On the other hand, the agencies with a majority of their licenses with an unfavorable score (3 or 4) are CJ, DF, DS, and OCIF.

Table 11. Types of license application system approaches by agency.

Agency	#L	Web	Email	InP
CJ	4			4 (100%)
CT	2		1 (50%)	1 (50%)
DACO	8	8 (100%)		
DE	35	35 (100%)		
DF	1			1 (100%)
DH	1			1 (100%)
DRD	3		3 (100%)	
DRNA	4			4 (100%)
DS	61	57 (93%)		4 (7%)
DSP	2			2 (100%)
NTSP	6			6 (100%)
OCIF	6		1 (17%)	5 (83%)
OCS	5	5 (100%)		
PJ	2			2 (100%)
All	140	105(75%)	5(4%)	30(21%)

Table 12. Ease of use characterization for the license application system by agency.

		1 = Relatively easy / all information in one location 4 = Complicated / missing information / highly disorganized				
Agency	#L	Avg.	1	2	3	4
CJ	4	4.0				4(100%)
CT	2	1.0	2(100%)			
DACO	8	1.5	4(50%)	4(50%)		
DE	35	1.2	29(83%)	5(14%)		1(3%)
DF	1	3.0			1(100%)	
DH	1	2.0		1(100%)		
DRD	3	1.0	3(100%)			
DRNA	4	2.3		3(75%)	1(25%)	
DS	61	3.0	8(13%)	6(10%)	26(43%)	21(34%)
DSP	2	3.0			2(100%)	
NTSP	6	2.0		6(100%)		
OCIF	6	3.2			5(83%)	1(17%)
OCS	5	1.0	5(100%)			
PJ	2	2.5		1(50%)	1(50%)	
All	140	2.3	51(36%)	26(19%)	36(26%)	27(19%)

3.4 Documents

The research included characterizing the specific set of documents that each license required as part of the initial application process. The complete list of documents was presented in Table 1. At least 40% of the licenses require 9 out of the 32 documents. Table 13 presents the list of documents that are required by at least 40% of the licenses, ordered by how frequently they are part of the requirements. Table 14 presents the average number of required documents per license by agency. The three agencies with the highest requirements are DS, DACO, and DSP, while the agencies with the lowest requirements are DRNA, PJ and NTSP.

Table 13. Documents required by more than 40% of the licenses.

Good conduct certificate (“Certificado de Antecedentes Penales”)	83%
Exam results	64%
Certificate of studies/of training	60%
Administration for the Child Support “ASUME” certificate	59%
Diploma	58%
Passport or other document to determine nationality/residence status	56%
Photo	56%
Transcripts	55%
Affidavit of identification	46%

Table 14. Average number of total required documents per license by agency.

Agency	#L	Required Documents
CJ	4	5.5
CT	2	8.5
DACO	8	9.0
DE	35	8.0
DF	1	7.0
DH	1	6.0
DRD	3	8.3
DRNA	4	3.5
DS	61	11.6
DSP	2	9.5
NTSP	6	5.0
OCIF	6	7.0
OCS	5	6.8
PJ	2	5.0
All	140	9.2

3.5 Examination Boards and Professional Organizations

Licenses in Puerto Rico, like in many US Jurisdictions, have examination boards who serve as co-regulators of the licensing processes. These boards typically evaluate applications and design the examination processes. National and local professional organizations, in some cases called “Colegios”, may also be involved in the licensing processes. This is the case when a membership to an organization is required to obtain and maintain an occupational license.

Table 15 presents the information related to examination boards and professional organizations. Column JE indicates the licenses with a local examination board; column PO indicates where a professional organization exists; and column RQ indicates the licenses where being a member of the professional organization is required to obtain and maintain a license.

A total of 108 licenses (77%) are supervised by an examination board (JE), with 100% of these licenses being regulated by DE, DS, DSP, NTSP, and PJ. On the other hand, there are no examination boards for the licenses regulated by CJ, CT, DACO, DF, DH, OCIF, and OCS. Almost half of the licenses fall under the scope of a professional organization (69 licenses, 49%) and membership is required in 48 licenses (34%).

Table 15. Characterizations related to examination boards and professional organizations by agency.

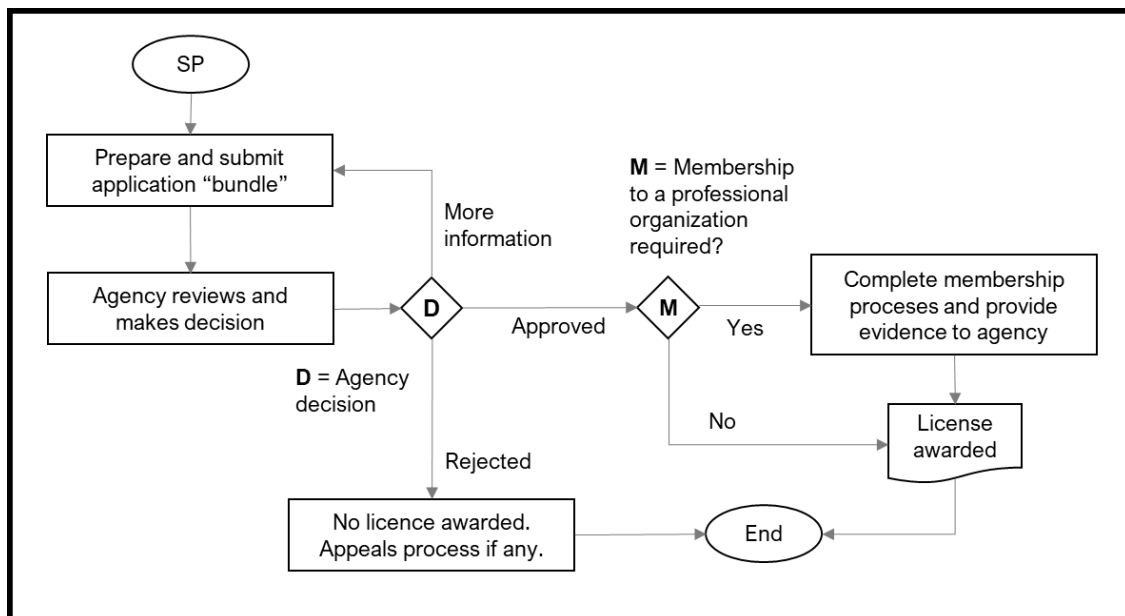
Agency	#L	Professional Organizations		
		JE	PO	RQ
CJ	4			
CT	2			
DACO	8			
DE	35	35(100%)	24(69%)	15(43%)
DF	1			
DH	1		1(100%)	1(100%)
DRD	3	1(33%)		
DRNA	4	1(25%)		
DS	61	61(100%)	36(59%)	27(44%)
DSP	2	2(100%)		
NTSP	6	6(100%)		
OCIF	6		6(100%)	5(83%)
OCS	5			
PJ	2	2(100%)	2(100%)	
All	140	108(77%)	69(49%)	48(34%)

3.6 Process Flows

From a macro/top level perspective, the process to obtain an occupational license is relatively simple. The licensing process starts once the individual has acquired the necessary education and experience. In general, there are three possible macro level flows, as described next.

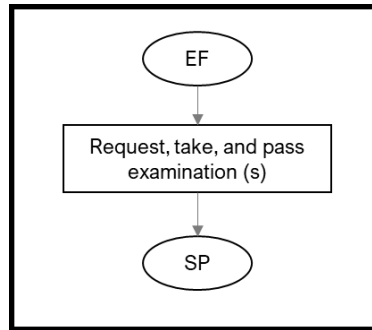
- Simple (SP): in this flow the individual completes the application forms, gathers all required documents, and submits the “bundle” to the agency. The agency reviews the “package” and makes decisions: reject, approve or request more information. If membership to a professional organization is required, this event will be an additional final step. Figure 1 presents a flowchart of this macro level process.

Figure 1. Flowchart of the simple (SP) macro level licensing process



- Exam first (EF): in this flow the individual must first pass the required examination(s). After passing the exam(s), the process is as the simple case previously described, with the exam results being one additional requirement in the “bundle” submitted to the agency. It is noted that often some documents, for example academic degree information, is required to be allowed to take the exam. Figure 2 presents a flowchart of this macro level process.

Figure 2. Flowchart of the exam first (EF) macro level licensing process



- Exam second (ES): in this flow the individual completes the application forms, gathers all required documents, and submits the “bundle” to the agency. The agency reviews the “package” and then allows the individual to take the examination(s). Under most circumstances, passing the exam(s) would result in a license being awarded, although in some cases a second review is made. As in the first two macro level flows (SP and EF), membership to a professional organization is the last step. Figure 3 presents a flowchart of this macro level process.

Figure 3. Flowchart of the exam second (ES) macro level licensing process

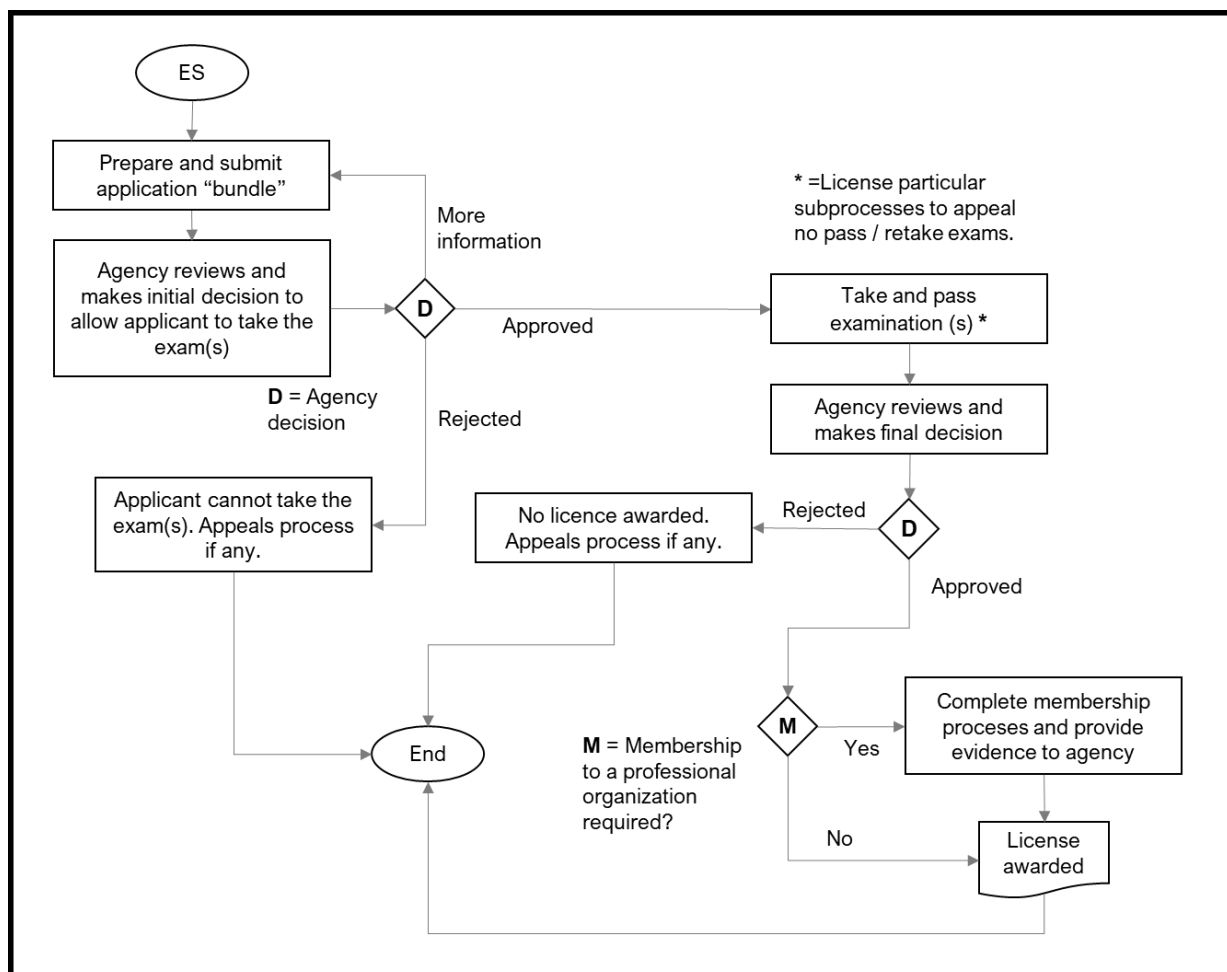


Table 16 presents the types of flows to obtain an occupational license per agency, including the requirements of membership to professional organizations. The columns with the PO-ending indicate the related flow where membership to a professional organization is required. Most of the licenses follow the exam first (EF) flow (75 licenses, 54%), with 35 of those requiring membership to a professional organization before the license is awarded. The simple process (SP) flow is next, with 38 licenses following that sequence (27%). Only 5 of those 38 require membership to a professional organization. The exam second (ES) flow is the least common (27 licenses, 19%), with 8 of these licenses requiring membership to a professional organization. Most agencies have some licenses that follow the SP flow, the exception being OCS and PJ, which are the only agencies that require exams for all their licenses. The EF flow is observed in seven agencies (CJ, CT, DACO, DE, DRD, DS, and OCIF), while the ES flow is observed in five agencies (DE, DS, DSP, OCS, and PJ).

Table 16. Characterizations related to macro level process flow by agency.

		Process Flowchart Types					
Agency	#L	SP	SP-PO	EF	EF-PO	ES	ES-PO
CJ	4	3(75%)	0	1(25%)	0	0	0
CT	2	1(50%)	0	1(50%)	0	0	0
DACO	8	7(88%)	0	1(13%)	0	0	0
DE	35	5(14%)	3(9%)	14(40%)	12(34%)	1(3%)	0
DF	1	1(100%)	0	0	0	0	0
DH	1	0	1(100%)	0	0	0	0
DRD	3	2(67%)	0	1(33%)	0	0	0
DRNA	4	4(100%)	0	0	0	0	0
DS	61	3(5%)	0	21(34%)	19(31%)	10(16%)	8(13%)
DSP	2	1(50%)	0	0	0	1(50%)	0
NTSP	6	6(100%)	0	0	0	0	0
OCIF	6	0	1(17%)	1(17%)	4(67%)	0	0
OCS	5	0	0	0	0	5(100%)	0
PJ	2	0	0	0	0	2(100%)	0
All	140	33(24%)	5(4%)	40(29%)	35(25%)	19(14%)	8(6%)
General flow type		38(27%)		75(54%)		27(19%)	

3.7 Recognition and other licenses

Licenses in Puerto Rico can be obtained by having a license from another jurisdiction or organization. Some licenses require another license; for example, the *Maestro Plomero* license can only be obtained if the applicant holds the *Oficial Plomero* license. The term recognition is used when a jurisdiction recognizes that an applicant is qualified to perform the occupation by the other jurisdiction's examination and evaluation processes. However, in most cases, the

license holder is exempted from the examination and experience requirements but must present all the required documentation and pay all related fees.

The characteristics related to recognition and other licensing requirements are presented in Table 16. Column RE presents the number of licenses per agency that recognize licenses from another jurisdiction, column RE-S provides the cases of RE where the regulations specify the jurisdictions that qualify, column RE-P indicates the number of license where the recognition is based on having a license from a professional organization, and column AL indicates if another license is required. Most of the licenses have the option of recognition (84 licenses, 60%). It is relevant to note that the majority of the licenses in DS include recognition (93%), and that the concept only applies to the licenses of 5 agencies (DACO, DE, DS, DSP, and OCS). The details of which jurisdictions are recognized is provided in less than half of the cases (38 out of 84). A small number of licenses (21 licenses, 15%) have recognition based on a professional type of license, while only a slightly higher number (31 licenses, 22%) have as a requirement that the applicant holds another license. It is noted that in the case of NTSP, all relate to vehicle driving licenses.

Table 16. Characterization of licensing recognition and “another” license requirements by agency.

Agency	#L	RE	RE-S	RE-P	AL
CJ	4	0	0	0	0
CT	2	0	0	0	0
DACO	8	1(13%)	1(13%)	0	0
DE	35	23(66%)	4(11%)	1(3%)	6(17%)
DF	1	0	0	0	0
DH	1	0	0	0	0
DRD	3	0	0	0	0
DRNA	4	0	0	0	0
DS	61	57(93%)	32(52%)	20(33%)	18(30%)
DSP	2	1(50%)	1(50%)	0	0
NTSP	6	0	0	0	6(100%)
OCIF	6	0	0	0	0
OCS	5	2(40%)	0	0	0
PJ	2	0	0	0	1(50%)
All	140	84(60%)	38(27%)	21(15%)	31(22%)

3.8 Provisional licenses

Provisional licenses are granted to account for a variety of situations. Our analysis considered them as part of the processes of obtaining the “regular license”, not as separate licenses. In concept, provisional licenses are a “temporary” approval to perform the occupation and for the most part, optional. This can be related to an allowance based on a wait period to receive exam results or to receive documentation. There are, however, some licenses where the process

requires all applicants to first have the provisional license. Table 17 presents the results related to provisional licenses. Column OP indicates where there is an option for a provisional license, column RP where it is required to first have a provisional license, and column DP indicates the average time in days that the individual can perform the occupation under the provisional authorization.

A total of 50 licenses (36%) allow individuals to perform an occupation in a provisional basis, and a very small number (16 licenses, 11%) require performing the occupation under a provisional status. Seven agencies have provisional licenses, with CJ allowing a short period of work for all of its licenses. The time allowed under provisional licenses varies significantly, from 30 days for casino-related licenses (CJ) to almost two years for the licenses under DE. A few provisional licenses have no defined duration (U), as in the case of the OCIF provisional license.

Table 17. Characterization of “another” license requirement by agency.

Agency	#L	OP	RP	DP
CJ	4	4(100%)	0	30
CT	2	0	0	0
DACO	8	1(13%)	0	730
DE	35	9(26%)	2(6%)	648.8
DF	1	0	0	0
DH	1	0	0	0
DRD	3	0	0	0
DRNA	4	0	0	0
DS	61	30(49%)	14(23%)	410.6
DSP	2	1(50%)	0	90
NTSP	6	4(67%)	0	90
OCIF	6	1(17%)	0	U
OCS	5	0	0	0
PJ	2	0	0	0
All	140	50(36%)	16(11%)	393.6

3.9 Renewal

Most of the licenses must be renewed; only 7 licenses (5%) are permanent. Renewals primarily have two elements of burden: fees and education, compounded by how frequently they must be renewed (period of validity). Table 18 provides the renewal characteristics by agency. Column PL indicates the permanent licenses, column RW indicates the renewable licenses, column YR the years between renewals, and column RF the renewal costs/fees. The reported values include costs to keep membership in a professional organization, in cases where this is a requirement of the license. Column ER indicates the licenses that require continuous education credit hours, and finally, column CH indicates the continuous education (CE) credit hours required for renewal.

Only four agencies have permanent licenses, with PJ being the only where all of its licenses are permanent. It must be noted that the two licenses under PJ require continuous education courses (or lose their license), but there is no renewal process per se. The average validity of licenses is 3 years (time between renewals), with some requiring renewals every year (OCIF), while others have an averaging validity time of more than 6 years as in the case of NTSP. Renewal associated costs/fees across all licenses average \$350 and range significantly across the agencies, with DH and OCIF having the highest costs/fees, while DF and DRD have average costs/fees below \$100. While all licenses with renewals have costs/fees, not all have an educational burden. Of the 133 licenses that must be renewed, 88 have an educational burden. Five agencies that have renewals do not have an educational requirement (CJ, DACO, DF, DRNA, and NTSP), while for five agencies, most of their renewals have an educational requirement (DE, DH, DS, DSP, and OCS). The average educational requirement is 36.4 credit hours of CE, with licenses from DE and DS having the highest requirements.

Table 18. Characterization of the renewal requirements by agency.

Agency	#L	PL	RW	YR	RF	ER	CH
CJ	4		4(100%)	2.0	\$ 140		
CT	2		2(100%)	5.0	\$ 110	1(50%)	30
DACO	8	1(13%)	7(88%)	1.7	\$ 190		
DE	35	3(9%)	32(91%)	3.5	\$ 387	21(60%)	40.3
DF	1		1(100%)	2.0	\$ 70		
DH	1		1(100%)	4.0	\$ 1,515	1(100%)	12
DRD	3		3(100%)	2.0	\$ 58	1(33%)	2
DRNA	4	1(25%)	3(75%)	2.3	\$ 748		
DS	61		61(100%)	3.0	\$ 258	56(92%)	38.9
DSP	2		2(100%)	2.0	\$ 114	2(100%)	6
NTSP	6		6(100%)	6.8	\$ 109		
OCIF	6		6(100%)	1.0	\$ 1,507	1(17%)	8
OCS	5		5(100%)	2.0	\$ 471	5(100%)	24
PJ	2	2(100%)					
All	140	7(5%)	133(95%)	3.0	\$ 350.3	88(63%)	36.4

4. Relationships

This section analyzes relationships between licensing burdens and two elements of the licenses: examination boards and professional organizations, the later when membership is required. Figures 4 to 6 present relationships between several burdens and licenses regulated by examination boards, while Figures 7 to 9 present relationships between several burdens and the requirement to be in a professional organization (typically called *Colegios* for PR based organizations).

As can be observed in Figures 4 to 6, burdens are for the most part, higher for licenses regulated by examination boards. Figure 4 demonstrates there are very significant differences in terms of experience, education, and by consequence CDL (remembering that CDL is the sum of the experience and education burdens) for the licenses with examination boards, where those that have it have a much higher burden. As can be observed in Figure 5, there is no significant difference in terms of the initial costs/fees (slightly higher for licenses with no examination boards), but the documents and exams required burden is notably higher for those with examination boards. Figure 6 presents the relationships associated with renewal for those that can be renewed, which is the majority. The left graph of Figure 6 illustrates that licenses with examination boards have a longer period between renewals, therefore a lower burden. The center graph of Figure 6 provides the renewal costs and fees divided by the renewal period (therefore a normalized value), and it clearly shows that licenses with examination boards have much lower costs/fees than those not regulated by EBs. It is worth mentioning that most healthcare professions have examination boards, and these occupations have high renewal costs/fees. The right graph of Figure 6 presents the CE requirement in term of credit hours normalized by the renewal period. This graph demonstrates that the CE burden is higher for licenses with examination boards.

Figure 4. Relationship between time burdens and examination boards.

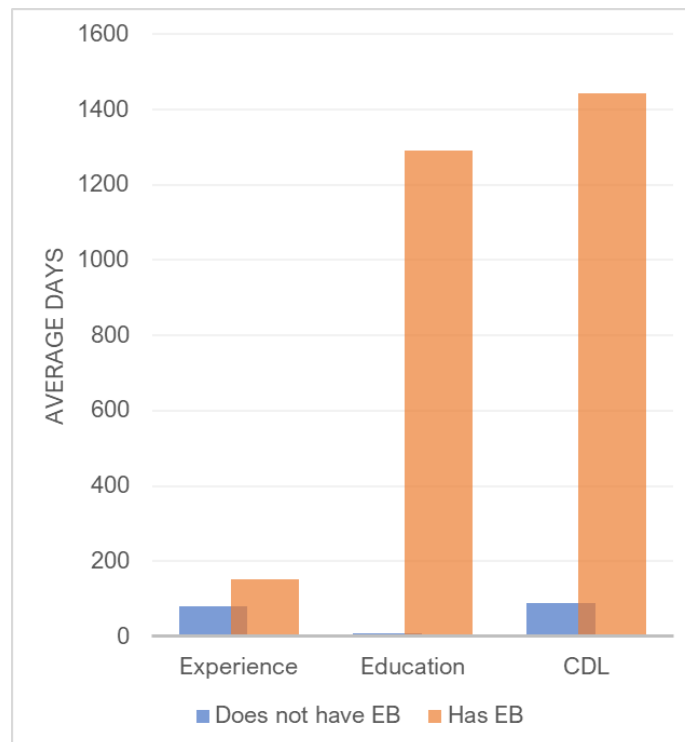


Figure 5. Relationship between initial costs/fees, documents & exams and examination boards.

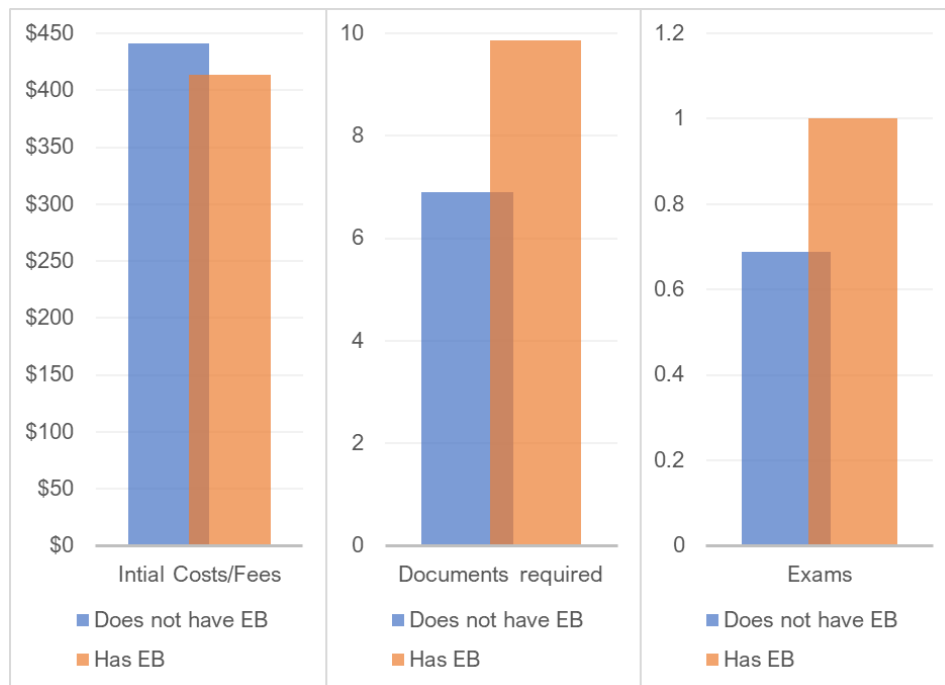
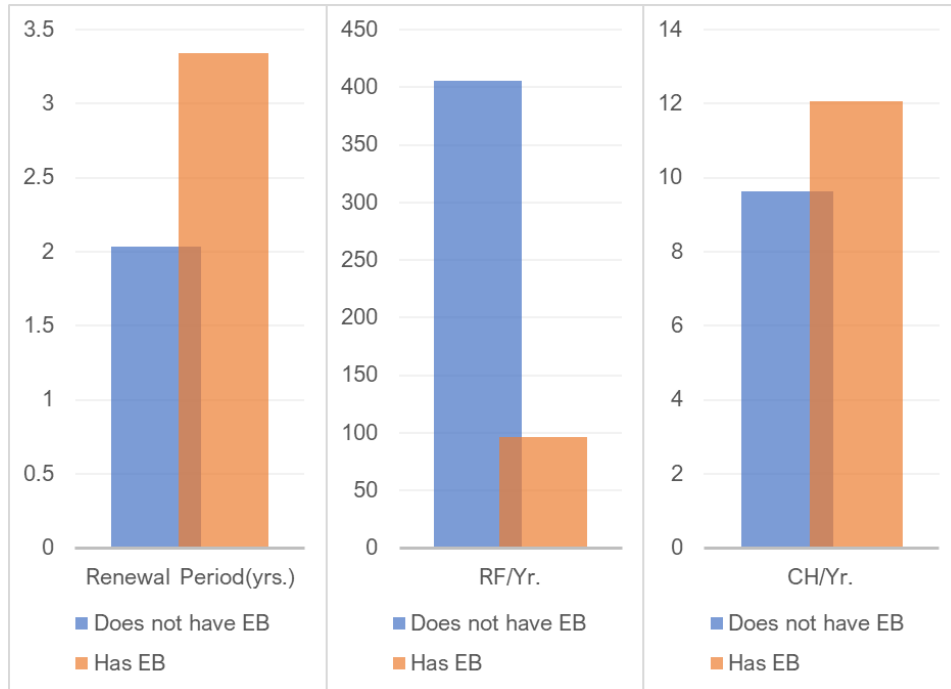


Figure 6. Relationship between renewal periods, normalized renewal fees, & normalized credit hours and examination boards.



Figures 7 to 9 provide the relationship between licensing burdens and the requirement to belong to a professional organization (PO). The results presented in Figure 7 demonstrate that licenses that have require membership in a PO have higher time burdens, although the difference is smaller when compared to that observed between licenses that have/do not have examination boards (Figure 4). Figure 8 illustrates that licenses that require membership to a PO have significantly larger initial fees, require more documents, and have more examinations. The results presented in Figure 9 indicate there is no difference in terms of the renewal period for licenses with a required PO membership. The middle graph of Figure 9 clearly shows that licenses with a required PO membership have significantly higher renewal costs/fees when considering their normalized value per year. This is relevant as over a 15 year period, licenses with no PO requirement will cost the individual about \$1,200, while licenses with a PO requirement will cost the individual approximately \$4,700. Finally, the right graph of Figure 9 shows that the CE requirement in term of credit hours normalized by the renewal period is notably higher for licenses with PO membership requirement.

Figure 7. Relationship between time burdens and requirement to belong to a professional organization.

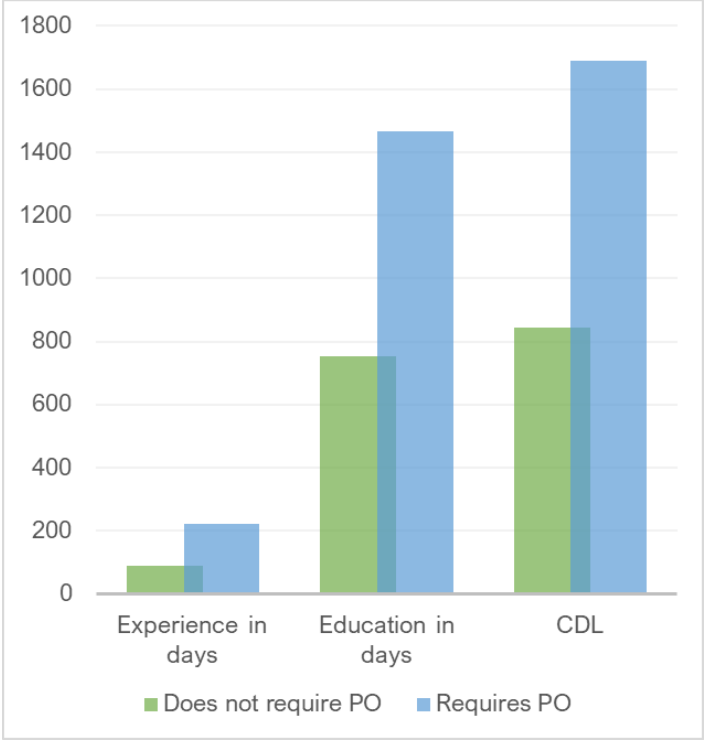


Figure 8. Relationship between initial costs/fees, documents & exams and the requirement to belong to a professional organization.

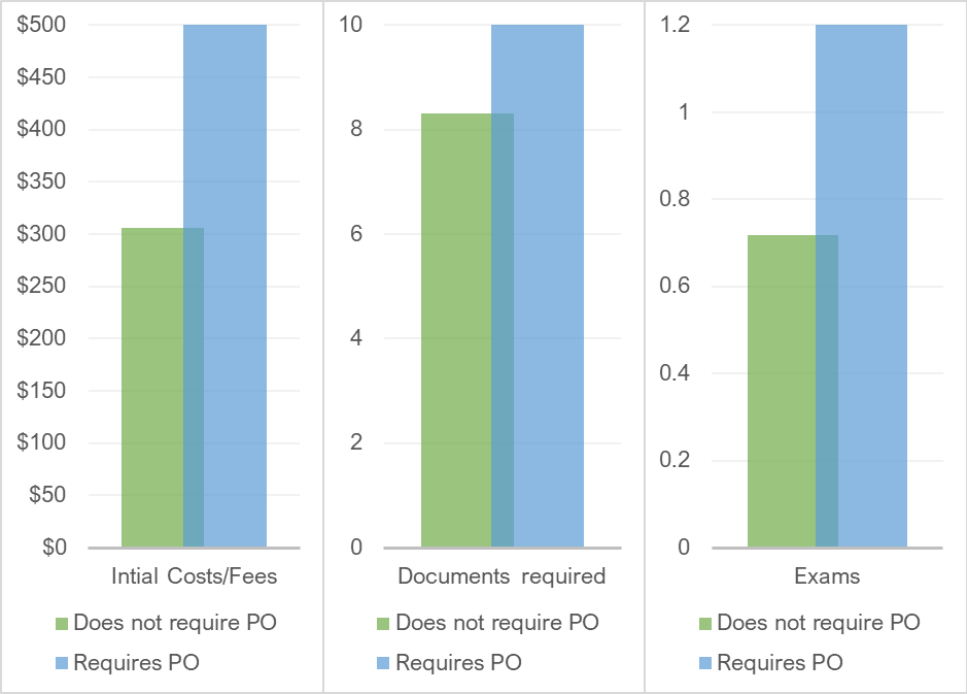
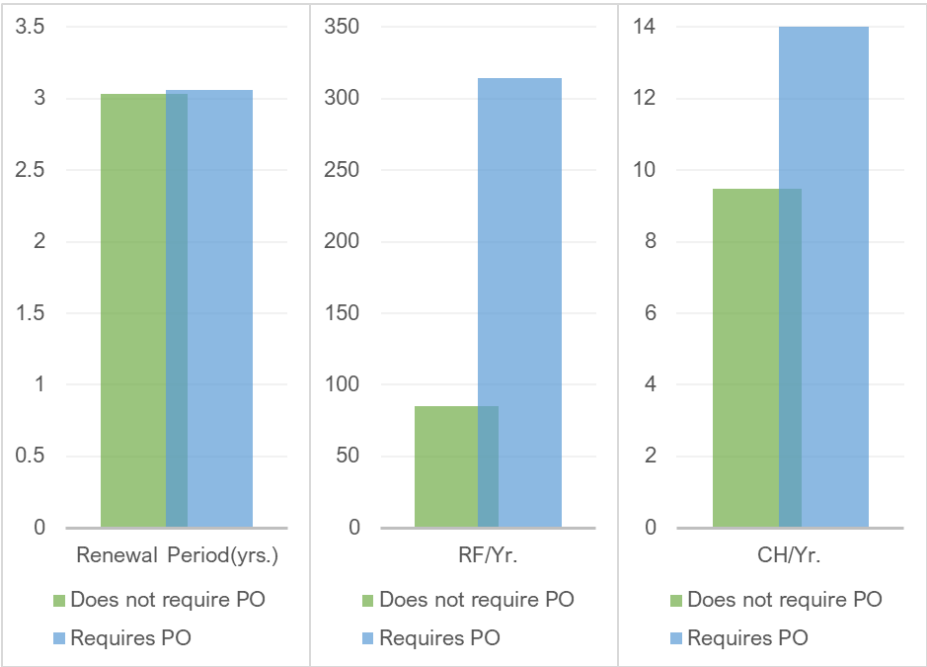


Figure 9. Relationship between renewal periods, normalized renewal fees, & normalized credit hours and the requirement to belong to a professional organization.



5. Summary and forthcoming work

This report presents the results of research conducted to describe the licensing requirements of the Commonwealth of Puerto Rico. It analyzes the burdens as characterized by the LtW study, plus a number of additional burdens including documents required and membership to professional organizations. It also analyzes burdens related to licensing renewals and describes the typical flows for those that want to get a license. In addition to the burdens, the report presents information related to the systems used by the agencies to manage the processes and also approaches to the recognition of licenses in other states, which “simplify” licensing requirements. The report finally analyzes the relationship between several types of burdens and two factors, licenses under examination boards and licenses that require membership to professional organizations.

There are two areas of upcoming work. The first is to use the information to be provided by the regulatory agencies in terms of number of licenses awarded and renewed to determine the overall burden of licenses in Puerto Rico. As the agencies will also be providing the licensing process cycle time, this analysis would include the overall burden in terms of time waiting. The second area of upcoming work is the assessment of Puerto Rico’s licensing burden versus the Kneer Center for the Study of Occupational Regulation database of licenses and to self-generated benchmarks.