VALIDATION REPORT
TASK ANALYSIS
L.A.R.E.

SUBMITTED TO: THE COUNCIL OF LANDSCAPE

ARCHITECTURAL REGISTRATION BOARDS (CLARB)

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Professional Testing

CLARB

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Overview

> *Licensing candidates in a profession, selecting the best employees, or increasing the professionalization of individuals through voluntary certification are challenges met by the application of accurate measures of knowledge, skills, and abilities.*

In November 2015 the Council of Landscape Architectural Registration Boards began a six-month task analysis process using a hybrid task analysis model. The hybrid task analysis model included three phases. The first phase was a review of the 2010 Task Analysis using the Delphi Technique to review job tasks internationally. The second phase included a focus group meeting with Landscape Architects who practice in North America to conduct a Task Inventory Analysis. The third phase included a large scale validation survey.

In total, over 7,400 subject matter experts from 58 different countries participated in hybrid task analysis. This report presents a detailed description of the process, as well as the results of the 2016 task analysis.

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Introduction

Job or task analysis is the process or procedure for analyzing the tasks performed by individuals in an occupation, as well as the knowledge, skills, and abilities required to perform those tasks. Specifically, job analysis can be defined as "any systematic procedure for collecting and analyzing job-related information to meet a particular purpose" (Raymond, 2001, p. 372). Job analysis can be used for multiple purposes including, but not limited to, job description, job classification, job evaluation, performance appraisal, training, worker mobility, workforce planning, efficiency, safety, and legal and quasi-legal requirements (Brannick, Levine, & Morgeson, 2007). Job analysis is traditionally used by secondary and post-secondary educators, business or industry trainers, government or military trainers, and test developers. Although there are multiple methods for conducting job or task analyses, for this job task analysis, a hybrid model was chosen combining elements of task inventory analysis and the Delphi technique.

Methods

Job Task Analysis Process Overview

A job analysis or task analysis is a foundational requirement of any valid credentialing program and helps to identify the core knowledge areas, critical work functions, and/or skills that are common across a representative sampling of current practitioners or job incumbent workers. Empirical results from the task analysis provide examinees and the public the basis of a valid, reliable, fair and realistic assessment that reflects the skills, knowledge, and abilities required for competent job performance. The services of Professional Testing were secured to assist with the development of the credential.

The Council of Landscape Architectural Registration Boards (CLARB) contracted with Professional Testing, who utilized knowledge of subject matter experts (SMEs) and Psychometricians with expertise in job/task analysis to prepare a comprehensive list of activities associated with the job duties performed by a Landscape Architect. The process used for this job task analysis was a hybrid model incorporating elements of both the Delphi technique and task inventory analysis.

The task analysis began in November, 2015 and concluded in June, 2016.

Hybrid Task Analysis Model

Phase I – Delphi Technique

The first phase of this hybrid task analysis included a review of the 2010 Task Analysis utilizing the Delphi Technique. The Delphi Technique is a "formalized methodology for virtually gathering subject matter experts (SMEs), eliciting their opinions on a topic, and then facilitating consensus-building through feedback" (Webb & Becker, 2014, p. 17). When applied to job/task analysis the Delphi Technique can be used to generate new job tasks or elicit feedback on a list of already established job tasks from SMEs who are unable to meet for a face-to-face

focus group meeting. For the purposes of this hybrid task analysis, the Delphi Technique was used to elicit feedback on the 2010 Task Analysis from landscape architects who practice internationally.

There were two rounds of surveys administered using the Delphi Technique. During the first round, SMEs were asked to review all of the job tasks from the 2010 Task Analysis and provide input on the following:

- whether or not tasks identified during the 2010 task analysis are still performed by landscape architects in your region;
- whether or not the language used to describe each task is appropriate; and
- whether or not there are tasks missing from each overall areas of practice.

Specifically, they were asked "Do landscape architects do this in your region?" – yes or no. Then, if they selected "No", they were asked why not. Lastly, they were asked "Are there any areas of work that were missing from this list?" and "Please share any additional thoughts or comments you had about the survey." A copy of the first round of Delphi Technique surveys is presented in Appendix A.

The first round of surveys was administered during a two-week window in November, 2015. Once completed, all responses were reviewed by the Psychometrician. New job tasks were added, existing job tasks were removed, and existing job tasks were edited so that the language was consistent with international practice.

Then, a second round of the Delphi Technique survey was administered. Following the second round of surveys, all responses were reviewed and job tasks added, edited, or removed job tasks based on the feedback from participants. A copy of the second round of Delphi Technique surveys is presented in Appendix B.

The final list of job tasks from Phase I was presented to the participants in Phase II of the study.

Phase II - Focus Group Meeting

The second phase of this hybrid task analysis included a focus group meeting of North American-based landscape architects. The two-and-a-half-day focus group meeting took place on February 18-20, 2016 in Reston, Virginia with eight SMEs. A detailed description of the eight SMEs is presented in Table 1. During the meeting, the participants reviewed the 2010 Task Analysis and the resulting task list from Phase I of this study. Using those two documents as a baseline, they created a new list of job tasks and identified all corresponding knowledge areas; skills and abilities; and tools, equipment, and other resources (typically referred to as KSAOs).

Table 1: Meeting participants from the Task Inventory focus group meeting.

Participant	Organization, Area of Work, Location of Work
Shawsheen Baker	City of Raleigh, Public Sector, Raleigh, NC
Craig Coronato	Logan Simpson, Inc., Private Sector, Tempe, AZ
Kim Drake	CDM Smith, Private Sector performing Public work, Cambridge, MA
Paul Kissinger	EDSA, Private Sector, Ft Lauderdale, FL
Dean Pearson	Architerra Group, Private Sector performing some Public work, Littleton, CO
Ming-Han Li	Texas A&M University, Educator, Bryan/College Station, TX
Eha Naylor	Dillion Consulting Limited, Private Sector, Toronto, Canada
Ian Wasson	Public Sector, Vancouver, Canada

The first day began with an introduction to the task inventory method. Once the SMEs had a good understanding of task inventories, the remaining time on the first day was spent reviewing the 2010 Task Analysis and the results of Phase I of this task analysis. Next, they revisited the larger content areas to see what should be added, removed, or updated.

The second day was spent updating all tasks under each of the larger duty areas. Once all tasks were generated, the participants identified all corresponding KSAOs. On day two they were also asked to identify any supplementary lists that might accompany the duty and task list and corresponding KSAOs. For example, they might want to generate a list of Personal Protective Equipment, or specific Codes, Ordinances, and Regulations that apply to landscape architects.

On the last day, the group of SMEs identified all of the demographic questions that should be included on the validation survey as part of Phase III.

Phase III – Validation Survey

The third phase of this hybrid task analysis included a large-scale validation survey. The survey was developed to validate the tasks identified during the previous two phases. It was administered internationally between May-June, 2016. Professional Testing used an internet survey software system to administer the survey. Survey invitations were sent to all CLARB, ASLA, CELA, and IFLA members. There were also links to the survey posted on CLARB's website and social media (e.g., Facebook, Twitter). Any device with a web browser and internet connection could be used to access the survey.

Survey participants received a direct email from CLARB, ASLA, CELA, and IFLA describing the purpose for the online survey and inviting those members to participate. The email requested input regarding the job tasks routinely performed by landscape architects. The survey participants were directed to the survey website to complete the survey. The online survey consisted of approximately 155 job task statements addressing professional duties performed by landscape architects.

Development of Task Rating Scales for the Online Validation Survey

The first step in developing the online validation survey is to identify the rating scales with which survey participants will rate the tasks performed by a landscape architect. There are multiple models of rating scales used in job analyses; however, for the purposes of this study, two survey scales were used: task frequency and criticality. Note, the criticality rating scale was not administered to participants outside of the United States, Canada, and Puerto Rico.

Task frequency is simply how frequency each task is performed. It was chosen because, as identified in Newman, Slaughter, & Taranath, those tasks that are performed more often should have a higher emphasis placed on them (1999). Task criticality, however, is defined as the potential for public harm if the task is performed incorrectly or not at all. As Shimberg stated, "tests used for licensing must be able to help identify those who possess the knowledge,

skills, and abilities to perform critical tasks in a manner that will adequately safeguard the public health, safety, and welfare" (1981, p. 1140). The levels of each of the two rating scales are illustrated below:

Frequency	Criticality
Perform Very Often – 4	Serious or severe harm – 2
Perform Fairly Often – 3	Moderate level of harm – 1
Occasionally Perform – 2	Little or no harm – 0
Seldom Perform – 1	
Never Perform – 0	

Development of Demographic Questions for the Online Validation Survey

The second step in developing the online validation survey is to identify key demographic questions to ensure the representativeness of survey respondents and help evaluate possible threats to the validity of survey responses. Participants in Phase II of this hybrid task analysis, along with input from CLARB, identified the following demographic questions:

- Do you primarily practice in the United States, Canada, or Puerto Rico?
- Which of the following BEST describes where you currently are in your landscape architecture career?
- How long have you been working in landscape architecture?
- In which of the following locations have you worked in the past 5 years?
- If you practice internationally, in which regions do you practice?
- Are you a licensed or registered landscape architect?
    - If you are a licensed or registered landscape architect, how long have you been licensed or registered?
- What is your highest level of education?
- Do you have a degree in landscape architecture?
- How old are you?
- What is your gender?
- What is the size of the organization in which you work?
- In which sector are you employed?
    - [If participants said they worked in a Private practice]

- In which type of firm do you work?

- What is your role in the organization in which you work?

- Are you currently an adjunct faculty member?

- [If participants said they worked in a Public practice]

  - In which type of department do you work?

  - At which governmental level do you work?

  - Are you currently an adjunct faculty member?

- [If participants said they worked in an Academic setting]

  - Do you also practice outside of the educational setting in which you work?

- Which of the following projects do you perform as a landscape architect?

  - Are there any projects missing from this survey?

If participants answered "No" to the first question (Do you primarily practice in the United States, Canada, or Puerto Rico?), they were presented with one additional demographic question:

- In which country do you primarily practice landscape architecture? (Please select the country in which you work 51% or more of the time.)

For the purposes of this study all respondents were included in the final analysis.

Results

Phase I – Delphi Technique Results

The first round of surveys consisted of 68 job tasks spread across seven duty areas (as presented in Appendix A). A total of eight Landscape Architects responded to the survey. Respondents represented the following countries: China, Germany, Netherlands, Russia, and South Africa. Based on the feedback from the first round of respondents, 42 job tasks and three duty areas were added resulting in a list of 110 job tasks spread across 10 duty areas.

The new list of 110 job tasks was included in a second round of surveys (as illustrated in Appendix B). The second round was completed by six International Landscape Architects again representing China, Germany, Netherlands, Russia, and South Africa during a two-week window in January, 2016. Based on the feedback from the second round of respondents, nine additional job tasks were added.

Between the first and second round of surveys, most of the feedback resulted in slight modifications to the language used to describe job tasks. The final task list resulting from the two rounds of Delphi Technique surveys; which was used during the Phase II, focus group meeting; is included in Appendix C.

Phase II – Focus Group Meeting

The two-and-a-half-day face-to-face focus group meeting consisted of a review of the results of Phase I plus a review of the 2010 Task Analysis. A copy of the 2010 Task Analysis is included in Appendix D. Based on both the results of Phase I and the 2010 Task Analysis, the focus group participants created a *new* list of job tasks and added all corresponding knowledge, skills, abilities, and tools, equipment, and other resources (KSAOs).

The final document created by focus group participants included 155 job tasks spread across seven duty areas, 230 unique knowledge areas, 100 unique skills and abilities, and 76 tools,

equipment, or other resources. Additionally, the following lists were included to support the final job task list: technical disciplines, documentation tools, sample kit, acronyms, codes, ordinances, and regulations, project types, delivery methods, submittals, construction materials, and calculations. The compiled results of the face-to-face focus group meeting are included in Appendix E.

Phase III – Validation Survey

Response Rate and Representativeness of Online Validation Survey

Of all participants invited, a sample of 7,407 responded to the survey with approximately 4,650 completing at least a portion of the survey. The sample size of approximately 4,650 respondents is large enough to allow reasonable confidence in the results of the survey.

The background and demographic portions of the survey assist with determining how representative the survey respondents are of the population of interest. Survey respondents were separated into two separate groups: respondents within the United States, North America, and Puerto Rico and respondents outside of those countries.

The first question asked of all survey participants was "Do you primarily practice in the United States, Canada, or Puerto Rico?". The majority of individuals, 75.37%, selected "Yes" indicating that their primary practice was in the United States, Canada or Puerto Rico, as illustrated in Figure 1.

Figure 1: Primary practice within the United States, Canada, or Puerto Rico

Do you primarily practice in the United States, Canada, or Puerto Rico?

24.63%

75.37%

- Yes
- No
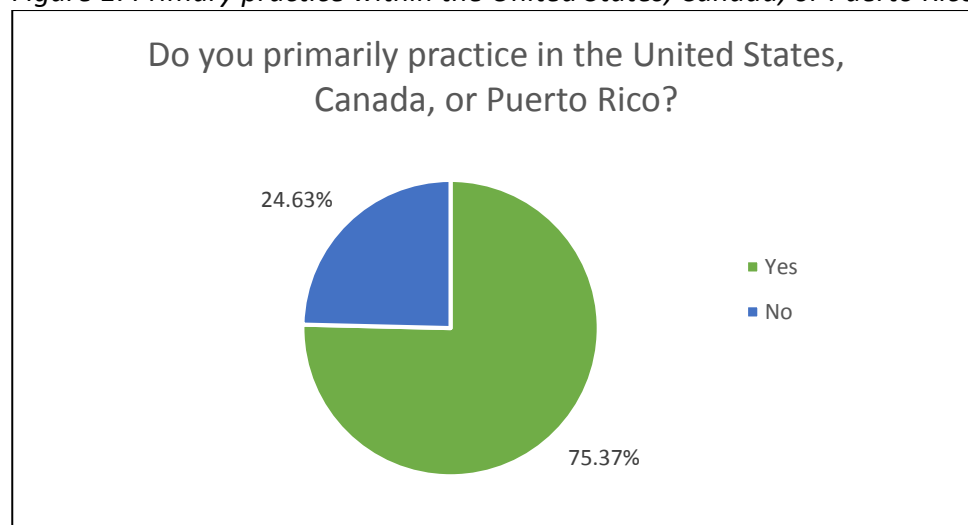
Survey participants reported having a variety of responses with regard to where they are in their landscape architecture careers. The majority of survey respondents in the United States, Canada, or Puerto Rico, 82.34%, reported being a "Licensed/registered landscape architect", as illustrated in Figure 2. The majority of respondents outside of the United States, Canada, or Puerto Rico, 83.5%, reported "Practicing landscape architecture professionally", as illustrated in Figure 3.

Figure 2: US, CAN, PR: Description of where respondents are in their landscape architecture career

Which of the following BEST describes where you currently are in your landscape architecture career?

1.38% 0.30% 1.90%
11.20%
2.89%

82.34%

- Currently enrolled in a landscape architecture college/university program
- Recent graduate from a landscape architecture college/university program
- Started taking the L.A.R.E. but have not completed all sections
- Recently completed the L.A.R.E. but not yet licensed

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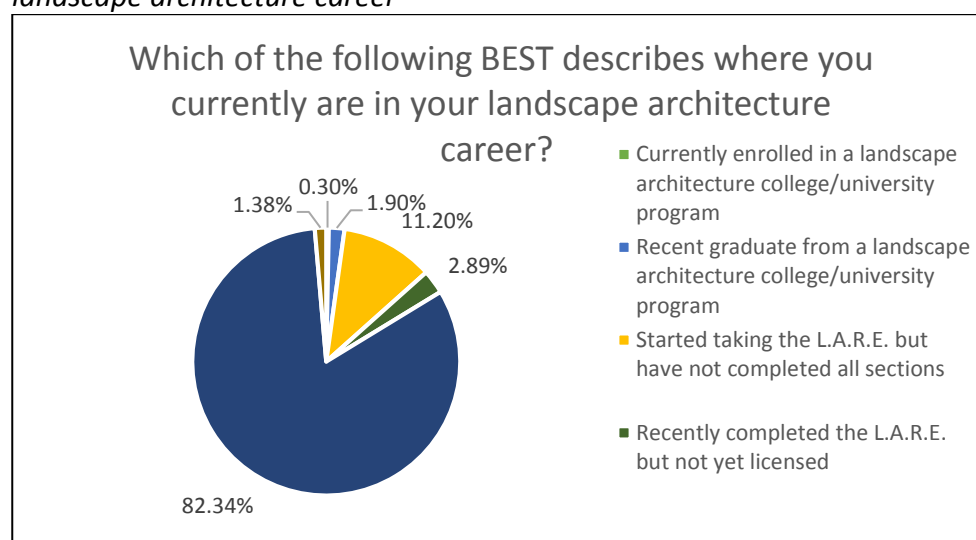
Figure 3: Non-US, CAN, PR: Description of where respondents are in their landscape architecture career.

Which of the following BEST describes where you currently are in your landscape architecture career?

- Currently enrolled in a landscape architecture college/university program
- Recent graduate from a landscape architecture college/university program
- Practicing landscape architecture professionally

9.4%   2.0%   5.1%

83.5%
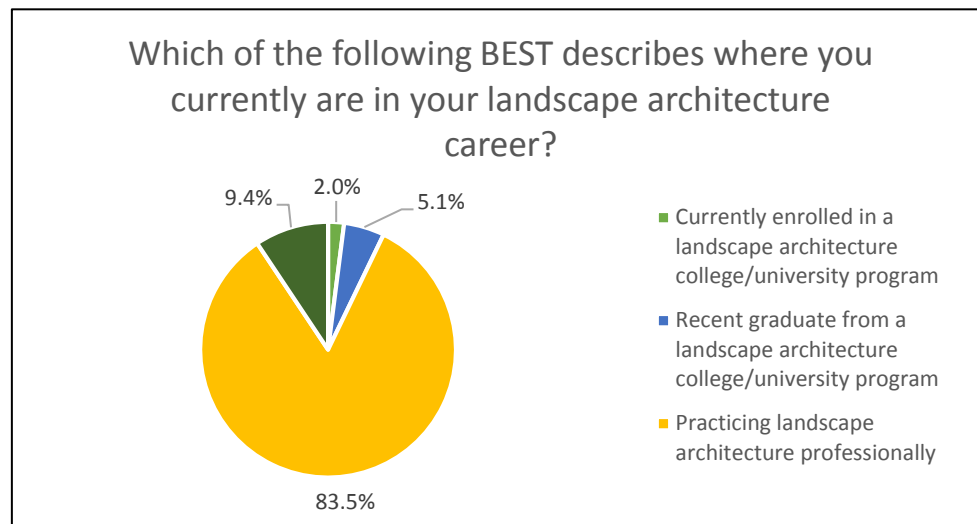
Survey participants reported working in landscape architecture for a variety of years. The majority of survey respondents, 58.8%, in the United States, Canada, or Puerto Rico reported working in landscape architecture for "16 or more years", as indicated in Figure 4. The largest number of survey respondents, 44.7%, outside of the United States, Canada, or Puerto Rico also reported working in landscape architecture for "16 or more years", as indicated in Figure 5.

Figure 4: US, CAN, PR: Length of time working in landscape architecture career

How long have you been working in landscape architecture?

70.0%	
60.0%	
50.0%	
40.0%	
30.0%	
20.0%	
10.0%	
0.0%	

Less than 1 year | 1-2 years | 3-5 years | 6-10 years | 11-15 years | 16 or more years | I am not currently working in landscape architecture

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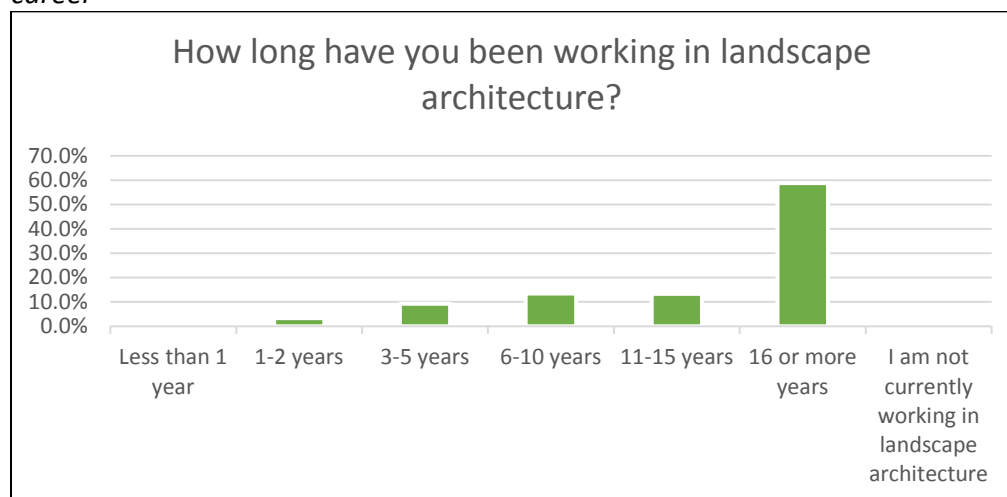
Figure 5: Non-US, CAN, PR: Length of time working in landscape architecture career
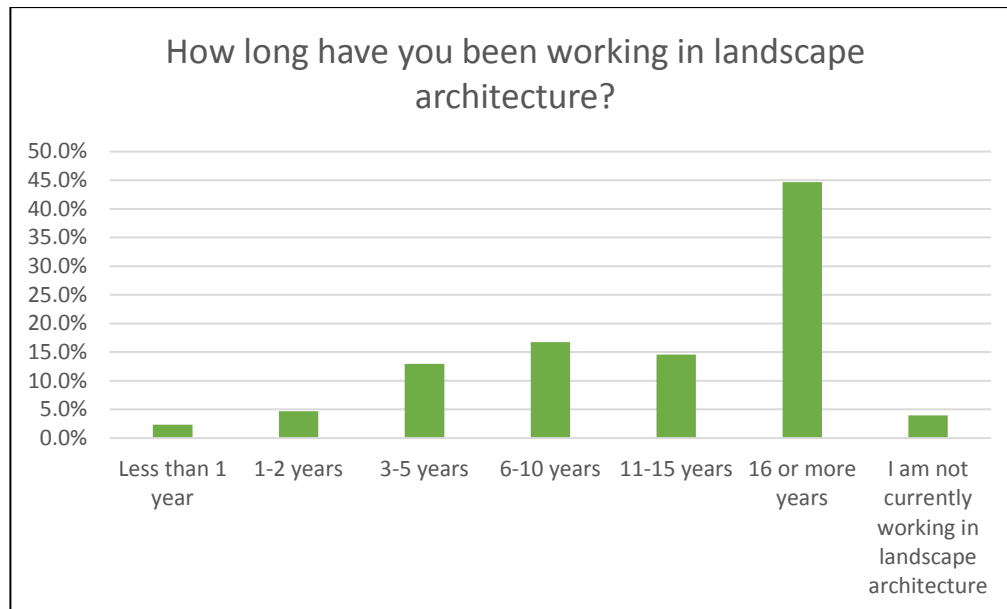
Respondents were asked to report the location in which they primarily practice landscape architecture. Respondents within the United States, Canada, or Puerto Rico were asked to report the locations they have worked within the last five years. The largest percentage of respondents, 19.5%, reported working in California, as illustrated in Table 2. Respondents outside the United States, Canada, or Puerto Rico were asked to report the country in which they primarily practice landscape architecture. The largest percentage of respondents, 17.7%, reported primarily practicing in Sweden, as illustrated in Table 3.

Table 2: US, CAN, PR: Responses for location in which respondents primarily practice landscape architecture.

Location	Percentage of Respondents	Number of Respondents
Alabama	4.5%	106
Alaska	1.4%	32
Alberta	2.3%	53
Arizona	6.7%	157
Arkansas	2.1%	50
British Columbia	4.5%	104
California	19.5%	455
Colorado	8.4%	197

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Table 2: US, CAN, PR: Responses for location in which respondents primarily practice landscape architecture.

Location	Percentage of Respondents	Number of Respondents
Connecticut	3.4%	80
Delaware	1.6%	37
Florida	11.3%	264
Georgia	8.7%	203
Hawaii	1.4%	33
Idaho	2.8%	66
Illinois	6.1%	143
Indiana	4.2%	98
Iowa	2.4%	57
Kansas	3.1%	73
Kentucky	3.4%	79
Louisiana	3.9%	90
Maine	1.8%	43
Manitoba	0.9%	21
Maryland	7.6%	177
Massachusetts	4.8%	113
Michigan	5.3%	123
Minnesota	3.1%	73
Mississippi	3.0%	70
Missouri	4.2%	97
Montana	1.6%	38
Nebraska	2.4%	55
Nevada	4.0%	93
New Brunswick	0.2%	4
New Hampshire	1.5%	34
New Jersey	4.6%	107
New Mexico	3.3%	77
New York	10.0%	233
Newfoundland and Labrador	0.0%	1
North Carolina	10.2%	238
North Dakota	2.0%	46
Nova Scotia	0.5%	12
Ohio	6.9%	161
Oklahoma	2.3%	54
Ontario	5.6%	131
Oregon	4.5%	106
Pennsylvania	7.4%	172

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Table 2: US, CAN, PR: Responses for location in which respondents primarily practice landscape architecture.

Location	Percentage of Respondents	Number of Respondents
Prince Edward Island	0.1%	2
Puerto Rico	0.8%	19
Quebec	0.5%	11
Rhode Island	1.2%	29
Saskatchewan	0.7%	16
South Carolina	6.2%	145
South Dakota	1.3%	30
Tennessee	4.8%	113
Texas	12.6%	295
Utah	3.5%	81
Vermont	1.2%	27
Virginia	9.4%	219
Washington	6.5%	151
West Virginia	2.3%	53
Wisconsin	3.6%	84
Wyoming	2.3%	53
District of Columbia	3.9%	91
Yukon	0.2%	5
North West Territories	0.2%	4
Nunavut	0.2%	4

Table 3: Non-US, CAN, PR: Responses for location in which respondents primarily practice landscape architecture.

Location	Percentage of Respondents	Number of Respondents
Argentina	0.4%	2
Australia	2.1%	11
Austria	0.2%	1
Bahamas	0.2%	1
Belgium	0.2%	1
Botswana	0.2%	1
Brazil	0.4%	2
Bulgaria	0.6%	3
Canada	0.4%	2
Chile	0.8%	4
China	4.4%	23

Table 3: Non-US, CAN, PR: Responses for location in which respondents primarily practice landscape architecture.

Location	Percentage of Respondents	Number of Respondents
Colombia	0.6%	3
Costa Rica	0.2%	1
Croatia	0.8%	4
Czech Republic	0.2%	1
Denmark	0.6%	3
Estonia	0.6%	3
Finland	0.2%	1
France	0.6%	3
Germany	3.5%	18
Greece	1.0%	5
Hungary	1.2%	6
Iceland	0.6%	3
India	0.2%	1
Indonesia	1.3%	7
Iran	0.4%	2
Ireland	2.1%	11
Israel	0.4%	2
Italy	6.5%	34
Kuwait	0.2%	1
Lebanon	0.8%	4
Malaysia	1.2%	6
Mexico	1.9%	10
Morocco	0.4%	2
Namibia	0.2%	1
Netherlands	7.1%	37
New Zealand	0.8%	4
Nigeria	0.2%	1
Oman	0.2%	1
Philippines	2.3%	12
Poland	0.2%	1
Portugal	9.2%	48
Qatar	0.2%	1
Romania	0.2%	1
Russian Federation	1.9%	10
Serbia	0.8%	4
Singapore	4.6%	24
South Africa	2.7%	14

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Table 3: Non-US, CAN, PR: Responses for location in which respondents primarily practice landscape architecture.

Location	Percentage of Respondents	Number of Respondents
Spain	2.1%	11
Sweden	17.7%	92
Switzerland	0.2%	1
Thailand	0.2%	1
Turkey	3.8%	20
United Arab Emirates	0.4%	2
United Kingdom of Great Britain and Northern Ireland	4.0%	21
United States of America	5.2%	27
Uruguay	0.2%	1
Venezuela	0.6%	3

Survey respondents who practice internationally, were asked to report the regions in which they practice. Of the survey participants in the United States, Canada, or Puerto Rico who responded to the survey, the majority (50.3%) reported practicing in the "Americas", as indicated in Figure 6. Survey participants outside of the United States, Canada, or Puerto Rico who responded to the survey, the majority (62.8%) reported practicing in "Europe", as indicated in Figure 7.

Figure 6: US, CAN, PR: International regions of practice.

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Figure 7: Non-US, CAN, PR: International regions of practice.

If you practice internationally, in which regions do you practice?

Survey respondents reported if they are a licensed or registered landscape architect. The majority of respondents, 83.2%, in the United States, Canada, or Puerto Rico responded "Yes" indicating they are a licensed or registered landscape architect, as indicated in Figure 8. The majority of respondents, 78.1%, outside the United States, Canada, or Puerto Rico responded "Yes" indicating they are a licensed or registered landscape architect, as indicated in Figure 9.

Figure 8: US, CAN, PR: Licensed or registered landscape architect.

Are you a licensed or registered landscape architect?

- Yes
- No, but I am currently pursuing a license
- No

2.2%
14.6%
83.2%
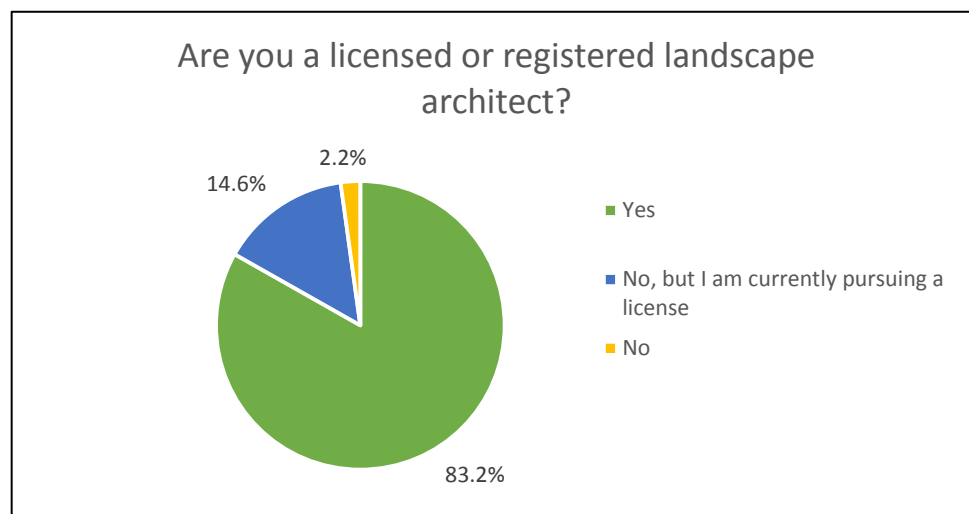
Figure 9: Non-US, CAN, PR: Licensed or registered landscape architect.

Are you a licensed or registered landscape architect?

- Yes
- No, but I am currently pursuing a license or registration
- No

11.9%
10.1%
78.1%
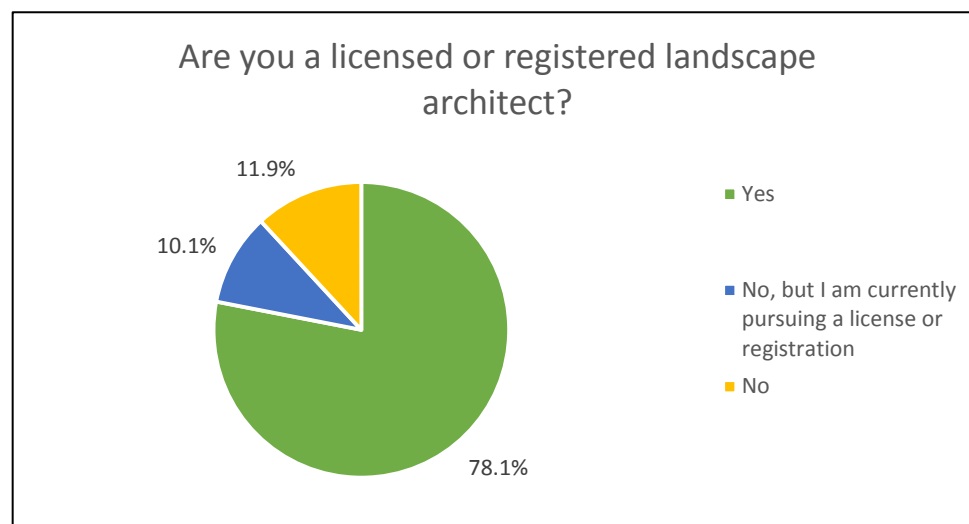
Of those who reported being licensed in landscape architecture, the most common length of time being licensed for respondents in the United States, Canada, or Puerto Rico is "16 or more years" (47.5%), as indicated in Figure 10. The most common length of time being licensed for respondents outside the United States, Canada, or Puerto Rico is also "16 or more years" (34.2%), as indicated in Figure 11.

Figure 10: US, CAN, PR: Length of time licensed or registered as a landscape registered.

If you are a licensed or registered landscape architect, how long have you been licensed or registered

| | Less than 1 year | 1-2 years | 3-5 years | 5-10 years | 11-15 years | 16 or more years | I am not currently licensed or registered |

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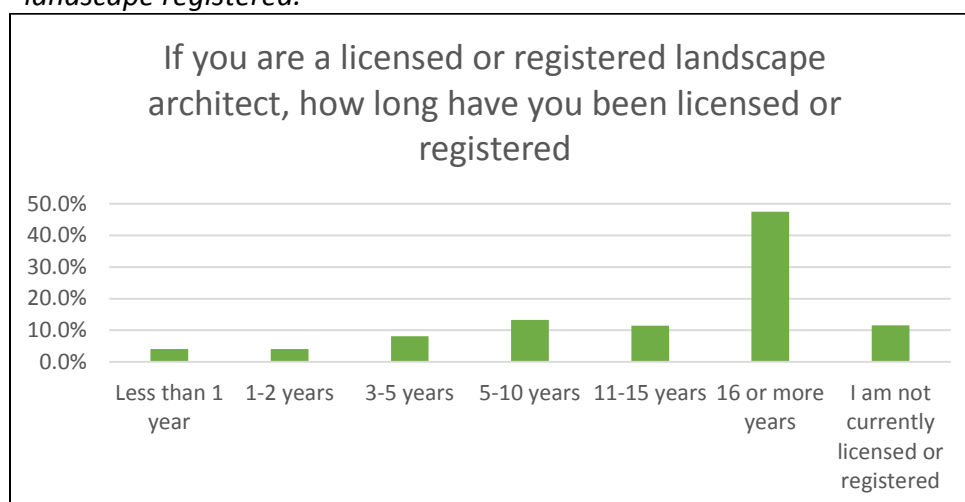
Figure 11: Non-US, CAN, PR: Length of time licensed or registered as a landscape registered.

If you are a licensed or registered landscape architect, how long have you been licensed or registered?
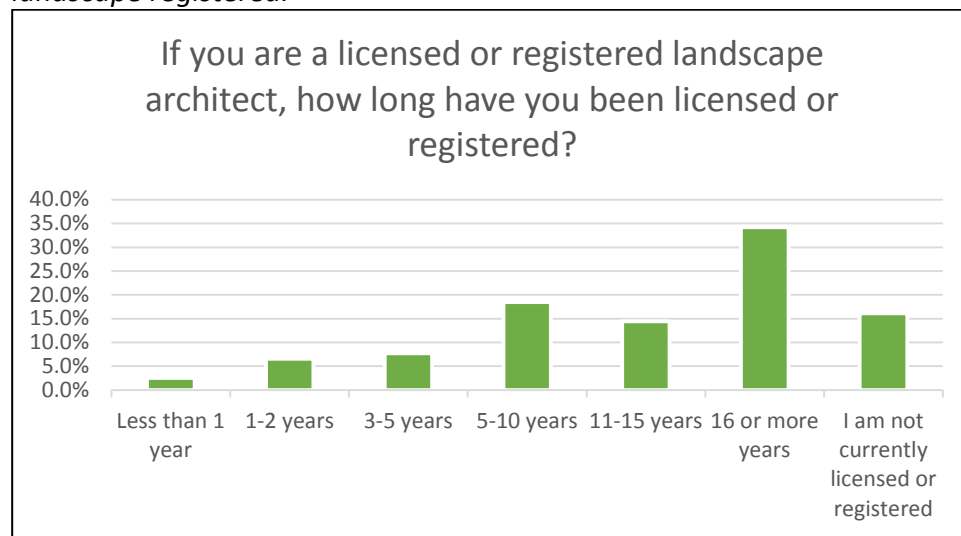
Survey participants were asked to report their highest level of education. The majority of respondents in the United States, Canada, or Puerto Rico, 59.9%, reported having a bachelor's degree as their highest level of education, as illustrated in Figure 12. The majority of respondents outside the United States, Canada, or Puerto Rico, 69.2%, reported having a master's degree as their highest level of education, as illustrated in Figure 13.

Figure 12: US, CAN, PR: Highest level of education.

What is your highest level of education?

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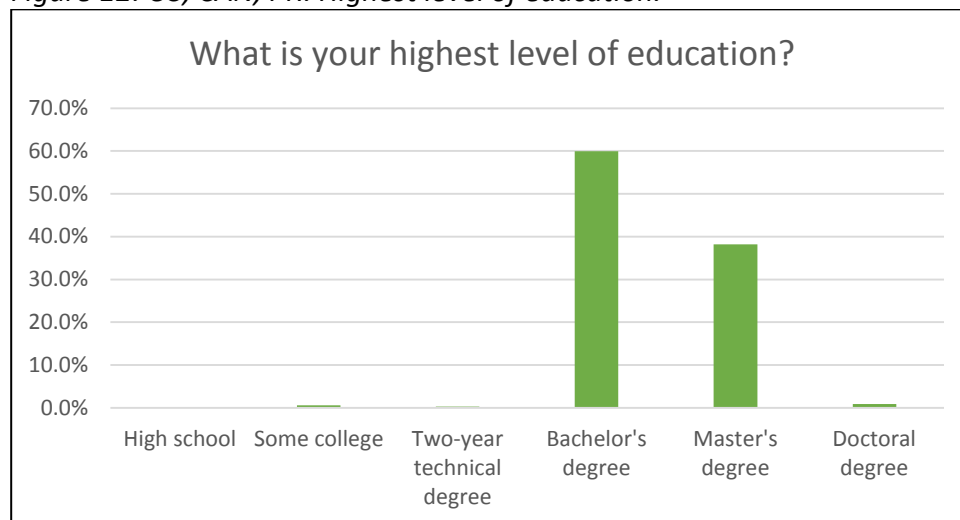
Figure 13: Non-US, CAN, PR: Highest level of education.
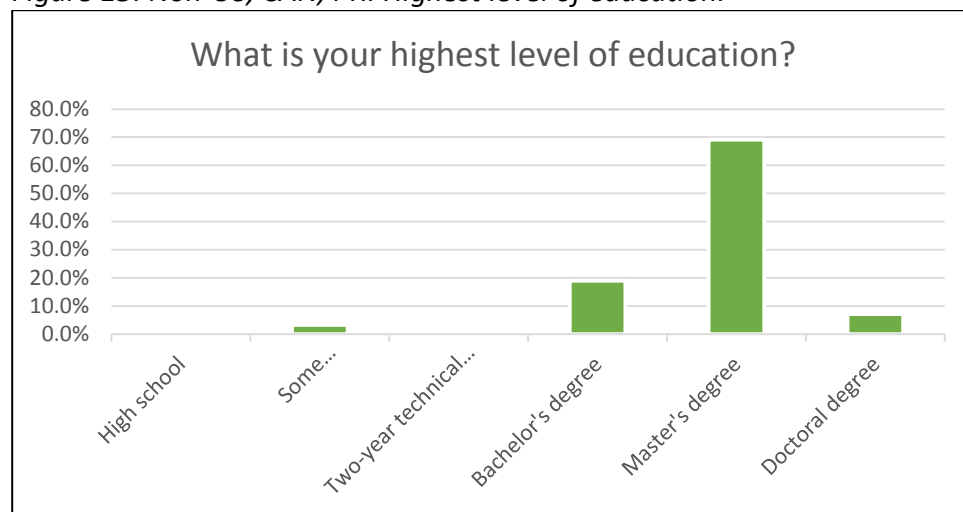
Survey respondents were asked to report if they have a degree in landscape architecture and if they do at which level. The majority of survey respondents in the United States, Canada, or Puerto Rico, 70.8%, reported holding a bachelor's degree in landscape architecture, as illustrated in Figure 14. The majority of survey respondents outside the United States, Canada, or Puerto Rico, 63.6%, reported holding a master's degree in landscape architecture, as illustrated in Figure 15.

Figure 14: US, CAN, PR: Degree in landscape architecture.
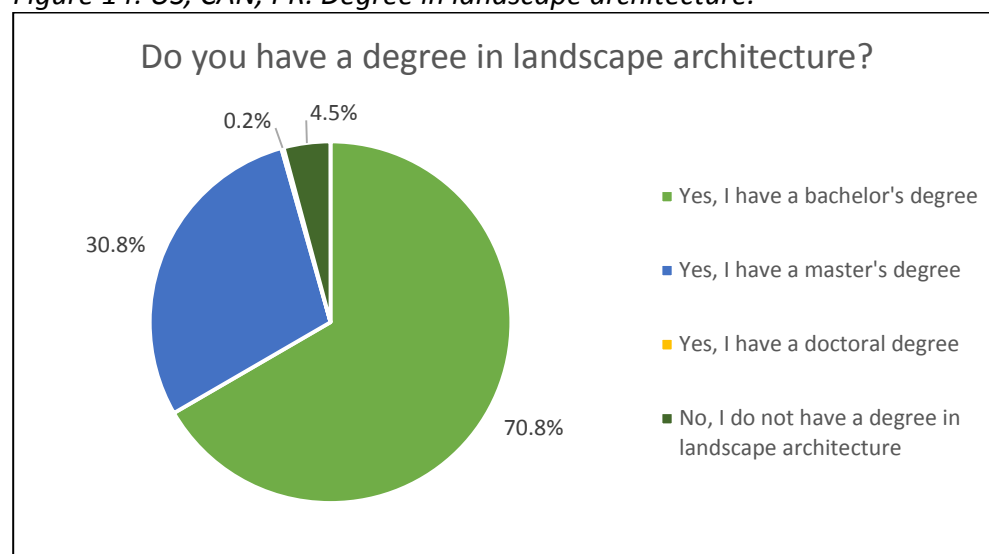
Figure 15: Non-US, CAN, PR: Degree in landscape architecture.

Do you have a degree in landscape architecture?

- 8.3%
- 5.2%
- 32.9%
- 63.6%

Legend:
- Yes, I have a bachelor's degree
- Yes, I have a master's degree
- Yes, I have a doctoral degree
- No, I do not have a degree in landscape architecture
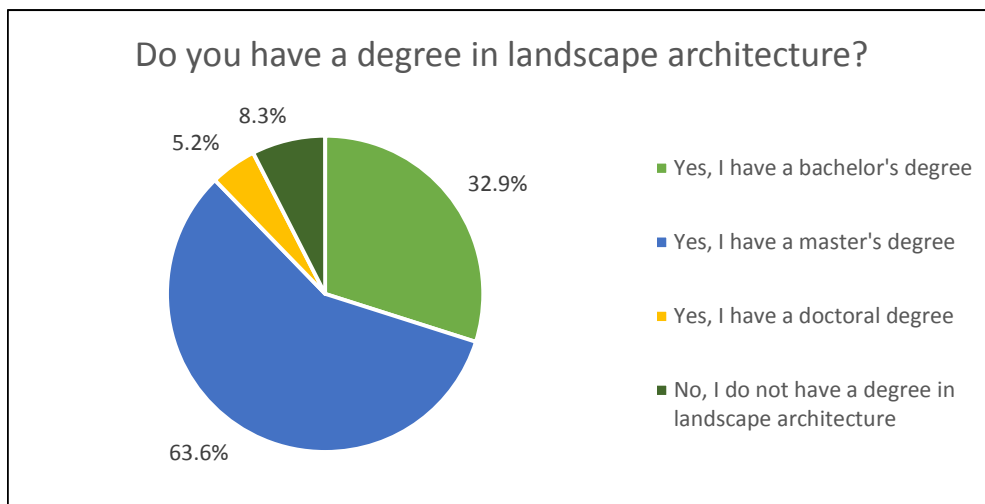
Survey respondents varied in the age in which they reported. The largest number of survey respondents within the United States, Canada, or Puerto Rico reported that they were in the 56-60 age range, 14.5%, as illustrated in Figure 16. The largest number of survey respondents outside the United States, Canada, or Puerto Rico reported that they were in the 41-45 age range, 17.2%, as illustrated in Figure 17.

Figure 16: US, CAN, PR: Age of respondents.

How old are you?

Age range	Percentage
18-24	0.8%
25-30	9.2%
31-35	12.7%
36-40	11.6%
41-45	10.3%
46-50	10.1%
51-55	11.1%
56-60	14.5%
61-65	11.9%
66-70	4.9%
71-75	1.9%
76 or older	1.0%
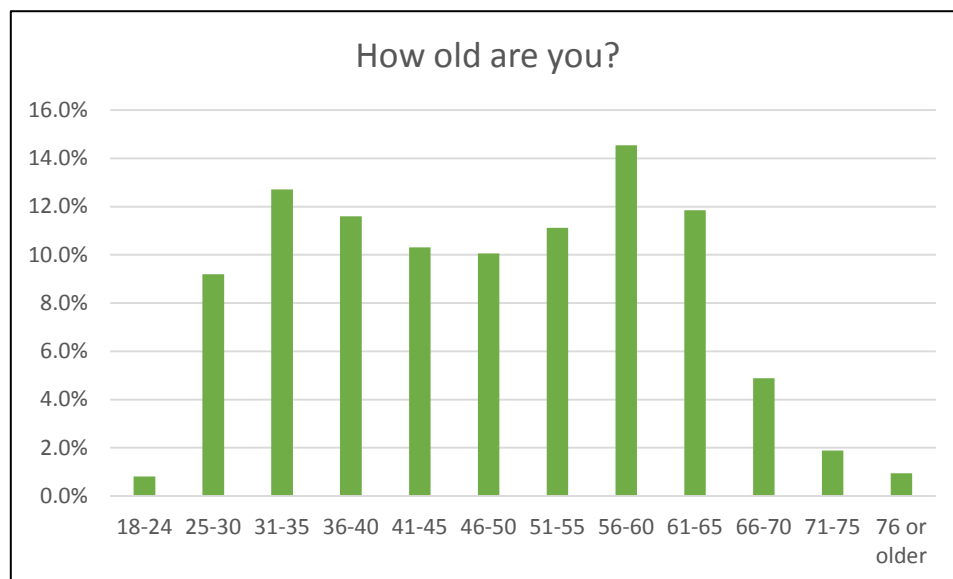
Figure 17: Non-US, CAN, PR: Age of respondents.
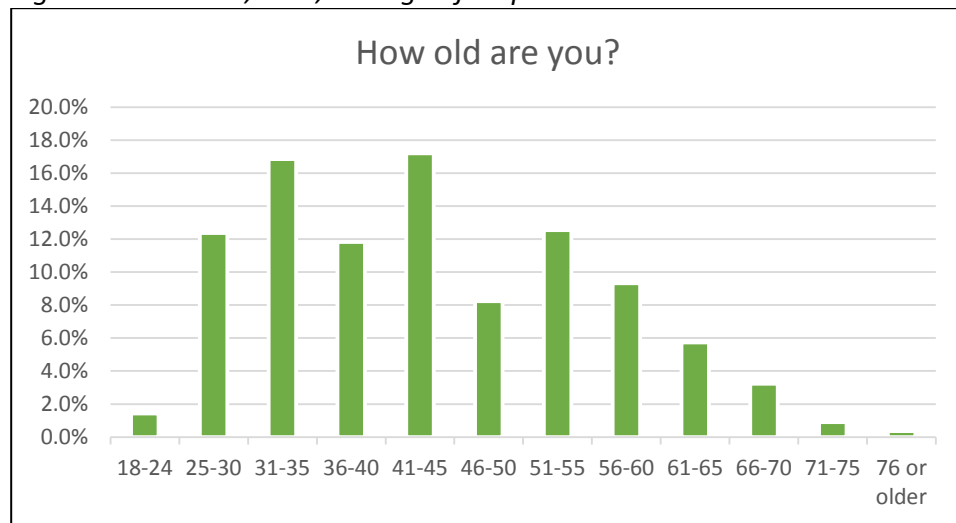
Survey respondents were asked to report their gender. The majority of respondents, 65.0%, within the United States, Canada, or Puerto Rico reported their gender as male, as illustrated in Figure 18. The gender reported by respondents, outside of the United States, Canada, or Puerto Rico was approximately acre, with 50.5% being male and 49.5% as female, as illustrated in Figure 19.

Figure 18: US, CAN, PR: Gender of respondents.

Professional Testing
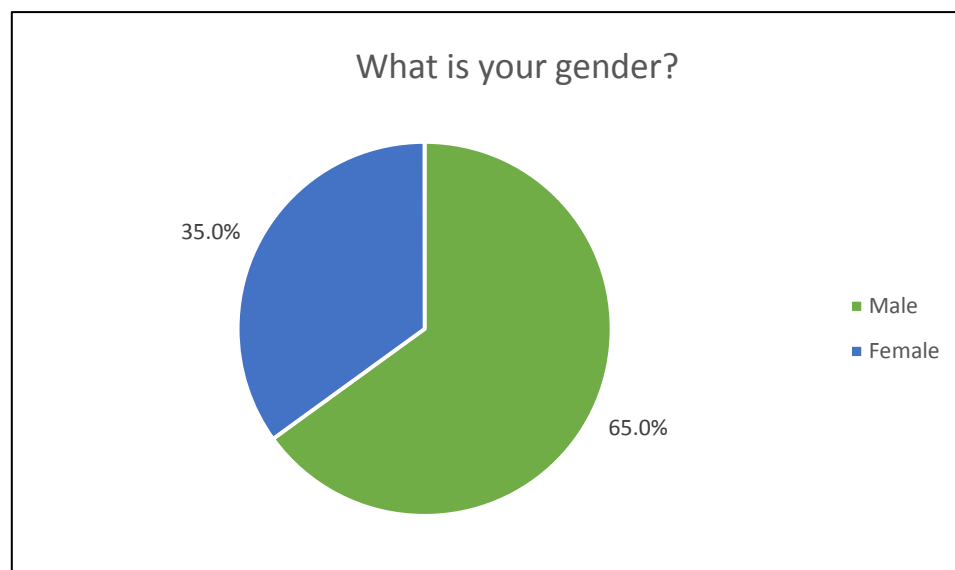
Figure 19: Non-US, CAN, PR: Gender of respondents.
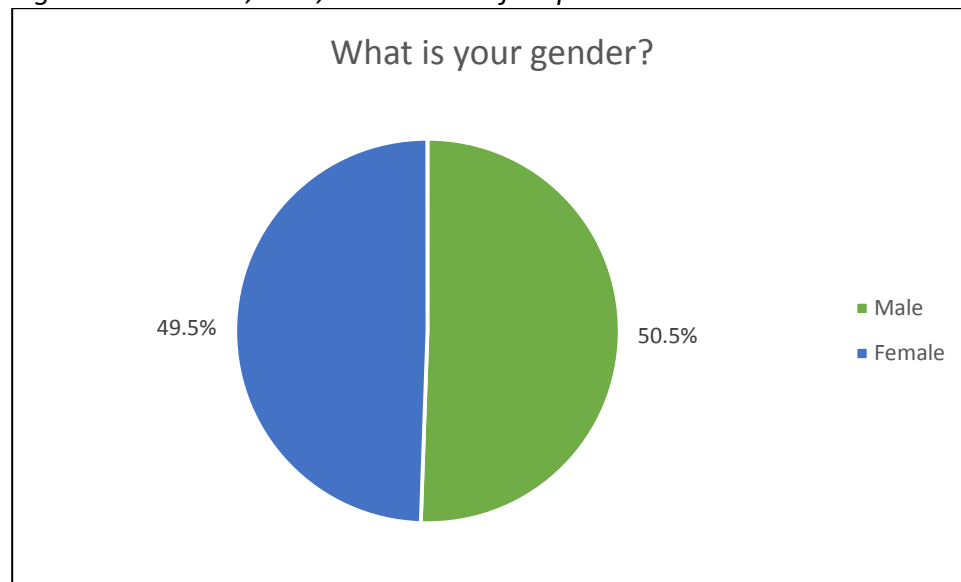
The sizes of the organizations in which survey respondents reported working varied. The largest number of survey participants, 26.2%, within the United States, Canada, or Puerto Rico reported working in smaller organizations, with 2-10 employees, as illustrated in Figure 20. The largest number of survey participants, 26.2%, outside the United States, Canada, or Puerto Rico reported working in smaller organizations, with 2-10 employees, as illustrated in Figure 21.

Figure 20: US, CAN, PR: Size of the organization in which respondents reported working.
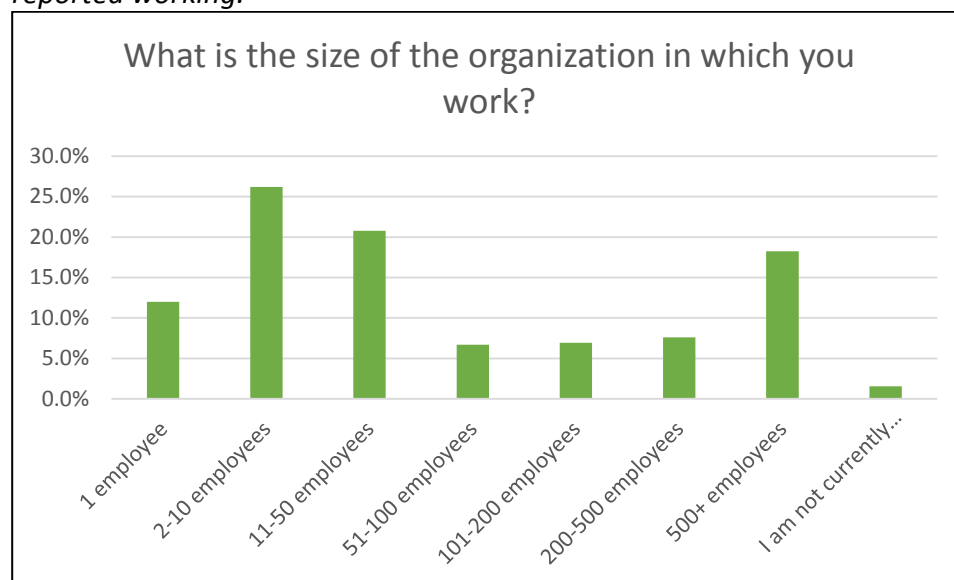
Figure 21: Non-US, CAN, PR: Size of the organization in which respondents reported working.
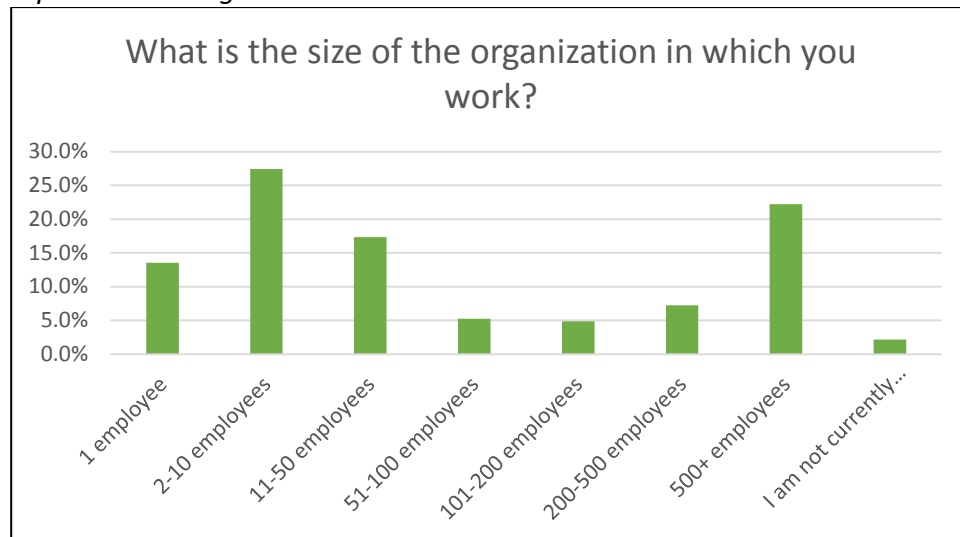
Respondents were asked to report the sector in which they were employed. The majority of respondents, 74.9%, within the United States, Canada, or Puerto Rico reported primarily working in a private practice, as illustrated in Figure 22. Respondents had the ability to fill in the specific sector in which they worked, and their responses are listed in Table 4. The majority of respondents, 62.0%, outside the United States, Canada, or Puerto Rico reported primarily working in a private practice, as illustrated in Figure 23. Respondents had the ability to fill in the specific sector in which they worked, and their responses are listed in Table 5.

Figure 22: US, CAN, PR: Sector respondents are employed.
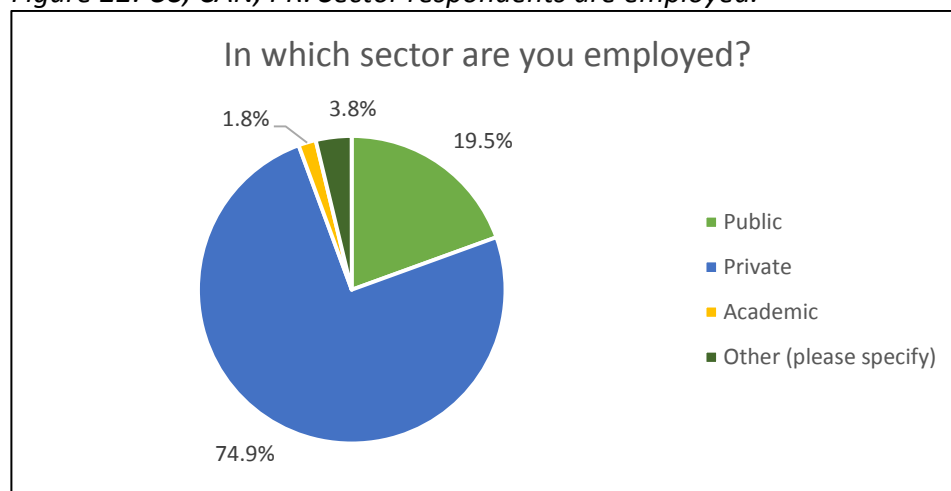
Figure 23: Non-US, CAN, PR: Sector respondents are employed.
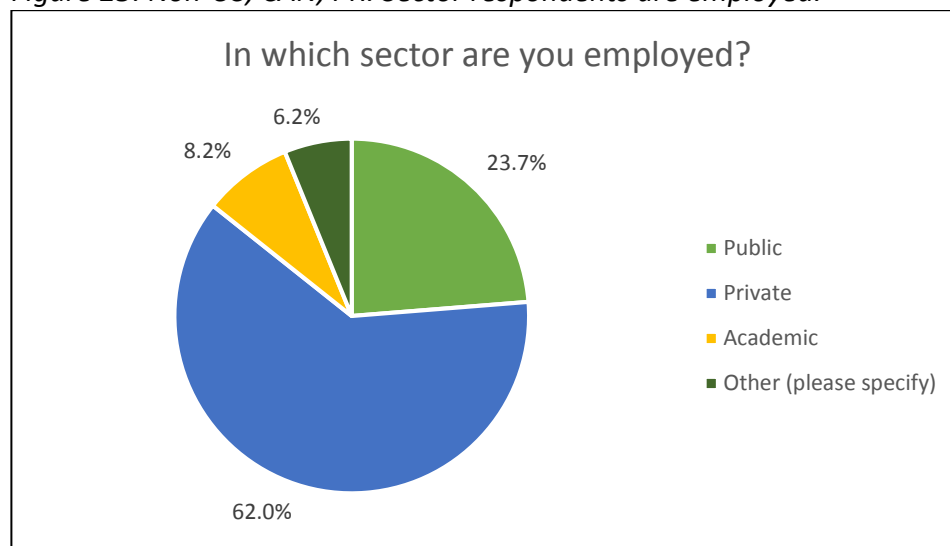
Table 4: US, CAN, PR: "Other" responses for sector respondents are employed.

Other Responses
50-50 mix of public and private
All
All of the above
Between Private and Public (some aspects are publicly funded, others are privatly
Both Academic and Private
both practice and academic. I teach construction courses
both public and private
community foundation
Consulant for Public
Corporate, schools, hospitals
Crown Corporation
Currently making public art
currently not working
currently taking a break from profession- stay at home mom
Facilities at a University
Federal
Federal-Interior Dept.-National Park Service
Freelance consultant working in both public and private.
Government
I am a faculty in LA, but have maintained a small LA practice for 304 years
I am currently working outside of field but have kept registration current.
I currently am engaged in Non-Profit Organization work
I teach fulltime, direct undergrad program & have private practice
Institution
Landscape design build

Table 4: US, CAN, PR: "Other" responses for sector respondents are employed.

Other Responses
Local Government
Mixed private/academic
NGO
Ngo
No longer working in the field, but still maintain license
Non Profit
non profit
Non profit
Non profit conservation and sustainable agriculture
Non Profit foundation
Nonprofit
non-profit
non-profit
non-profit
Non-profit partner to public agencies
Non-profit professional certification provider
Non-Profit Public Garden
Not answering no longer work
Not currently employed
not currently working
Not employed
Not-for-profit
Principal/Owner- design for public and private
Private - but 95% of my clients are Public entities.
Private / Public Consulting
Private and Public
Private and public.
Private consultant with all Public Agency clients
private ecological restoration (mitigation banking)
Private non profit and academic
Private Non-Profit
private not for profit
Private practice full time and teach university level part time
Private Sector. Civil engeneering development firm
Private/academic part time
Private/Public
Private/public partnership
public & private
Public & Private
Public & Private
Public (Primary), also have a small personal private practice
Public and Private

Table 4: US, CAN, PR: "Other" responses for sector respondents are employed.

Other Responses
Public through most all of 39 year career; now semi-retired, but still active with small
Public Utility
Public, Private and Academic
Public, private and non profit
Public/Private
Public-Private non-profit Commercial Improvement District
Recent graduate, not yet working in the field
Retired
Retired
Retired
Retired - Previously Private Sector
Retired from the public utility regulatory sector
Self
Self Employed
SELF HEMPLYED
Self-Employed
State Government
University Landscape Architect (vs teaching)
was public now retired
Woman owned business - public, private, academic work
Work for private company, consult/work with government agency

Table 5: Non-US, CAN, PR: "Other" responses for sector respondents are employed.

Other Responses
Academic and privat (Iam own buro)
Academic and Private
Academic and Private
and Private
Arboricultural and horticultural consulting
Charity
Charity organization
commercial orders
Criated the first professional school with new classes of landscapa architecturwe - being
Först private, later public
Free lance
Freelance
Freelance practice
freelance wherever the work is interesting/profitable
freelancer
Government administration, bur former 15+ years as teacher and even now as visiting
I am not allowed to work in my country

Table 5: Non-US, CAN, PR: "Other" responses for sector respondents are employed.

Other Responses
I am not currently working
Large public practice, small private practice (2 to 10 ,employees)
My own business
Non profit conservation
not employed
not for profit knowledge institute
owner
Privat and public.
Private and public
Private practice and academic teaching part time
public and privat. more privat than public
public and private
Public, private and academic
semi-public
Unemployed
We work in all sectors

Participants who reported working in the private sector were asked the type of firm in which they worked. The majority of respondents, 50.6%, reported working in a landscape architecture firm, as indicated in Figure 24. A total of 185 participants selected "other". Their responses are presented in Table 6.

Figure 24: Type of architecture firm in which respondents reported working.
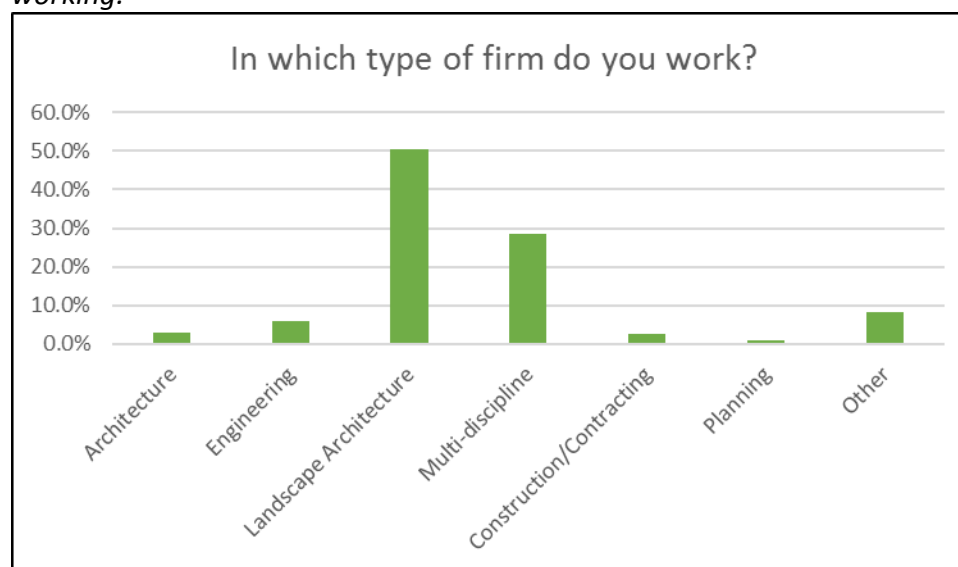
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Table 6: "Other" responses to the firm in which respondents reported working.

Other Responses
academica
Arboricultural and horticultural consulting
Architect and Landscape Architect
Architecture and Landscape Architecture
civil engineering & landscape architecture
Combination of LA, Engineering adn GIS
Community Disaster Recvoery and Planning
Community Foundation   Grants
Consulting
Contracting
Crown Corp/Engineering
Department of Natural Resources
depends on projects (why cannot chose more than 1 ???)
Design Build
Design Build
Design Build
Design Build
Design Build
Design Build
design build
Design Build landscape company and nursery
Design Build Residential
Design build -upscale residential
Design, Build and Maintaining Company for Reidential & Commerical Properties
Design/ Build
Design/ Build
Design/ Build
Design/ build
Design/build
Design/Build
Design/Build
design/build
Design/build landscape contractor
Design-Build
Developer
Development
Development

Table 6: "Other" responses to the firm in which respondents reported working.

Other Responses
Development
Development
development / build
Distribution
Ecological and environmental
Ecological restoration, land health management and community development and education
Economic Development
Educational Research Foundation
Emerging Technology
Engineering, planning & Landscaping
Engineering/Planning/Landscape Architecture
Entertainment and resort design
Environmental consulting
Environmental Consulting
Environmental Consulting
Environmental Regeneration charity
Extension Office
Facilities Design and Construction
Facilities Manager for Hospitality Venue
Federal-Facilities Project Management
for a private individual
Garden Center
Golf Course Architecture
Golf Course Architecture
Golf course design
Golf Course Design
Government
health non-profit
Hospital infrastructure and landscape architecture studio
i am not currently working
I have worked in numerous roles ame capacities.
institute for soil and water management
Institution
Institutional facilities planning
integrated approach, both general and specialist
Irrigation Design
L.A. and Irrigation Consultant
LA and Planning firm
Land Development

Table 6: "Other" responses to the firm in which respondents reported working.

Other Responses
Land Development/Home Building
Land Surveying/Civil Engineering
landsape architecture, urban design and planning
landscape and planning
Landscape Architect / Landscape Construction
Landscape Architecture & Civil Engineering firm
Landscape Architecture & Planning
Landscape Architecture & Planning
landscape architecture + urban design
landscape architecture and environmental planning
Landscape architecture and planning
Landscape Architecture and Planning
Landscape Architecture and Planning
Landscape architecture and Planning
Landscape Architecture and Planning
Landscape Architecture and Planning
Landscape Architecture and Public Art Services
Landscape Architecture Design Build
landscape architecture design/build
Landscape Architecture Design/Build and Product Design
Landscape Architecture, Planning, National Park Design
Landscape Architecture/Construction
Landscape architecture/design build
Landscape Architecture/Planning
Landscape Construction
Landscape contractor
Landscape Design
Landscape Design
Landscape design build firm
Landscape Design-Build
Landscape Design-Build
landscape design-build
landscape planning and nature conservation
LDS Church Meetinghouse Facilities Department
Local Government
maintenance & construction
manufacturing
Mining Consulting
Multidisciplinary

Table 6: "Other" responses to the firm in which respondents reported working.

Other Responses
multi-disciplinary design firm
Multi-discipline with construction
My firm works with technical consulting in all of the fields above.
My own firm
Natural Resource organizations
non profit
Non profit
Non profit conservation organization
Non Profit Public Garden/Arboretum
None
Non-motorized Transportation Planning
non-profit
Nonprofit Agency
Non-Profit Conservation Corporation
Non-profit firm involved in planning and land management
Non-profit Land Trust
not currently employed
Not currently employed
not currently working
Not employed
not for profit
nyb
Oil & gas
Owner/Developer
Parks and Recreation Department
Planning engineering and landscape architecture
Planning, Landscape Architecture & Engineering
Planning, Landscape Architecture, Environmental Services
Planning, Landscape Architecture, Project Promotion
Planning/Architecture/Landscape architecture/Project management
planning-landscape architecture-urban design
plant materials supplier, nursery, maintenence and design services
Plant nursery
PMO
private mitigation banking company
Professional Certification provider
Project Management
Project Management/Construction Management
Public art--1 person

Table 6: "Other" responses to the firm in which respondents reported working.

Other Responses
Public utility
Real Estate developer
Real estate development
Real Estate Development
Real Estate Development
Real estate development firm
Real estate investment
Recent graduate, not yet working in the field
Residential design/ build
Residential Design-Build
restauration
Retired
Retired
Retired
Retired - Multi-discipline
retired, but answering according to most recent employment
self employed
Specialty Design
Stormwater Consulting
Sustainable development
Through vast majority of career, public park agencies
Turf pitch maintenance
University Planning/Architecture Office
Volunteering
We design and plan exterior spaces
we do LA AND construction/contracting
wetlands and environmental planning
Wood
Worked in LA firm,also taught
Working as an architect of landscape designing in public , private spaces and I am also a university professor
Zoological Design

Participants who reported working in the private sector were asked to report their role within the organization in which they work. The majority of respondents, 50.3%, reported working in a leadership role, as indicated in Figure 25. A total of 217 participants selected "other" roles. Their responses are presented in Table 7.

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Figure 25: Roles in which respondents reporting having within their organizations.

What is your role in the organization in which you work?

- Entry-level
- Mid-level/Management
- Leadership
- Other

9.9%
9.0%
41.1%
50.3%

Table 7: "Other" responses to the role in which respondents reported having within their organizations.

Other Responses
accounting, marketing,etc. (I wear all hats)
All
All
All roles
Arboricultural and horticultural consulting
architectural executive
Associate
Associate Principal
Associate Principal, Senior Planner and Landscape Architect
Because we're so small it's hard to give me a role, I was the company's first autocad technician and now I am the senior technician (four additional people started after me) and I just got my stamp.
between entry level and mid-level
bitch
business associate
CEO
Consultant
CONSULTANT
Consultant
Consultant in one firm and Leadership in a second
Coordinator , designer and teacher

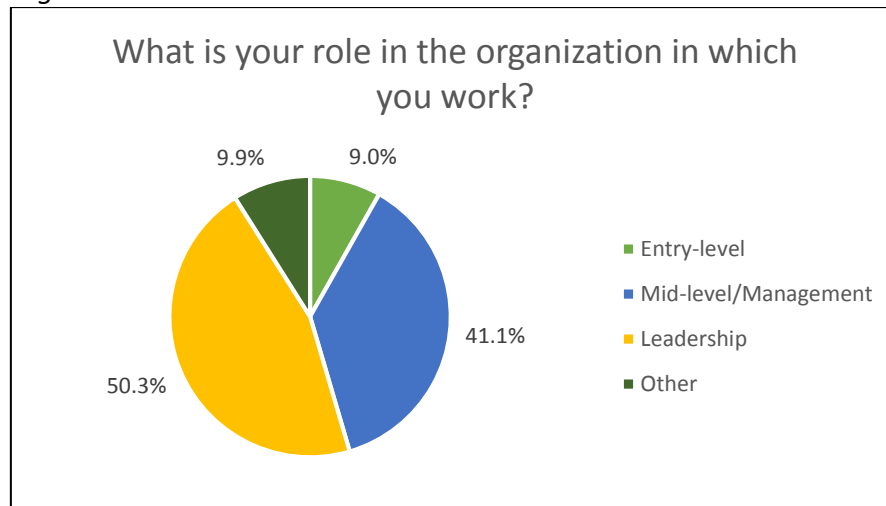*Table 7: "Other" responses to the role in which respondents reported having within their organizations.*

Other Responses
co-owner
Co-Owner; VP
Creative Director/Principal
department head
Design- Sales - Client Relations
Design, sales and maintenance
Design; Administration
Designer
Designer
Designer & Project Manager
DIRECTOR
Director
Director of Design
Director of Land Planning & Landscape Architecture
éminence grise' external expert advise
en situación de retiro
Everything
Everything
Facilities Manager
I also own my private practice
I am a contract base employee, project base. I lead the projects I am in charge of. I work for two different firms.
i am not currently working
I am not working at the moment
I am self-employed
I am the founding principle
I am the president of my firm
I do it all.
I meet with, design and estiamte projects with clients and then run the job site
I perform all aspects of Landscape Architecture from proposal, through design and construction administration
I run everything
I'm a sole practitioner, so I perform all roles involved
Independent Practioner
Intermedia
Intern
landscape architect
landscape architect
Lead Design, Project Management

Table 7: "Other" responses to the role in which respondents reported having within their organizations.

Other Responses
Member of board
Mid level
mid range environmental scientist
mid-level no management
not currently employed
not currently working
Not employed
not sure
nyb
Offered a partnership for 2017
one man show!
Own the company
owner
Owner
Owner
Owner
Owner
owner
Owner
Owner
Owner
owner
Owner
Owner
Owner
Owner
owner
owner
Owner
Owner
owner
Owner
Owner
Owner
owner
Owner
Owner
Owner

Table 7: "Other" responses to the role in which respondents reported having within their organizations.

Other Responses
Owner
Owner
Owner
Owner / Partner
Owner / Principal
Owner / Principal
Owner / Sole Proprietor
Owner + Partner
Owner and Designer
Owner and president
Owner of firm
Owner operator
Owner operator of firm
owner- sole practitioner
Owner, manager, designer
owner, primary practioner
owner, principal in charge
Owner/ Principal in Charge
owner/ sole-practitioner
Owner/design; I do everything
Owner/Founder/Landscape Architect
Owner/Operator
Owner/partner
Owner/President
Owner/Principal
owner/principal
Owner/Principal
Owner/Principal/President
Owner/Private practice
Owner/self employed
Owner/Sole Employee
Ownership
Ownership and all of the above before retiring
ownert
Par time /contract
Part Owner, Project Leader and Business Manager
practitioner
President

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Table 7: "Other" responses to the role in which respondents reported having within their organizations.

Other Responses
President
President
President and Owner
President, Owner
President/CEO
President/Principal Landscape Architect
Prime
Principal
principal
Principal
Principal
Principal
Principal
Principal
Principal
Principal
Principal
Principal
Principal, Ownership
Principal, Vice President, Board of Directors
Principal/Owner
Principal/Owner
principal; senior landscape architect,
Project Architect
project engineer
project landscape architect
Project management/design
Project Manager
Project manager
Project manager
Project manager/designer
project team
Quality assurance / risk management
Recent graduate, not yet working in the field
Registered Landscape Architect / CADD drafter
Retainer, As LA applies
Retired

*Table 7: "Other" responses to the role in which respondents reported having within their organizations.*

Other Responses
Retired
Retired - Mid/level/Management
Sales Assoc.
Self
Self Employed
self employed
SElf employed consultant
self-employed
Self-employed Landscape Architect
self-employed owner
self-retired
senior landscape architect
Senior Landscape Architect
Senior Landscape Architect
Senior landscape architect/environmental planner
Senior Principal
senior professional
Senior specialist
Senior-level Project Management
Single Landscape Architect in Architecture firm
Small firm, Principal
sole owner and employee
sole owner/principal/employee
sole practitioner
Sole proprieter
Sole Proprieter
sole proprietor
Sole Proprietor
Sole Proprietor
sole proprietor
sole proprietor
Sole proprietor
Sole Proprietor
Sole proprietor
Sole Proprietor
Sole Proprietor
Sole proprietor, so I do it all.
Sole Proprietor/Principal

Table 7: "Other" responses to the role in which respondents reported having within their organizations.

Other Responses
sole propritor
Somewhere between entry-level and mid-leve;
Sr Technical Staff
Through bulk of career, supervisory/management level; currently semi-retired, but still active (self-imployed) with small private residential projects
totally depends on the mission: now being entry level for proposing business plans, while occasionally managing maintenance/design teams, etc
Urban Designer and Associate Landscape Architect
Volunteer "pro bono" advisory engagements
Was leadership both firm and academic
Wherever I am needed

Respondents that indicated that they worked in the private sector were asked to report if they are currently an adjunct faculty member. The majority of respondents, 92.8%, reported "No" indicating that they are not currently an adjunct faculty member as illustrated in Figure 26.

Figure 26: US, CAN, PR: Currently an adjunct faculty member.
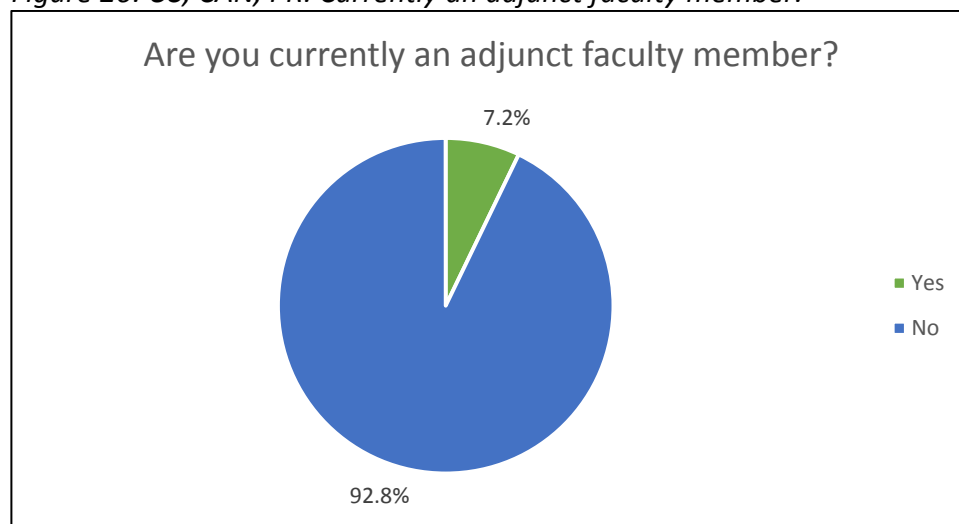
Respondents that indicated that they worked in the public sector were asked to report the type of department in which they work. The largest percentage of respondents, 33.7%, reported

"Parks and recreation" as the type of department in which they work, as illustrated in Figure 27.

Respondents had the ability to select "Other" and their write in responses are listed in Table 8.

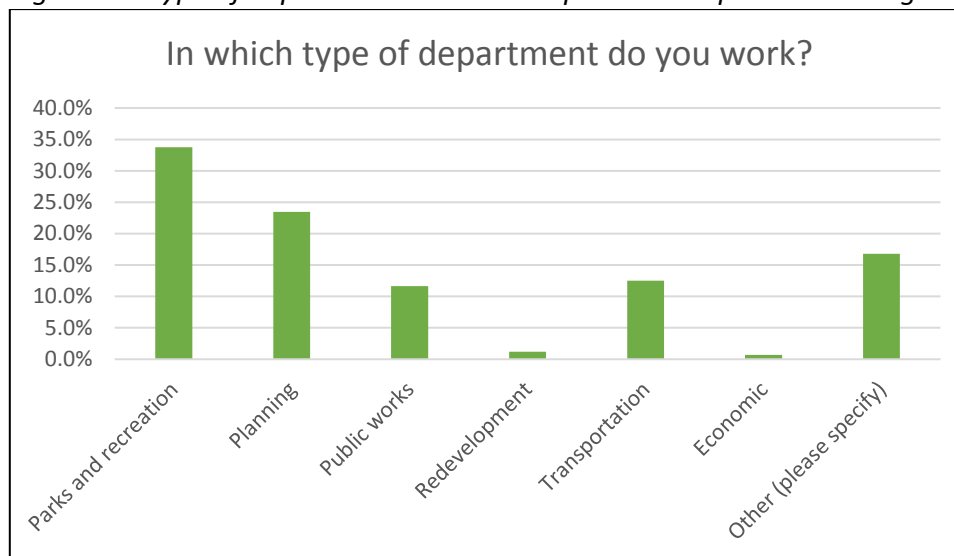*Figure 27: Type of department in which respondents reported working.*

Table 8: "Other" Responses for type of department in which respondents reported

Other Responses
Academia
Architectural firm
Asset & Facility Management
Asset Management
Aviation
Botanic Garden
Capital Project Management
Capital Works
CEO
city develoment and landscape architecture
city development
Civil Engineering Dept.
college
Conservation
Construction and tecnic
Construction Management USACE
cost engineering
Design & Construction (multi disciplinary)
Design & Construction Project Mgmt

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Table 8: "Other" Responses for type of department in which respondents reported

Other Responses
Design & Development (Operations)
Design/Build
Development
Development Services - Engineering
Dir. of Parks and Planning departments
Education
Engineering
Engineering
Engineering
Engineering
Engineering
Engineering, Parks and Recreation
Environment & Infrastructure Services
Environment & Natural Resources
Environmental Quality Control
Environmental Services
Environmental Services (sewer bureau)
facilities design and construction
Facilities maintenance
Facilities management
Facilities Management
Facilities Operations
golf course design
Grounds Management
Higher Education
HOng Kong special administrative region
Infrastructure
Infrastructure
Landscape Architecture
Landscape Architecture
Landscape Architecture
Landscape Architecture
Landscape Architecture Division
Marine
Military
Most of the above apply to our multi-uear project
Municipal Development
N/A
National Landscape Department. Malaysia
Natural Resources
Natural Resources
Park development

Table 8: "Other" Responses for type of department in which respondents reported

Other Responses
Park Planning
Park Planning
Park Planning
Park planning
Park Planning and Projects
Parks and Land Use
parks and rec, planning
Parks Development
Pesticide Safety Education
Planning and Landscape Architecture
Planning parks and recreation
Planning, parks, transport, environment
Planning/Development engineering, parks redevelopment, active transportation
plant material supply
Policy
primarily public sector, semi-retired
Project Management
Public and Private Design Build / Environmental Restoration
Public School System
reconstructing watersystems, urban design, parks, gardens, policy and design
Regulatory
residential
restaurant
Site/Civil Design Engineering
social and cultural equipements
State Government / Fish and Wildlife
Transportation and Facilities
Univeristy Facilities
University
Urban Design & Planning and Technology
urban planning and development
Urban Stewardship - Stormwater Emphasis
US Dept. of Veterans Affairs - Real Property Service
Water Resource Management
Water Resources
Watershed Protection
Work with Municipalities - Plannign, Public Works, Parks

Respondents that indicated that they worked in the public sector were asked to report the governmental level in which they work. The majority of survey respondents, 57.1%, report

"Local" as the government level that they work in, as illustrated in Figure 28. Respondents had the ability to select "Other" and their write in responses are listed in Table 9.

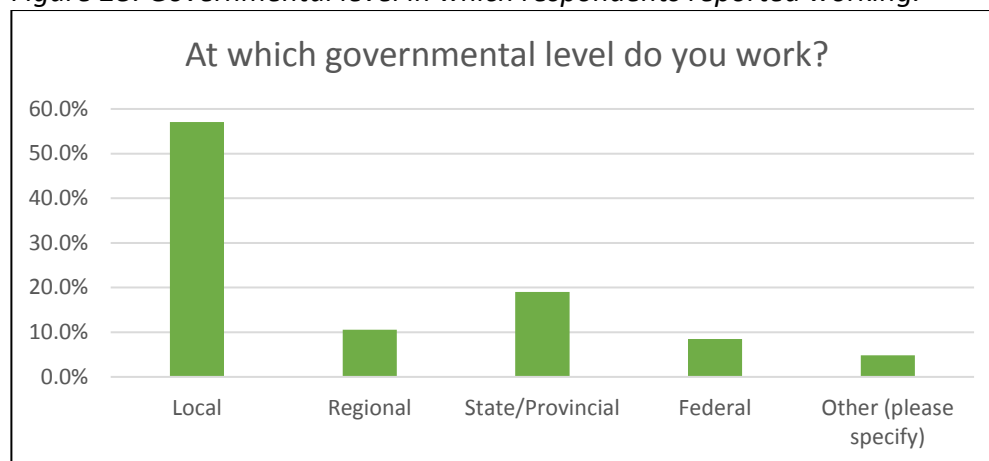*Figure 28: Governmental level in which respondents reported working.*

*Table 9: Governmental level in which respondents work.*

Other Responses
All of the above
All of the Above.
Bi-State agency
clients include local, regional and provincial
County
County
County
County
Higher Education-University
HKSAR
I work with several levels
Local and Regional
local, regional and provincial
municipal projects
Municipality
Municipality
N
NA
National
National
non govermental
none
none
Regional Transit Agency

Table 9: Governmental level in which respondents work.

| Other Responses |
|---|
| State & Federsl interface |
| state university |
| Tribal |
| University |

The majority of respondents, 95.0%, outside the United States, Canada, or Puerto Rico reported "No" indicating that they are not currently an adjunct faculty member as illustrated in Figure 29.

*Figure 29: Non-US, CAN, PR: Currently an adjunct faculty member.*
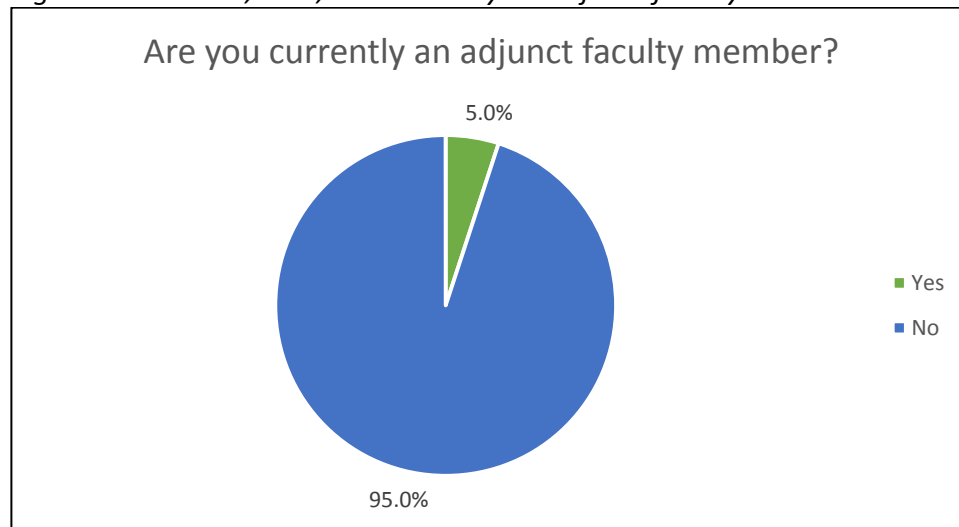
All respondents who reported working in an academic setting were asked if they practice outside of the educational setting in which they work. The majority of respondents, 74.2%, selected "Yes" indicating that they do work outside of the educational setting in which they work, as illustrated in Figure 30.

Figure 30: Practice landscape architecture outside of the educational setting in which they work.

Do you also practice outside of the educational setting in which you work?

- Yes
- No

25.8%

74.2%
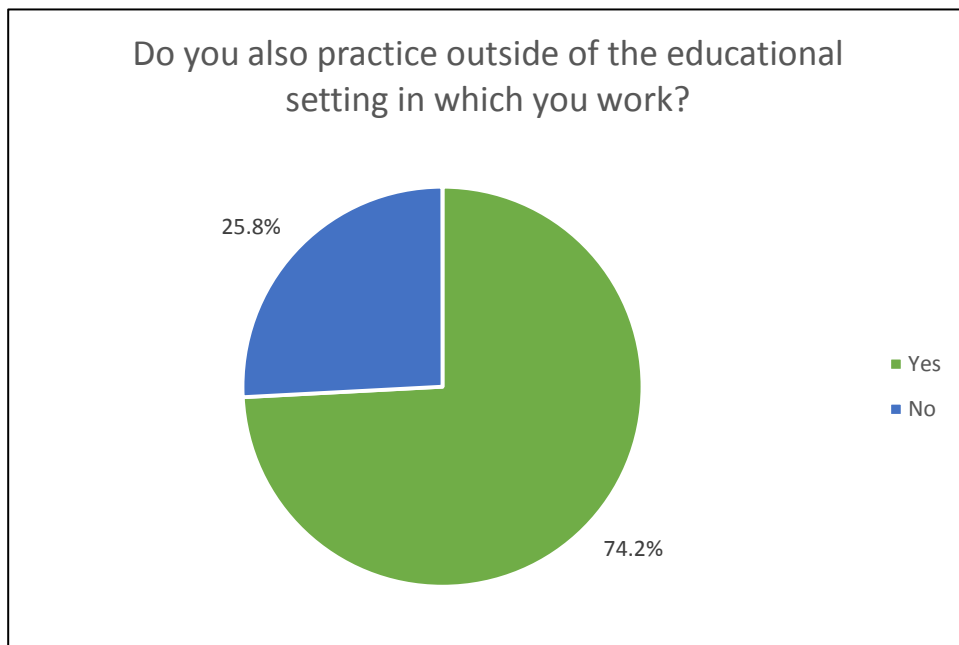
Lastly, respondents were asked to report on which project they perform as a landscape architect. Respondents were allowed to select all options that are applicable. The majority of respondents, 72.9%, selected "Parks and recreation" as illustrated in Figure 31.

Professional Testing

Figure 31: Projects performed as a landscape architect.
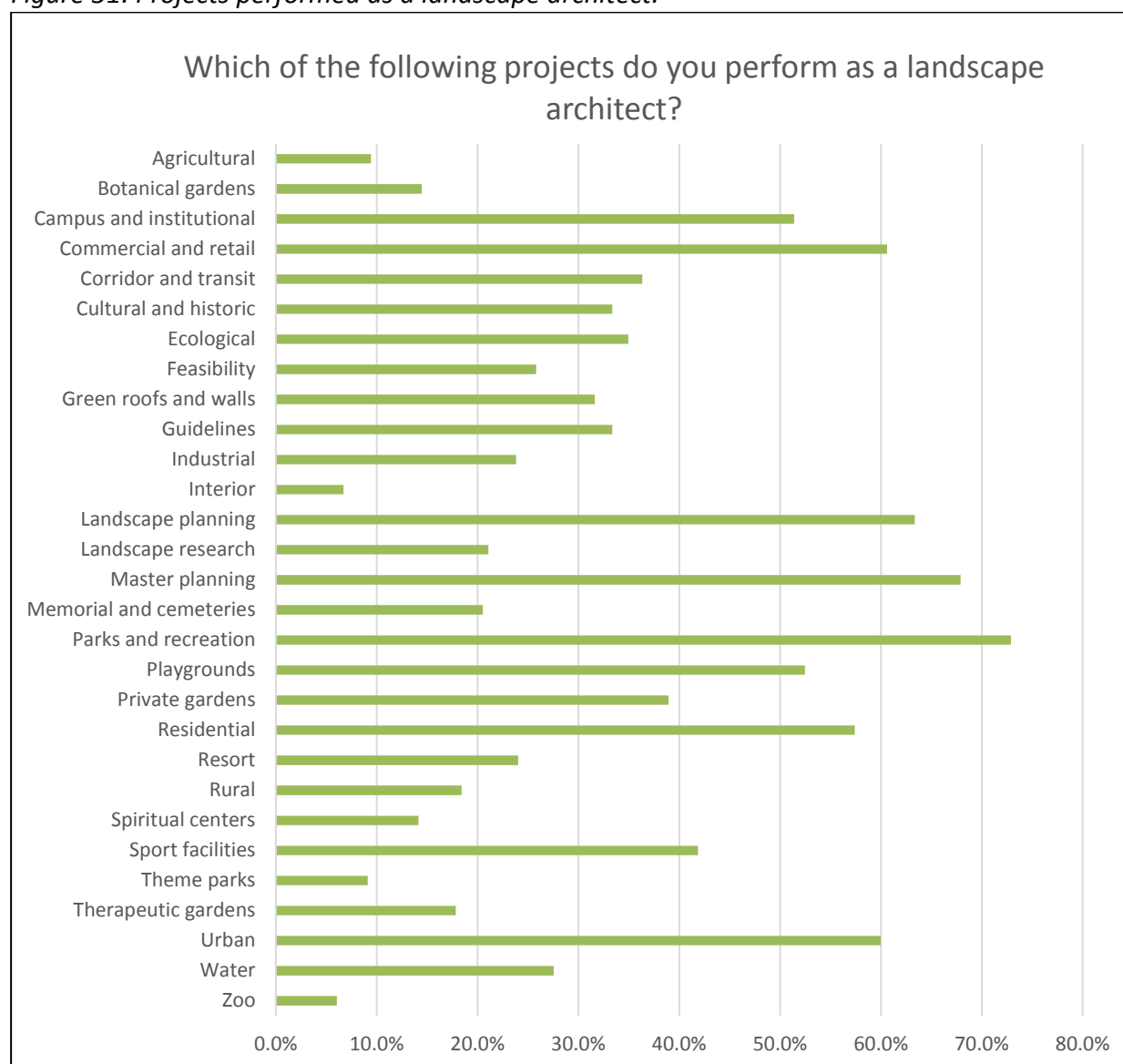
Overview of Survey Respondents Ratings for Task Statements

Survey respondents were asked to rate task frequency and criticality. The mean ratings for task importance ranged from 0.54 to 3.35, with an average standard deviation of 1.25, indicating that there was little variability in the ratings. The mean criticality ratings ranged from 0.24 to 1.66, with an average standard deviation of 0.69 indicating that very little variability in the ratings.

In addition to analyzing the means and standard deviations of both task ratings, the standard error of the mean was calculated for each of the task ratings. For all task ratings and across all task rating scales, the standard error of the mean was less than 0.03, indicating that if the survey were to be repeated with a different sample of landscape architects, the results would be very similar.

The final task list, with means, standard deviations, and the standard error of the mean is illustrated in Table 10.

Table 10. Means, SD, and SEM of Task Ratings.

Content Areas	Frequency Ratings			Criticality Ratings		
	Means	SD	SEM	Means	SD	SEM
Project Management						
Manage project team	2.85	1.24	0.02	1.07	0.71	0.02
Determine project scope, schedule, and budget (e.g., capital and operational budgets)	2.73	1.28	0.02	0.86	0.73	0.02
Manage project scope, schedule, and budget	2.92	1.23	0.02	0.89	0.73	0.02
Determine client and/or public objectives	2.88	1.18	0.02	0.95	0.70	0.02
Establish quality control procedures	2.53	1.26	0.02	1.36	0.70	0.02
Develop contract	2.47	1.38	0.02	0.90	0.77	0.02
Negotiate contract	2.23	1.44	0.02	0.72	0.74	0.02
Execute marketing activities	2.01	1.35	0.02	0.24	0.49	0.02
Prepare RFPs or RFQs	1.78	1.35	0.02	0.54	0.66	0.02
Respond to RFPs or RFQs	2.11	1.42	0.02	0.47	0.64	0.02
Review RFPs or RFQs	1.93	1.37	0.02	0.51	0.65	0.02
Select project team	2.01	1.35	0.02	0.77	0.70	0.02
Facilitate meetings (e.g., staff, regulators, consultants, clients, public)	2.75	1.15	0.02	0.68	0.67	0.02
Coordinate work of/with other disciplines (e.g., deliverables, reports, drawings, reviews)	3.12	1.02	0.02	1.22	0.72	0.02
Establish common project goals (e.g., with client, other disciplines, stakeholders)	2.86	1.08	0.02	0.88	0.69	0.02
Document design decisions and project communication	3.16	1.00	0.02	1.19	0.74	0.02
Execute records retention policy	1.83	1.38	0.02	0.75	0.72	0.02
Site Inventory and Analysis						

Table 10. Means, SD, and SEM of Task Ratings.

Content Areas	Frequency Ratings			Criticality Ratings		
	Means	SD	SEM	Means	SD	SEM
Determine applicable codes, regulations, and permitting requirements	2.99	1.14	0.02	1.53	0.63	0.02
Collect contextual data (e.g., natural systems, road networks, demographics, cultural and historical, land use)	2.82	1.13	0.02	1.09	0.71	0.02
Gather stakeholder input	2.54	1.21	0.02	0.79	0.67	0.02
Identify policy objectives (e.g., community plans, sustainability, climate change)	2.25	1.26	0.02	0.85	0.69	0.02
Conduct project related research (e.g., precedents, best practices)	2.66	1.15	0.02	0.81	0.69	0.02
Conduct onsite investigation and fieldwork	3.06	1.01	0.02	1.22	0.72	0.02
Document site inventory	2.90	1.06	0.02	1.06	0.72	0.02
Analyze codes, regulations, and permitting requirements	3.00	1.06	0.02	1.39	0.68	0.02
Determine appropriate types of analyses	2.57	1.13	0.02	0.88	0.70	0.02
Perform circulation analysis (e.g., multi-modal mobility, access, connectivity)	2.32	1.25	0.02	1.10	0.71	0.02
Interpret utility analysis	2.11	1.27	0.02	1.18	0.71	0.02
Perform visual resources analysis (e.g., view sheds, view corridors, aesthetics)	2.54	1.17	0.02	0.67	0.66	0.02
Perform micro and macro climate analysis (e.g., solar, wind, precipitation)	2.01	1.23	0.02	0.73	0.66	0.02
Perform hydrological analysis (e.g., floodplain, site drainage, water shed, surface and sub-surface)	2.27	1.30	0.02	1.48	0.66	0.02
Perform vegetation analysis	2.77	1.11	0.02	0.83	0.66	0.02
Interpret ecological analysis (e.g., habitat, biodiversity, ecosystem services)	2.03	1.24	0.02	0.92	0.71	0.02
Perform topographical analysis	2.84	1.14	0.02	1.20	0.70	0.02
Interpret soil analysis (e.g., soil classifications, organic content, ph analysis)	2.04	1.22	0.02	0.93	0.69	0.02
Interpret geotechnical/geological analysis (e.g., bearing capacity, plasticity, permeability, swelling)	1.57	1.27	0.02	1.46	0.69	0.02
Interpret environmental studies (e.g., contamination, erosion, air quality, water quality)	1.83	1.24	0.02	1.40	0.69	0.02
Interpret cultural, historical, and archeological analysis	1.88	1.20	0.02	0.73	0.68	0.02

Table 10. Means, SD, and SEM of Task Ratings.

Content Areas	Frequency Ratings			Criticality Ratings		
	Means	SD	SEM	Means	SD	SEM
Interpret social analysis (e.g., demographics, access to resources or amenities, equity)	1.83	1.21	0.02	0.71	0.66	0.02
Interpret economic analysis	1.35	1.17	0.02	0.63	0.63	0.02
Analyze contextual data	2.25	1.26	0.02	0.69	0.65	0.02
Analyze stakeholder feedback	2.37	1.25	0.02	0.74	0.67	0.02
Collect and analyze performance metrics	1.52	1.20	0.02	0.58	0.63	0.02
Planning						
Synthesize analysis into opportunities and constraints	2.63	1.23	0.02	0.87	0.67	0.02
Design public participation process	1.81	1.28	0.02	0.65	0.68	0.02
Execute public participation process	1.86	1.28	0.02	0.66	0.67	0.02
Prioritize stakeholder goals	2.16	1.28	0.02	0.69	0.67	0.02
Initiate stakeholder communication strategy	1.68	1.31	0.02	0.56	0.64	0.02
Develop regional plan	1.09	1.16	0.02	0.82	0.72	0.02
Develop vision plan	1.69	1.32	0.02	0.65	0.68	0.02
Develop framework plan	1.46	1.31	0.02	0.61	0.66	0.02
Develop urban plan	1.40	1.28	0.02	0.81	0.70	0.02
Develop land use plan	1.69	1.32	0.02	0.97	0.71	0.02
Develop strategic implementation plan	1.52	1.26	0.02	0.74	0.67	0.02
Develop site master plan	2.79	1.20	0.02	1.09	0.69	0.02
Develop historic restoration and preservation plan	1.17	1.13	0.02	0.75	0.69	0.02
Develop parks, open space, and trails master plan	2.30	1.32	0.02	1.00	0.68	0.02
Develop urban green system plan	1.51	1.31	0.02	0.83	0.68	0.02
Develop design guidelines	1.99	1.22	0.02	0.95	0.70	0.02
Develop a feasibility study	1.63	1.24	0.02	0.76	0.68	0.02
Develop active transportation plan	0.95	1.13	0.02	1.01	0.73	0.02
Develop mobility plan	0.95	1.12	0.02	0.89	0.71	0.02
Develop view corridor plan	1.18	1.16	0.02	0.57	0.65	0.02
Develop redevelopment plan	1.39	1.23	0.02	0.84	0.67	0.02
Develop ecological restoration plan	1.32	1.19	0.02	1.00	0.72	0.02
Develop urban forest management plan	0.85	1.06	0.02	0.89	0.71	0.02
Develop area and district plan	1.02	1.17	0.02	0.71	0.67	0.02
Conduct urban design and planning	1.80	1.34	0.02	0.91	0.69	0.02
Initiate public communication strategy	1.20	1.21	0.02	0.58	0.65	0.02
Design						

Professional Testing

Table 10. Means, SD, and SEM of Task Ratings.

Content Areas	Frequency Ratings			Criticality Ratings		
	Means	SD	SEM	Means	SD	SEM
Synthesize and apply the site analysis	3.14	1.01	0.02	1.18	0.70	0.02
Develop and refine the program	3.00	1.09	0.02	0.91	0.69	0.02
Create the basis for the design (e.g. inspiration, precedent)	3.06	1.10	0.02	0.69	0.70	0.02
Identify design inspiration	2.87	1.19	0.02	0.46	0.65	0.02
Create conceptual design alternatives and scenarios	3.25	1.00	0.02	0.82	0.68	0.02
Evaluate design alternatives	3.25	0.97	0.02	0.93	0.68	0.02
Develop a design narrative	2.62	1.22	0.02	0.49	0.63	0.02
Refine and synthesize concept alternative	3.00	1.13	0.02	0.80	0.66	0.02
Develop schematic design (e.g. layout, grading, planting, materials, detailing, lighting)	3.35	1.01	0.02	1.25	0.68	0.02
Prepare preliminary cost estimate	2.95	1.17	0.02	0.84	0.74	0.02
Prepare presentation drawings and communication tools	3.21	1.07	0.02	0.69	0.71	0.02
Communicate concept(s)/schematic(s) to stakeholders	3.07	1.10	0.02	0.76	0.72	0.02
Identify and develop performance metrics	1.77	1.28	0.02	0.65	0.67	0.02
Synthesize stakeholder feedback (including client, public, users, funding agencies)	2.34	1.30	0.02	0.70	0.69	0.02
Construction Documentation						
Develop layout plan	3.15	1.17	0.02	1.41	0.68	0.02
Develop demolition plan	2.44	1.40	0.02	1.33	0.68	0.02
Develop sediment control plan	1.73	1.45	0.02	1.36	0.68	0.02
Develop existing conditions plan	2.57	1.31	0.02	0.98	0.74	0.02
Develop outline specifications	2.40	1.34	0.02	1.08	0.73	0.02
Develop technical specifications	2.64	1.32	0.02	1.49	0.64	0.02
Develop general notes	2.86	1.26	0.02	1.19	0.68	0.02
Develop grading plan	2.73	1.31	0.02	1.64	0.58	0.02
Develop planting plan	3.29	1.10	0.02	1.07	0.67	0.02
Develop irrigation plan	1.78	1.50	0.02	0.96	0.71	0.02
Develop details (e.g., retaining walls, pavements, structures, planting, specialty features)	3.12	1.18	0.02	1.66	0.57	0.02
Develop code summary	1.68	1.37	0.02	1.12	0.75	0.02
Prepare sections	2.80	1.23	0.02	1.04	0.71	0.02
Prepare elevations	2.70	1.26	0.02	0.93	0.71	0.02
Prepare plan enlargements	2.81	1.30	0.02	0.88	0.75	0.02

Professional Testing

Table 10. Means, SD, and SEM of Task Ratings.

Content Areas	Frequency Ratings			Criticality Ratings		
	Means	SD	SEM	Means	SD	SEM
Develop stormwater pollution prevention plan	1.43	1.37	0.02	1.43	0.67	0.02
Prepare lighting plan	1.75	1.33	0.02	1.08	0.70	0.02
Develop site furnishings plan	2.44	1.31	0.02	0.68	0.65	0.02
Develop signage and wayfinding plan	1.82	1.24	0.02	0.91	0.67	0.02
Develop materials plan	2.61	1.36	0.02	0.98	0.70	0.02
Develop traffic control plan	0.89	1.14	0.02	1.45	0.71	0.02
Develop phasing plan	2.16	1.22	0.02	0.71	0.66	0.02
Develop key plan	2.22	1.43	0.02	0.41	0.61	0.02
Prepare cover sheet	2.55	1.42	0.02	0.34	0.58	0.02
Develop tree protection plan	2.60	1.28	0.02	1.12	0.70	0.02
Compile materials sample board	1.74	1.33	0.02	0.36	0.57	0.02
Develop mitigation plan (e.g., wetland, tree)	1.73	1.31	0.02	1.17	0.70	0.02
Develop emergency access plan	1.07	1.18	0.02	1.50	0.70	0.02
Prepare soil boring location plan	1.11	1.21	0.02	1.06	0.75	0.02
Prepare pavement markings plan	1.41	1.35	0.02	1.08	0.72	0.02
Prepare cost estimate	2.77	1.27	0.02	0.84	0.74	0.02
Prepare bid alternate plan	1.98	1.35	0.02	0.69	0.68	0.02
Prepare bid form/schedule	1.89	1.40	0.02	0.67	0.71	0.02
Develop project manual/front end specifications	1.78	1.37	0.02	1.11	0.73	0.02
Conduct quality control review	2.27	1.40	0.02	1.38	0.70	0.02
Prepare summary of quantities	2.24	1.36	0.02	0.75	0.70	0.02
Facilitate client review	2.51	1.34	0.02	0.76	0.71	0.02
Obtain permits	1.79	1.40	0.02	1.15	0.77	0.02
Prepare bid/tender documents	2.18	1.46	0.02	0.99	0.77	0.02
Bidding and Construction Related Services						
Facilitate pre-bid meeting/site visit	2.08	1.35	0.02	0.83	0.71	0.02
Prepare and issue addenda	2.11	1.36	0.02	1.00	0.73	0.02
Coordinate with sub consultants	2.60	1.34	0.02	1.10	0.73	0.02
Respond to RFIs	2.30	1.46	0.02	1.08	0.75	0.02
Conduct bid opening	1.38	1.32	0.02	0.59	0.71	0.02
Evaluate bids and make recommendations (e.g., check insurance, check references, check math, check bonds)	1.67	1.39	0.02	1.05	0.75	0.02
Identify delivery methods	1.29	1.28	0.02	0.67	0.68	0.02
Evaluate contractor qualifications	1.77	1.32	0.02	1.25	0.71	0.02
Assist with construction contract execution	1.63	1.39	0.02	0.98	0.76	0.02

Professional Testing

Table 10. Means, SD, and SEM of Task Ratings.

Content Areas	Frequency Ratings			Criticality Ratings		
	Means	SD	SEM	Means	SD	SEM
Facilitate pre-construction meeting	1.94	1.35	0.02	0.90	0.72	0.02
Document pre-construction existing conditions	1.89	1.36	0.02	1.09	0.71	0.02
Review submittals	2.43	1.38	0.02	1.22	0.71	0.02
Prepare change orders	1.97	1.37	0.02	1.06	0.73	0.02
Conduct onsite construction-related actions (e.g., construction observation, progress meetings, field reports)	2.58	1.33	0.02	1.39	0.68	0.02
Prepare drawing revisions	2.63	1.30	0.02	1.24	0.69	0.02
Prepare clarification sketches	2.40	1.28	0.02	1.13	0.70	0.02
Document construction observation (e.g., field reports)	2.40	1.35	0.02	1.24	0.70	0.02
Attend substantial completion (practical completion) walkthrough	2.44	1.36	0.02	1.22	0.70	0.02
Prepare punch list (deficiency list)	2.39	1.38	0.02	1.28	0.70	0.02
Attend final completion walkthrough	2.46	1.36	0.02	1.18	0.72	0.02
Prepare as-built (record) drawings	1.68	1.30	0.02	1.03	0.73	0.02
Conduct warranty review	1.47	1.31	0.02	0.92	0.71	0.02
Compile close-out documents	1.47	1.31	0.02	0.78	0.71	0.02
Collect and analyze performance metrics	0.96	1.12	0.02	0.61	0.66	0.02
Post-Construction Services						
Estimate maintenance and management costs	1.32	1.21	0.02	0.72	0.67	0.02
Prepare maintenance and operation manual	1.30	1.13	0.02	0.92	0.69	0.02
Review maintenance services	1.26	1.18	0.02	0.79	0.65	0.02
Prepare management plan	1.15	1.11	0.02	0.83	0.66	0.02
Conduct post-occupancy evaluation	0.99	1.10	0.02	0.65	0.65	0.02
Estimate lifecycle costs	0.82	1.00	0.02	0.59	0.64	0.02
Provide inputs to the asset management plan	0.83	1.04	0.02	0.55	0.62	0.02
Collect and analyze performance metrics	0.74	0.98	0.02	0.55	0.63	0.02
Perform forensic evaluation	0.54	0.91	0.02	0.78	0.75	0.02

Professional Testing

A total of 19 tasks were flagged for having low frequency and criticality ratings. Those tasks are as follows:

- Execute marketing activities
- Respond to RFPs or RFQs
- Develop regional plan
- Develop active transportation plan
- Develop mobility plan
- Develop urban forest management plan
- Develop area and district plan
- Identify design inspiration
- Develop a design narrative
- Develop traffic control plan
- Develop key plan

- Prepare cover sheet
- Compile materials sample board
- Collect and analyze performance metrics
- Conduct post-occupancy evaluation
- Estimate lifecycle costs
- Provide inputs to the asset management plan
- Collect and analyze performance metrics
- Perform forensic evaluation

Professional Testing

Of the 19 tasks flagged, 16 were removed from the final task list. The remaining three tasks were kept on the final task list.

Write-in Responses to the Survey

At the end of the survey, respondents were offered a chance to write-in responses to any job-related tasks that were missing from the survey. The responses to that question are presented in Appendices H and G. Appendix H has the write-in responses from all participants who identified themselves as working in the United States, Canada, and Puerto Rico. Appendix G includes all write-in responses from those working outside of the United States, Canada, or Puerto Rico.

Next Steps

The Council of Landscape Architectural Registration Boards' Examination Committees should review final list of job tasks and related knowledge, skills and abilities, and tools, equipment and other resources, to determine if new content should be written for each of the Sections of the L.A.R.E. Any updates to the L.A.R.E. should be published to the candidate population in advance of updating any exam content.

 The job analysis should be revisited every five to seven years to ensure that the examination blueprint reflects current practice, so the job analysis should be revisited again no later than 2023.

Appendix A: Phase I – Round 1 Survey

Global Landscape Architecture Task Analysis Questionnaire
Round One

Overview

Every five to seven years the Council of Landscape Architectural Registration Boards (CLARB) conducts an analysis of the practice of landscape architecture in North America to ensure that what is tested on the Landscape Architectural Registration Exam (L.A.R.E.) accurately reflects the knowledge and skills required to practice as a licensed professional. Additionally, the results of the Task Analysis are often used to help define and defend the scope of work that can be performed by landscape architects.

CLARB is conducting a Task Analysis to revalidate the most recent study, completed in 2010. The project is scheduled to begin in November 2015 and end in fall 2016.

Historically, the Task Analysis was sent to practicing landscape architects in North America. This year, CLARB is partnering with the IFLA Global Professional Standards Working Group (IFLA GPS) to expand the scope of the study to better understand how landscape architecture is practiced across the world.

The project will be completed in three phases:

- The first phase is a review of the duties and tasks identified during the 2010 Task Analysis by subject matter experts (SMEs) from the International Federation of Landscape Architects (IFLA).
- The second phase is a review of these duties and tasks task force of CLARB appointed SMEs.
- The third phase is a large scale, electronic survey to validate the duties and tasks identified during the first and second phases.

A more detailed description of the process can be found in the document entitled "Global Landscape Architecture Task Analysis Project".

To begin this *enhanced* Task Analysis process, Working Group Chair Ilya Mochalov has identified a small group of landscape architects who practice outside of North America to seek input on the following:

- whether or not tasks identified during the 2010 task analysis are performed by landscape architects in your region;
- whether or not the language used to describe each task is appropriate; and
- whether or not there are tasks missing from each overall areas of practice.

There are approximately 75 tasks that are organized into seven areas of practice (beginning with *Project Management* and ending with *Construction Documentation*). The survey consists of nine pages of task statements followed by a few short open-ended questions.

Global Landscape Architecture Task Analysis Questionnaire
Round One

How to Respond

Please read each job task, then ask yourself "Do landscape architects in your country do this?" If the task is performed by landscape architects in your country, please place an **X** under "Yes". If the task is not performed by landscape architects in your country, please place an **X** under "No". If the task is not something that landscape architects do, please tell us why you believe it is not appropriate to include.

Next, you will be asked to provide any proposed changes to the language used to describe each task. The original job tasks were written by landscape architects based in the United States and Canada. The language used was based upon how they describe practice. If you feel the language is too vague or inappropriate please suggest how the language used to describe each task may be updated.

Finally, at the end of section, please tell us if there were any tasks missing from that area of practice that should be added to the final task list.

Global Landscape Architecture Task Analysis Questionnaire
Round One

Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
	Yes	No		
A **Project Management**				
1 Determine project scope and client requirements				
2 Establish and monitor project budgets (or statement of probable cost)				
3 Establish scope of services and required outside expertise				
4 Develop program				
5 Prepare and review contractual agreements				
6 Coordinate topographical survey and develop project base map				
7 Establish project schedule				
8 Facilitate meetings (e.g. staff, government regulators, consultants, clients)				

2016-08-19

Global Landscape Architecture Task Analysis Questionnaire
Round One

	Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
		Yes	No		
9	Coordinate other disciplines' documents				
10	Document design decisions and project communication				
11	Prepare technical memorandum and graphics				
12	Obtain input from stakeholders regarding project				
13	Coordinate construction documents (internally, with clients, and with other consultants)				
Please identify any additional tasks missing from the area of **Project Management** that you would like to see added to this list:					
B	Bidding and Construction				
1	Respond to bidder requests for information				

Global Landscape Architecture Task Analysis Questionnaire
Round One

	Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
		Yes	No		
2	Issue addenda to construction documents				
3	Participate in construction meetings				
4	Respond to contractor requests for information				
5	Review and respond to submittals				
6	Review and respond to shop drawings				
7	Prepare change orders				
8	Conduct construction site review and documentation				
9	Perform substantial completion inspection				
10	Perform final inspection				

Global Landscape Architecture Task Analysis Questionnaire
Round One

Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
	Yes	No		
Please identify any additional tasks missing from the area of **Bidding and Construction** that you would like to see added to this list:				
C Site Inventory				
1 Determine applicable codes, regulations, and permitting requirements				
2 Conduct onsite investigation				
3 Collect and record site inventory				
4 Identify gaps and deficiencies				
Please identify any additional tasks missing from the area of **Site Inventory** that you would like to see added to this list:				

Global Landscape Architecture Task Analysis Questionnaire
Round One

	Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
		Yes	No		
D	Analysis of Existing Conditions				
1	Analyze codes and regulations for design impact				
2	Perform site use analysis				
3	Perform circulation analysis				
4	Interpret utility analysis				
5	Perform view analysis				
6	Perform microclimate analysis				
7	Interpret floodplain conditions				
8	Perform vegetation analysis				

Global Landscape Architecture Task Analysis Questionnaire
Round One

	Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
		Yes	No		
9	Perform solar analysis				
10	Interpret ecological analysis (e.g. habitat, biodiversity)				
11	Perform a slope analysis				
12	Interpret soil analysis				
13	Interpret geotechnical analysis				
14	Perform small-scale surface hydrological analysis				
15	Interpret stakeholder input				
16	Analyze on and offsite relationships				

2016-08-19

Global Landscape Architecture Task Analysis Questionnaire
Round One

Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
	Yes	No		
Please identify any additional tasks missing from the area of **Analysis of Existing Conditions** that you would like to see added to this list:				
E Concept Development				
1 Synthesize site opportunities and constraints				
2 Refine program				
3 Create design alternatives				
4 Analyze design alternatives				
5 Develop concept narrative				
6 Refine conceptual design(s)				

Global Landscape Architecture Task Analysis Questionnaire
Round One

Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
	Yes	No		
7	Prepare conceptual renderings*				
Please identify any additional tasks missing from the area of **Concept Development** that you would like to see added to this list:				
F	**Design Development**				
1	Develop master plan documents (e.g. land-use, circulation, phasing plan, and guidelines)				
2	Perform earthwork analysis				
3	Refine the preferred design alternative				
4	Develop preliminary site plans, sections, and details				
5	Prepare illustrative graphics (e.g. perspectives, elevations, plans, sections)				

Global Landscape Architecture Task Analysis Questionnaire
Round One

	Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
		Yes	No		
6	Investigate, verify availability, and select design materials and components				
	Please identify any additional tasks missing from the area of **Design Development** that you would like to see added to this list:				
G	**Construction Documentation**				
1	Prepare existing conditions plan				
2	Prepare demolition and removal plan				
3	Prepare site protection and preservation plans (e.g. soil, existing features, existing pavements, historic elements, vegetation)				
4	Prepare erosion and sediment-control plan				
5	Prepare layout and materials plan				

Global Landscape Architecture Task Analysis Questionnaire
Round One

	Task	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
		Yes	No		
6	Prepare grading plan				
7	Prepare stormwater management plan				
8	Prepare planting plans				
9	Prepare project sections and profiles				
10	Prepare construction details				
11	Prepare general contract and bidding specifications				
12	Prepare technical specifications				
Please identify any additional tasks missing from the area of **Construction Documentation** that you would like to see added to this list:					
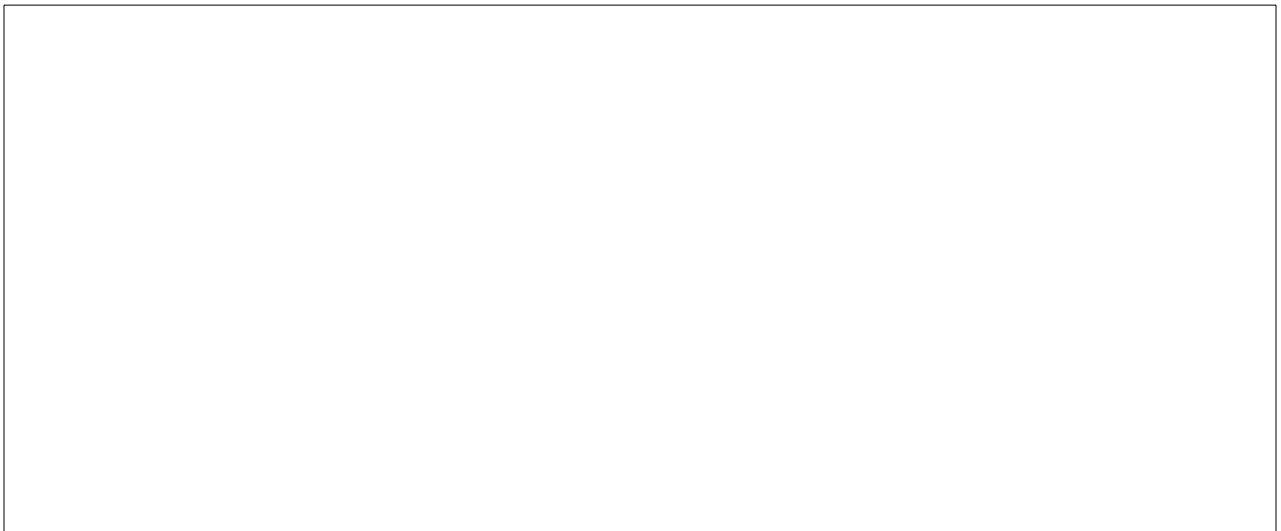
1.   Are there any areas of work that were missing from the previous list?

2. Please share any additional thoughts or comments about the survey:

Thank you for your responses. Once we have consolidated your feedback we will send you an updated questionnaire for review.

Appendix B: Phase I – Round 2 Survey

Global Landscape Architecture Task Analysis Questionnaire Round Two

Overview of Round Two

CLARB received feedback from the First Round of Phase I of the Task Analysis a few weeks ago. All feedback was consolidated and reorganized into an updated task list. The updated task list is provided below, and again we would like to solicit feedback on this revised list.

As a reminder, every five to seven years the Council of Landscape Architectural Registration Boards (CLARB) conducts an analysis of the practice of landscape architecture in North America to ensure that what is tested on the Landscape Architectural Registration Exam (L.A.R.E.) accurately reflects the knowledge and skills required to practice as a licensed professional. Additionally, the results of the Task Analysis are used to help define and defend the scope of work that can be performed by landscape architects.

Historically, the Task Analysis was sent to practicing landscape architects in North America. This year, CLARB has partnered with the IFLA Global Standards Working Group to expand the scope of the study to better understand how landscape architecture is practiced across the world.

The project will be completed in three phases:

- The first phase is a review of the duties and tasks identified during the 2010 Task Analysis by subject matter experts (SMEs) from the International Federation of Landscape Architects (IFLA).
- The second phase is a review of these duties and tasks task force of CLARB appointed SMEs.
- The third phase is a large scale, electronic survey to validate the duties and tasks identified during the first and second phases.

A more detailed description of the process can be found in the document entitled, "Global Landscape Architecture Task Analysis Project."

CLARB began Phase I of this project last month by surveying a small group of landscape architects who practice outside of North America. They were asked to provide input on the following:

- whether or not tasks identified during the 2010 task analysis are performed by landscape architects in your region;
- whether or not the language used to describe each task is appropriate; and
- whether or not there are tasks missing from each overall areas of practice.

Global Landscape Architecture Task Analysis Questionnaire
Round Two

Explanation about Task Analyses

While CLARB recognizes that some of the tasks listed in this document may seem generic or general compared to the specific activities you perform, we would like to keep the task list general so that it may provide an outline of all tasks performed by landscape architects across the world.

We recognize that processes vary from jurisdiction to jurisdiction based upon custom, legislation or precedent, but in most instances tasks are similar and that landscape architects may or may not perform these tasks in your jurisdiction. To conduct this survey across many and varied jurisdictions and make meaningful comparisons, requires that the tasks that you perform are fit into the tasks on the survey, recognizing that it may not reflect the exact process in your jurisdiction.

If there are additional tasks (rather than processes) that can't be interpreted as one of the items on the survey and are performed by landscape architects in your jurisdiction, please note them in the appropriate location.

How to Respond

Please read each job task, then ask yourself "Do landscape architects in your country do this?" If the task is performed by landscape architects in your country, please place an **X** under "Yes". If the task is not performed by landscape architects in your country, please place an **X** under "No". If the task is not something that landscape architects do, please tell us why you believe it is not appropriate to include.

Next, you will be asked to provide any proposed changes to the language used to describe each task. The original job tasks were written by landscape architects based in the United States and Canada. The language used was based upon how they describe practice. If you feel the language is too vague or inappropriate please suggest how the language used to describe each task may be updated.

Finally, at the end of section, please tell us if there were any tasks missing from that area of practice that should be added to the final task list.

Global Landscape Architecture Task Analysis Questionnaire
Round Two

Task/Type of Project	Do L.A.s in your country do this?		If no, why not?	Please provide any proposed changes to the language used to describe each task:
	Yes	No		
A **Types of Projects**				
1 Public projects				
2 Private projects				
3 Large scale landscape design				
4 Small scale landscape design				
5 Landscape planning				
6 Land use planning				
7 Landscape social planning				
9 Landscape cultural and historical management planning				
10 Landscape visual resource assessment and management				
11 Landscape systems planning				
12 Historic restoration and preservation				
13 Urban design				
14 Master planning				
15 Landscape community/stakeholder engagement - participatory design				
16 Design/place policy				
17 Design/place governance				
18 Design review (panels)				
19 Design guidelines				
Please identify any additional **Types of Projects** missing that you would like to see added to this list:				

Global Landscape Architecture Task Analysis Questionnaire
Round Two

	Task	Do L.A.s in your country do this?	If no, why not?	Please provide any proposed changes to the language used to describe each task:
B	**Project Management**			
1	Determine project scope and client requirements			
2	Establish and monitor project budgets (or statement of probable cost)			
3	Establish scope of services and required outside expertise			
4	Develop program (work with client to define the spaces and uses of and within a site)			
5	Prepare and review contractual agreements			
6	Coordinate topographical survey and develop project base map			
7	Establish project schedule			
8	Facilitate meetings (e.g. staff, government regulators, consultants, clients)			
9	Coordinate other disciplines' documents			
10	Document design decisions and project communication			
11	Prepare technical memorandum and graphics			
12	Obtain input from stakeholders regarding project (e.g., organize debates and discussions with stakeholders and society)			
13	Coordinate construction documents (internally, with clients, and with other consultants)			
14	Conduct research to identify specific landscape, environmental, or territorial obligations and other possible existing right or prohibition (e.g., right of way, aqueduct, high tension cables)			

Global Landscape Architecture Task Analysis Questionnaire
Round Two

	Task	Do L.A.s in your country do this?	If no, why not?	Please provide any proposed changes to the language used to describe each task:
15	Conduct impact analysis			
Please identify any additional tasks missing from the area of **Project Management** that you would like to see added to this list:				
C	Site or Policy Inventory			
1	Determine applicable codes, regulations, and permitting requirements			
2	Conduct onsite investigation and fieldwork			
3	Conduct local and regional analyses			
4	Collect and record site inventory			
5	Identify gaps and deficiencies onsite			
6	Conduct research into historical/iconographical archives (e.g., reviewing ancient documents, paintings, drawings, pictures) oral histories			
Please identify any additional tasks missing from the area of **Site or Policy Inventory** that you would like to see added to this list:				
D	Analysis of Existing Conditions			
1	Analyze codes and regulations for design impact			
2	Perform site and region use analysis			
3	Perform circulation, access, and connectivity / gap analysis			
4	Interpret utility analysis			
5	Perform view, spatial, esthetic, and amenity analysis			
6	Perform micro and macroclimate analysis			
7	Perform hydrological (site drainage) analysis			

Global Landscape Architecture Task Analysis Questionnaire
Round Two

	Task	Do L.A.s in your country do this?	If no, why not?	Please provide any proposed changes to the language used to describe each task:
8	Perform vegetation analysis			
9	Perform solar (Shadow Impact) analysis			
10	Interpret ecological analysis (e.g. habitat, biodiversity)			
11	Perform topographic (slope) analysis			
12	Interpret soil and sold profile analysis			
13	Interpret geotechnical and geological analysis			
14	Perform small-scale surface hydrological analysis			
15	Interpret stakeholder input			
16	Analyze on and offsite relationships			
17	Conduct environmental impact assessments			
18	Conduct Social / Cultural Analysis to determine stakeholder preferences and taboos			
19	Organize and analyze Public and Stakeholder Participation and Involvement (meetings, charrettes, surveys, open houses, etc.)			
20	Conduct historical analysis			
Please identify any additional tasks missing from the area of **Analysis of Existing Conditions** that you would like to see added to this list:				
E	Concept Development			
1	Synthesize site and regional opportunities and constraints			
2	Refine program			
3	Create design alternatives			
4	Analyze design alternatives			

Global Landscape Architecture Task Analysis Questionnaire
Round Two

	Task	Do L.A.s in your country do this?	If no, why not?	Please provide any proposed changes to the language used to describe each task:
5	Develop concept narrative			
6	Refine conceptual design(s)			
7	Prepare presentation drawings (e.g., conceptual renderings)			
8	Create periodical and final project reports			
Please identify any additional tasks missing from the area of **Concept Development** that you would like to see added to this list:				
F	Design Development			
1	Develop master plan documents (e.g. land-use, circulation, phasing plan, and guidelines)			
2	Perform earthwork and water management analysis			
3	Refine the preferred design alternative			
4	Develop preliminary site plans, sections, and details			
5	Prepare illustrative graphics (e.g. perspectives, elevations, plans, sections, and sketches)			
6	Investigate, verify availability, and select design materials and components			
Please identify any additional tasks missing from the area of **Design Development** that you would like to see added to this list:				
G	Construction Documentation			
1	Prepare existing conditions plan			
2	Prepare demolition and removal plan			
3	Prepare site protection and preservation plans (e.g. soil, existing features, existing pavements, historic			

Global Landscape Architecture Task Analysis Questionnaire
Round Two

	Task	Do L.A.s in your country do this?	If no, why not?	Please provide any proposed changes to the language used to describe each task:
	elements, vegetation)			
4	Prepare erosion and sediment-control plan			
5	Prepare layout and materials plan			
6	Prepare grading plan			
7	Perform water management plan (including stormwater, grey water, black water)			
8	Prepare planting plans			
9	Prepare vegetation, reforestation, reclaimation plans			
10	Prepare project sections and profiles			
11	Prepare construction and planting details			
12	Prepare general contract and bidding specifications			
13	Prepare technical specifications			
14	Review and coordinate documentation with other consultants			
Please identify any additional tasks missing from the area of **Construction Documentation** that you would like to see added to this list:				
H	Bidding and Construction (Tender and Construction)			
1	Respond to bidder requests for information			
2	Issue addenda to construction and planning documents			
3	Participate in construction, planning, and maintenance meetings			
4	Respond to contractor requests for information			
5	Review and respond to submittals			

Global Landscape Architecture Task Analysis Questionnaire
Round Two

	Task	Do L.A.s in your country do this?	If no, why not?	Please provide any proposed changes to the language used to describe each task:
6	Review and respond to shop (fabricator / manufacturer) drawings			
7	Prepare change orders			
8	Conduct construction site review, documentation, and planning			
9	Perform substantial completion inspection			
10	Perform final inspection			
Please identify any additional tasks missing from the area of **Bidding and Construction** that you would like to see added to this list:				
I	Maintenance			
1	Document the history of parks and historic gardens			
2	Keep records of parks and historic gardens			
3	Set up inventories of historic gardens			
4	Produce landscape maintenance and use manuals			
5	Create concepts for the restoration of historic gardens and green spaces			
6	Plan plant layouts			
7	Generate proposals for the restoration of historic water features			
8	Create plans for the restoration of architectural features			
Please identify any additional tasks missing from the area of Maintenance that you would like to see added to this list:				
J	Miscellaneous Tasks			

Global Landscape Architecture Task Analysis Questionnaire
Round Two

	Task	Do L.A.s in your country do this?	If no, why not?	Please provide any proposed changes to the language used to describe each task:
1	Organize and evaluate design and landscape architectural competitions			
2	Prepare expert opinions			
3	Organize and participate in conferences, exhibitions and presentations			
4	Create visual representations of spaces (e.g., photographs, film)			
Please identify any additional tasks missing from the area of Miscellaneous that you would like to see added to this list:				

Global Landscape Architecture Task Analysis Questionnaire
Round Two

1.   Are there any areas of work that were missing from the previous list?

2.   Please share any additional thoughts or comments about the survey:

Thank you for your responses. Once we have consolidated your feedback we will send you an updated questionnaire for review.

Appendix C: Task List Post-Delphi Surveys

Task List	
A	**Types of Projects**
1	Public or private
2	Large scale or small scale landscape design
3	Landscape planning
4	Land use planning
5	Landscape social planning
6	Landscape cultural and historical management planning or landscape cultural and historical protection planning
7	Landscape visual resource assessment and management or Visual impact assessment
8	Landscape open space systems planning
9	Historic restoration and preservation
10	Urban design, urban planning, urbanism
11	Master planning
12	Landscape community/stakeholder engagement - participatory design
13	Design/place policy
14	Design/place governance
15	Design review (panels)
16	Design guidelines
17	Social impact assessment
18	Urban green system planning
19	National park planning
20	Road greening planning and design
21	Infrastructural landscape planning and design (e.g., stormwater, channels, urban forestry)
22	Mitigation and risk control landscapes for climate change
23	Research by design
B	**Project Management**
1	Determine project scope and client requirements
2	Establish and monitor project budgets (or statement of probable cost)
3	Establish scope of services and required outside expertise
4	Develop program (work with client to define the spaces and uses of and within a site)
5	Prepare and review contractual agreements
6	Coordinate topographical survey and develop project base map
7	Establish project schedule
8	Facilitate meetings (e.g. staff, government regulators, consultants, clients)
9	Coordinate other disciplines' documents
10	Document design decisions and project communication
11	Prepare technical memorandum and graphics
12	Obtain input from stakeholders regarding project (e.g., organize debates and discussions with stakeholders and society)
13	Coordinate construction documents (internally, with clients, and with other consultants)

	Task List
14	Conduct research to identify specific landscape, environmental, or territorial obligations and other possible existing right or prohibition (e.g., right of way, aqueduct, high tension cables)
15	Conduct impact analysis
C	**Site or Policy Inventory**
1	Determine applicable codes, regulations, and permitting requirements
2	Conduct onsite investigation and fieldwork
3	Conduct local and regional analyses
4	Collect and record site inventory
5	Identify gaps and deficiencies onsite
6	Conduct research into historical/iconographical archives (e.g., reviewing ancient documents, paintings, drawings, pictures) oral histories
D	**Analysis of Existing Conditions**
1	Analyze codes and regulations for design impact
2	Perform site and region use analysis
3	Perform circulation, access, and connectivity / gap analysis
4	Interpret utility analysis
5	Perform view, spacial, esthetic, and amenity analysis
6	Perform micro and macroclimate analysis
7	Perform hydrological (site drainage) analysis
8	Perform vegetation analysis
9	Perform solar (Shadow Impact) analysis
10	Interpret ecological analysis (e.g. habitat, biodiversity)
11	Perform topographic (slope) analysis
12	Interpret soil and soil profile analysis
13	Interpret geotechnical and geological analysis
14	Perform small-scale surface hydrological analysis
15	Interpret stakeholder input
16	Analyze on and offsite relationships
17	Conduct environmental impact assessments
18	Conduct Social / Cultural Analysis to determine stakeholder preferences and taboos
19	Organize and analyze Public and Stakeholder Participation and Involvement (meetings, charrettes, surveys, open houses, etc.)
20	Conduct historical analysis
E	**Concept Development**
1	Synthesize site and regional opportunities and constraints
2	Refine program
3	Create design alternatives and scenarios
4	Analyze design alternatives
5	Develop concept narrative
6	Refine conceptual design(s)
7	Prepare presentation drawings (e.g., conceptual renderings)

Task List

8	Create periodical and final project reports
F	**Design Development**
1	Develop master plan documents (e.g. land-use, circulation, phasing plan, and guidelines)
2	Perform earthwork and water management analysis
3	Refine the preferred design alternative
4	Develop preliminary site plans, sections, and details
5	Prepare illustrative graphics (e.g. perspectives, elevations, plans, sections, and sketches)
6	Investigate, verify availability, and select design materials and components
7	Conduct foresight studies
G	**Construction Documentation**
1	Prepare existing conditions plan
2	Prepare demolition and removal plan
3	Prepare site protection and preservation plans (e.g. soil, existing features, existing pavements, historic elements, vegetation)
4	Prepare erosion and sediment-control plan
5	Prepare layout and materials plan
6	Prepare grading plan
7	Perform water management plan (including stormwater, grey water, black water)
8	Prepare planting plans
9	Prepare vegetation, reforestation, reclamation/amelioration, restoration plans
10	Prepare project sections and profiles
11	Prepare construction and planting details
12	Prepare general contract and bidding specifications
13	Prepare technical specifications
14	Review and coordinate documentation with other consultants
H	**Bidding and Construction (Tender and Construction)**
1	Respond to bidder (contractor) requests for information
2	Issue addenda to construction and planning documents
3	Participate in construction, planning, and maintenance meetings
4	Respond to contractor requests for information
5	Review and respond to submittals
6	Review and respond to shop (fabricator / manufacturer) drawings
7	Prepare change orders
8	Conduct construction site review, documentation, and planning
9	Perform substantial completion (practical completion) inspection
10	Perform final (final completion) inspection
11	Perform Building Information Modeling (BIM)
I	**Maintenance**
1	Document the history of parks and historic gardens
2	Keep records of parks and historic gardens
3	Set up inventories of historic gardens

Task List
4	Produce landscape maintenance and use manuals
5	Create concepts for the restoration of historic gardens and green spaces
6	Plan plant layouts
7	Generate proposals for the restoration of historic water features
8	Create plans for the restoration of architectural features
9	Prepare project maintenance schedule
J	**Miscellaneous Tasks**
1	Organize and evaluate design and architectural competitions
2	Prepare expert opinions
3	Organize exhibitions and presentations
4	Create visual representations of spaces (e.g., photographs, film, maquettes, 3D, games)
5	Prepare and administer short term active urban spaces
6	Design short-term, active spaces/events (pop-up spaces)

Appendix D: 2010 CLARB Task Analysis

Task Inventory	Knowledge of	Skills Needed	Abilities Needed	Other Characteristics
A Project Management				
1 Determine Client Requirements	Adaptive Reuse; Administrative Policies; Basic Archaeology; Basic Civil Engineering; Basic Electrical Engineering; Basic Legal Terminology; Basic Mechanical Engineering; Basic Political Climate; Basic Traffic Engineering; Basic Urban Forestry; Bidding Procedures; Budgeting; Basic Business Law; Communication Methods; Basic Basic Knowledge of Computer Graphic Software; Consensus Techniques; Contract Law; Design Processes; Drafting Standards; Economic Impact of Green Space and Vegetation on Property Values; Environmental Ethics Standards; Federal, State, and Local Codes and Regulations; Governing Agency Processes; Graphic Standards; Human Resources; Industry Standards and Guidelines; Landscape Architecture Terminology; Laws Governing Landscape Architecture; Liability Insurance; Master Plan Implementation Strategies; Occupational Health and Safety Standards; Organizational Structure; Professional Ethics Standards; Professional Liability; Project Development Processes; Roles of Associated Professions; Site Surveys; Specification Types and Formats; Technical Drawings; Project Budget	Analytical Skills; Balance Needs of Multiple User Groups; Computer Skills; Cost Estimating Skills; Data Manipulation; Educating Others on Environmental and Cultural Significance; Facilitation Skills; Integrating Environmental and Cultural Systems in a Design; Interpersonal Skills; Leadership Skills; Literacy; Mathematics Skills; Maximize User Experience; Mediating Skills; Negotiation Skills; Organizational Skills; Public Speaking Skills; Research Skills; Team-Building Skills; Verbal Communication Skills; Written Communication Skills;	Ability to Synthesize; Adaptability; Analytical Reasoning; Creativity; Leadership Ability; Listening Ability; Problem-Solving;	Accommodating; Assertiveness; Attention to Detail; Awareness of Social Environment; Confidence; Conscientiousness; Curiosity; Decisive; Emotional Stability; Ethical; Initiative; Integrity; Self-Awareness; Service Orientation; Tolerance for Ambiguity;
2 Establish Project Budgets				
3 Determine Project Scope				
4 Establish Scope of Services				
5 Determine Required Outside Expertise				
6 Prepare Contractual Agreement				
7 Read Contractual Agreement				
8 Coordinate Topographical Survey				
9 Establish Project Schedule				
10 Conduct Presentations				
11 Facilitate Meetings (e.g. staff, government regulators, consultants, clients)				
12 Document External Project Communication				
13 Coordinate Internal Design Documentation				
14 Analyze Other Disciplinary Documents				
15 Document Design Decisions				
16 Prepare Technical Memorandum and Graphics				
17 Obtain Input from Stakeholders Regarding Project				
18 Coordinate Construction Documentations Internal				
19 Coordinate Construction Documents with Client				
20 Coordinate Construction Documents with Other Consultants				

Task Inventory	Knowledge of	Skills Needed	Abilities Needed	Other Characteristics
B Project Related Research				
1 Review Codes and Regulations for Design Impact	Accessibility Requirements; Adaptive Reuse; Agronomy; Air Quality Issues; Analysis Methods; Basic Archaeology; Basic Traffic Engineering; Basic Urban Forestry; Carrying Capacities; Climate Impact; Communication Methods; Data Inventory Resources; Design Precedent; Federal, State, and Local Codes and Regulations; Fire Protection; Governing Agency Processes; Human Factors Influencing Design; Impacts of Development on Resources; Industry Standards and Guidelines; Interpretive Design; Land Reclamation; Landscape Architecture Terminology; Landscape Ecology; Level of Service for Providing Public Infrastructure; Lifecycle Costs; Local Resource Availability; Low Impact Development; Master Plan Implementation Strategies; Mixed-Use Development; Multi-modal Circulation (e.g. pedestrian, bicycle, vehicular, equestrian); Noise Impacts; Planning Principles; Plant Communities; Plant Hardiness Zone; Plant Materials; Plant Toxicity; Playground Safety; Pollution Mitigation; Public Health Issues; Public Policies Effecting Landscape Architecture; Recreational Facility Design; Recreational Trail Design; Research Methods (e.g. Quantitative and Qualitative); Restoration Ecology; Retrofitting; Reused and Recycled Materials; Signage System Designs; Site Lighting Design; Social Impacts of Design; Spatial Composition; Stormwater Management Practices; Sustainable Site Initiatives; Sustainablity Principles and Practices; Therapeutic Landscape Design; Understanding Scale; Utility Systems; Vegetation Preservation; Water Conservation; Water Quality Issues; Wayfinding Methods and Practices; Wetland Conditions; Wind Effects;	Analytical Skills; Computer Skills; Data Manipulation; Geographic Information System Skills; Integrating Environmental and Cultural Systems in a Design; Investigative Skills; Literacy; Maximize User Experience; Organizational Skills; Photography Skills; Research Skills; Technical Drawing Interpretation Skills; Verbal Communication Skills; Written Communication Skills;	Ability to Synthesize; Analytical Reasoning; Conceptual Reasoning; Creativity; Deductive Reasoning; Inductive Reasoning; Listening Ability; Long-Term Conceptualization; Problem-Solving; Spatial Relations; Three Dimensional Visualization;	Assertiveness; Attention to Detail; Awareness of Social Environment; Curiosity; Ethical; Future-Orientation; Initiative; Integrity; Stewardship;
2 Review Best Practices				
3 Research Latest Materials and Technologies				
4 Develop program				
5 Refine program				

Task Inventory	Knowledge of	Skills Needed	Abilities Needed	Other Characteristics
C Site Inventory				
1 Determine Applicable Codes & Regulations	Accessibility Requirements; Adaptive Reuse; Aerial Photos; Analysis Methods; Basic Arboriculture; Basic Archaeology; Basic Architecture; Basic Geology; Basic Geotechnical Engineering; Basic Traffic Engineering; Carrying Capacities; Computer Graphic Software; Conservation Planning; Coordinate Systems; Data Inventory Resources; Demolition Processes; Drainage; Ecological Systems; Federal, State, and Local Codes and Regulations; Fire Protection; Geographic Information Systems; Hazard Conditions; Human Factors Influencing Design; Hydrology; Native and Invasive Plant Species; Landscape Architecture Terminology; Landscape Ecology; Microclimates; Noise Impacts; Plant Communities; Plant Hardiness Zone; Plant Toxicity; Playground Safety; Pollution Mitigation; Recreational Trail Design; Research Methods (e.g. Quantitative and Qualitative); Restoration Ecology; Reused and Recycled Materials; Signage System Designs; Site Lighting Design; Site Opportunities and Constraints; Site Surveys; Soil Types; Solar Patterns; Surficial Geology; Topography; Utility Systems and Infrastructure; Vegetation Preservation; Visual Assessment Methods; Wind Effects; Natural Diversity Database; Floodplains; Aquifer Protection; Farmland Preservation	Analytical Skills; Computer Skills; Geographic Information System Skills; Graphic Communication Skills; Investigative Skills; Literacy; Organizational Skills; Photography Skills; Physical Data Collection; Regional Analysis (e.g. watershed, viewshed, corridor); Research Skills; Site Analysis; Verbal Communication Skills; Visual Assessment Skills; Written Communication Skills;	Analytical Reasoning; Creativity; Inductive Reasoning; Listening Ability;	Attention to Detail; Curiosity; Ethical; Initiative; Integrity;
2 Conduct Onsite Investigation				
3 Develop Site Data Inventory				
4 Perform Photographic Inventory				
5 Record Site Inventory				

Task Inventory	Knowledge of	Skills Needed	Abilities Needed	Other Characteristics
D Analysis of Existing Conditions				
1 Analyze Codes and Regulations for Design Impact	Accessibility Requirements; Adaptive Reuse; Aerial Photos; Agronomy; Analysis Methods; Basic Arboriculture; Basic Architecture; Basic Civil Engineering; Basic Geology; Basic Geotechnical Engineering; Basic Traffic Engineering; Computer Graphic Software; Conservation Planning; Crime Prevention Through Environmental Design; Drainage; Ecological Systems; Environmental Psychology; Erosion Management; Fire Protection; Fluvial Geomorphology; Geographic Information Systems; Grading Equations; Hazard Conditions; Hillslope Geomorphology; Horticulture; Human Factors Influencing Design; Hydrology; Impacts of Development on Resources; Native and Invasive Plant Species; Irrigation Techniques; Landscape Architecture Terminology; Landscape Ecology; Local Resource Availability; Low Impact Development; Microclimates; Multi-modal Circulation (e.g. pedestrian, bicycle, vehicular, equestrian); Noise Impacts; Noise Mitigation; Plant Communities; Plant Toxicity; Playground Safety; Public Policies Effecting Landscape Architecture; Recreational Facility Design; Recreational Trail Design; Research Methods (e.g. Quantitative and Qualitative); Retaining Walls; Site Opportunities and Contraints; Soil Types; Solar Patterns; Stormwater Management Practices; Structural Considerations; Site Surveys; Surficial Geology; Topography; Utility Systems; Vegetation Preservation; Visual Assessment Methods; Water Quality Issues; Wetland Conditions; Wind Effects; Natural Diversity Database (Wildlife or Plant Endangered Species); Floodplains; Aquifer Protection; Farmland Preservation	Analytical Skills; Comparative Analysis; Computer Aided Drafting Skills; Computer Aided Rendering Skills; Computer Skills; Data Manipulation; Geographic Information System Skills; Graphic Presentation Skills; Hand-Drafting Skills; Hand-Drawing Skills; Investigative Skills; Literacy; Organizational Skills; Regional Analysis (e.g. watershed, viewshed, corridor); Research Skills; Site Analysis; Technical Drawing Interpretation Skills; Verbal Communication Skills; Visual Assessment Skills; Written Communication Skills;	Ability to Synthesize; Analytical Reasoning; Creativity; Deductive Reasoning; Inductive Reasoning; Listening Ability; Spatial Relations;	Assertiveness; Attention to Detail; Awareness of Social Environment; Conscientiousness; Curiosity; Emotional Stability; Ethical; Future-Orientation; Initiative; Integrity; Self-Awareness; Stewardship;
2 Perform Site Use Analysis				
3 Perform Circulation Analysis				
4 Interpret Utility Analysis				
5 Evaluate Project Context				
6 Perform View Analysis				
7 Perform Microclimate Analysis				
8 Interpret Floodplain Conditions				
9 Perform Vegetation Analysis				
10 Perform Solar Analysis				
11 Perform Ecological Analysis				
12 Perform a Slope Analysis				
13 Interpret Soil Analysis				
14 Interpret Geotechnical Analysis				
15 Perform Small-Scale Surface Hydrological Analysis				
16 Interpretation of Stakeholder Input				
17 Analyze Offsite Relationships				
18 Identify Gaps and Deficiencies				
19 Synthesize Site Opportunities and Constraints				

Task Inventory	Knowledge of	Skills Needed	Abilities Needed	Other Characteristics
E Concept Development				
1 Create a Project Base Map	Accessibility Requirements; Adaptive Reuse; Basic Architecture; Basic Design Principles (e.g., balance, color theory, proportions, rhythm, sequencing, scale, proportion, unity); Budgeting; Community Outreach Strategies; Consensus Techniques; Construction Detailing; Construction Materials; Construction Techniques; Crime Prevention Through Environmental Design; Design of Social Spaces; Design Precedent; Design Principles; Design Processes; Design Vocabulary; Drainage; Drainage Equations; Elements of Design; Environmental Psychology; Grading; History of Landscape Architecture ; Human Factors Influencing Design; Interpretive Design; Landscape Architecture Terminology; Landscape Choreography; Landscape Ecology; Low Impact Development; Microclimates; Mixed-Use Development; Multi-modal Circulation (e.g. pedestrian, bicycle, vehicular, equestrian); Noise Mitigation; Park Planning; Planning for Density; Planning Principles; Plant Communities; Plant Materials; Plant Toxicity; Playground Safety; Pollution Mitigation; Recreational Facility Design; Recreational Trail Design; Rendering Techniques; Restoration Ecology; Retrofitting; Signage System Designs; Site Lighting Design; Site Surveys; Social Impacts of Design; Spatial Composition; Stormwater Management Equations; Stormwater Management Practices; Structural Considerations; Sustainable Site Initiatives; Sustainablity Principles and Practices; Therapeutic Landscape Design; Understanding Scale; Urban Design; Water Features; Wayfinding Methods and Practices; Wind Effects;	Analytical Skills; Balance Needs of Multiple User Groups; Comparative Analysis; Computer Aided Drafting Skills; Computer Aided Rendering Skills; Computer Skills; Cost Estimating Skills; Design Skills; Educating Others on Environmental and Cultural Significance; Facilitating Charrettes; Facilitation Skills; Grading Design Skills; Graphic Presentation Skills; Hand-Drafting Skills; Hand-Drawing Skills; Integrating Environmental and Cultural Systems in a Design; Literacy; Mathematics Skills; Maximize User Experience; Mediating Skills; Negotiation Skills; Organizational Skills; Public Speaking Skills; Team-Building Skills; Verbal Communication Skills; Written Communication Skills;	Ability to Synthesize; Adaptability; Analytical Reasoning; Conceptual Reasoning; Creativity; Deductive Reasoning; Listening Ability; Long-Term Conceptualization; Problem-Solving; Spatial Relations; Three Dimensional Visualization;	Accommodating; Assertiveness; Attention to Detail; Confidence; Curiosity; Ethical; Future-Orientation; Initiative; Integrity; Self-Awareness; Stewardship; Tolerance for Ambiguity;
2 Create Design Alternatives				
3 Analyze Design Alternatives				
4 Facilitate Selection of Preferred Design Alternative				
5 Develop Concept Narrative				
6 Establish Design Vocabulary				
7 Refine Conceptual Design(s)				
8 Prepare Conceptual Renderings				
9 Prepare Concept Feasibility Evaluation				
10 Prepare Preliminary Cost Estimate				

Task Inventory	Knowledge of	Skills Needed	Abilities Needed	Other Characteristics
F Design Development				
1 Develop Master Plan Documents (e.g. land-use, circulation, phasing plan, and guidelines)	Accessibility Requirements; Adaptive Reuse; Basic Archaeology; Basic Architecture; Basic Design Principles (e.g., balance, color theory, proportions, rhythm, sequencing, scale, proportion, unity); Budgeting; Component Costs; Construction Detailing; Construction Materials; Construction Techniques; Cut and Fill Equations; Design Precedent; Design Principles; Design Vocabulary; Drafting Techniques; Drainage; Drainage Equations; Elements of Design; Fire Protection; Grading; Grading Equations; Graphic Standards; Horticulture; Human Factors Influencing Design; Landscape Architecture Terminology; Local Resource Availability; Low Impact Development; Material Costs; Microclimates; Multi-modal Circulation (e.g. pedestrian, bicycle, vehicular, equestrian); Noise Mitigation; Pavement Systems; Plant Communities; Plant Materials; Plant Toxicity; Pollution Mitigation; Recreational Facility Design; Recreational Trail Design; Restoration Ecology; Retaining Walls; Retrofitting; Reused and Recycled Materials; Signage System Designs; Site Lighting Design; Spatial Composition; Stormwater Management Equations; Stormwater Management Practices; Structural Considerations; Sustainable Site Initiatives; Sustainablity Principles and Practices; Therapeutic Landscape Design; Understanding Scale; Urban Design; Water Features; Wayfinding Methods and Practices;	Analytical Skills; Comparative Analysis; Computer Aided Drafting Skills; Computer Aided Rendering Skills; Computer Skills; Cost Estimating Skills; Design Skills; Facilitating Charrettes; Grading Design Skills; Graphic Presentation Skills; Hand-Drafting Skills; Hand-Drawing Skills; Literacy; Mathematics Skills; Organizational Skills; Research Skills; Verbal Communication Skills; Written Communication Skills;	Ability to Synthesize; Analytical Reasoning; Creativity; Listening Ability; Problem-Solving; Spatial Relations; Three Dimensional Visualization;	Accommodating; Assertiveness; Attention to Detail; Curiosity; Decisive; Ethical; Future-Orientation; Initiative; Integrity; Stewardship; Tolerance for Ambiguity;
2 Refine the Preferred Design Alternative				
3 Develop Preliminary Site Plans, Sections, and Details				
4 Investigate Design Components				
5 Select Design Components				
6 Confirm Design is Within Project Budget				
7 Determine Availability of Materials				
8 Confirm Project Design Palette				
9 Perform Earthwork Analysis				

Task Inventory	Knowledge of	Skills Needed	Abilities Needed	Other Characteristics
G Additional Supporting Graphics				
1 Draw Project Elevation 2 Prepare Illustrative Graphics 3 Prepare Technical Drawings	Computer Graphic Software; Drafting Standards; Drafting Techniques; Graphic Standards; Landscape Architecture Terminology; Rendering Techniques; Signage System Designs; Art Media;	Analytical Skills; Computer Aided Drafting Skills; Computer Aided Rendering Skills; Computer Skills; Design Skills; Graphic Presentation Skills; Hand-Drafting Skills; Literacy; Organizational Skills; Publishing Skills; Written Communication Skills;	Analytical Reasoning; Creativity; Listening Ability; Three Dimensional Visualization;	Attention to Detail; Ethical; Future-Orientation; Integrity; Self-Awareness; Tolerance for Ambiguity;

Task Inventory	Knowledge of	Skills Needed	Abilities Needed	Other Characteristics
H Construction Documentation				
1 Prepare Construction Drawing Cover Sheet	Adaptive Reuse; Basic Construction Trades; Basic Entomology; Basic Legal Terminology; Basic Mechanical Engineering; Basic Trigonometry; Budgeting; Business Law; Computer Graphic Software; Construction Detailing; Construction Health and Safety Standards; Construction Materials; Construction Processes; Construction Sequences; Construction Techniques; Construction Tolerances; Contract Law; Coordinate Systems; Cut and Fill Equations; Decking Systems; Demolition Processes; Drafting Standards; Drafting Techniques; Drainage; Drainage Equations; Erosion Management; Fasteners; Grading; Grading Equations; Graphic Standards; Horizontal and Vertical Alignments; Horticulture; Human Factors Influencing Design; Industry Standards and Guidelines; Invasive Plant Species; Irrigation Techniques; Jobsite Safety; Landscape Architecture Terminology; Landscape Maintenance Practices; Lifecycle Costs; Local Resource Availability; Material and Construction Testing; Material Costs; Noise Mitigation; Pavement Systems; Plant Communities; Plant Hardiness Zone; Plant Materials; Plant Quality; Planting Methods; Critical Root Zones; Dripline, Vegetation/Soil Protection; Playground Safety; Pollution Mitigation; Recreational Facility Design; Recreational Trail Design; Restoration Ecology; Retaining Walls; Retrofitting; Reused and Recycled Materials; Signage System Designs; Site Lighting Design; Specification Types and Formats; Stormwater Management Equations; Stormwater Management Practices; Structural Considerations; Surficial Geology; Sustainable Site Initiatives; Sustainablity Principles and Practices; Technical Drawings; Therapeutic Landscape Design; Turf Management; Units of Measurement; Water Conservation; Water Features; Wetland Conditions;	Analytical Skills; Computer Aided Drafting Skills; Computer Skills; Cost Estimating Skills; Data Manipulation; Design Skills; Grading Design Skills; Graphic Presentation Skills; Hand-Drafting Skills; Literacy; Mathematics Skills; Organizational Skills; Project Management; Publishing Skills; Research Skills; Technical Drawing Interpretation Skills; Verbal Communication Skills; Written Communication Skills; Technical Written Communication Skills;	Ability to Synthesize; Analytical Reasoning; Creativity; Listening Ability; Problem-Solving;	Accommodating; Attention to Detail; Conscientiousness; Decisive; Ethical; Initiative; Integrity; Self-Awareness;
2 Prepare Existing Conditions Plan				
3 Prepare Demolition and Removal Plan				
4 Prepare Vegetation Preservation Plan				
5 Prepare Site Protection Plan (e.g. soil, existing features, existing pavements, historic elements)				
6 Prepare Erosion and Sediment-Control Plan				
7 Prepare Layout and Materials Plan				
8 Prepare Grading Plan				
9 Prepare Stormwater Management Plan				
10 Prepare Planting Plans				
11 Prepare Project Sections and Profiles				
12 Prepare Construction Details				
13 Prepare Final Cost Estimate				
14 Prepare General Contract and Bidding Specifications				
15 Prepare Technical Specifications				

Task Inventory	Knowledge of	Skills Needed	Abilities Needed	Other Characteristics
I Bidding and Construction				
1 Respond to Bidder Requests for Information	Accessibility Requirements; Basic Arboriculture; Basic Archaeology; Basic Construction Trades; Basic Geotechnical Engineering; Basic Legal Terminology; Bidding Procedures; Business Law; Communication Methods; Construction Health and Safety Standards; Construction Materials; Construction Processes; Construction Sequences; Construction Techniques; Construction Tolerances; Coordinate Systems; Erosion Management; Governing Agency Processes; Grading; Hazard Conditions; Horticulture; Irrigation Techniques; Jobsite Safety; Landscape Architecture Terminology; Landscape Maintenance Practices; Material and Construction Testing; Material Costs; Plant Materials; Plant Quality; Planting Methods; Playground Safety; Reused and Recycled Materials; Specification Types and Formats; Turf Management; Alternative Material Options or Approved Equals;	Analytical Skills; Balance Needs of Multiple User Groups; Computer Aided Drafting Skills; Computer Skills; Cost Estimating Skills; Data Manipulation; Hand-Drafting Skills; Investigative Skills; Literacy; Mathematics Skills; Mediating Skills; Negotiation Skills; Organizational Skills; Photography Skills; Physical Data Collection; Project Management; Team-Building Skills; Technical Drawing Interpretation Skills; Verbal Communication Skills; Written Communication Skills;	Adaptability; Analytical Reasoning; Creativity; Deductive Reasoning; Listening Ability; Problem-Solving;	Assertiveness; Attention to Detail; Confidence; Conscientiousness; Decisive; Emotional Stability; Ethical; Integrity; Self-Awareness; Tolerance for Ambiguity;
2 Issue Addenda to Construction Documents				
3 Revise Bid Documents for Construction Set				
4 Participate in Construction Meetings				
5 Respond to Contractor Requests for Information				
6 Review Submittals				
7 Respond to Submittals				
8 Review Shop Drawings				
9 Respond to Shop Drawings				
10 Prepare Change Order Proposals				
11 Conduct Construction Site Review and Documentation				
12 Perform Substantial Completion Inspection				
13 Perform Final Inspection				

Appendix E: Phase II Post-Focus Group Task List

2016 Task Analysis for Landscape Architects

Task Inventory		Knowledge of	Skills and Abilities	Tools, Equipment, and Other Resources
A	**Project Management**			
1	Manage project team	• code of ethics • codes, ordinances, and regulations • conflicts of interest • construction delivery methods • construction law • construction process • contract law • cultural expectations • emerging technology • governing or regulatory agency processes • industry standards and guidelines • landscape architecture • limits of practice (i.e., when to bring in a specialist) • other technical disciplines • procurement regulations • types of costs (e.g., capital, operational, fee-based, lifecycle)	• ability to accept criticism • ability to mediate • ability to provide constructive criticism • ability to use design software • ability to use project management software • analytical skills • business acumen • conflict resolution skills • cost estimating skills • critical thinking • emotional intelligence • ethical • facilitation skills • graphic communication skills • integrity • interpersonal skills • leadership skills • management skills • negotiation skills • organization skills • problem solving skills • strategic thinking • team-building skills • verbal communication skills • written communication skills	• administrative policies (e.g., public health and safety, insurance policies, liability coverage) • ASLA code of ethics • capital budget • CLARB code of professional conduct • client • codes, ordinances, and regulations • contract templates • design software • landscape architecture staff • operational budget • other disciplines • project management software • sub consultants
2	Determine project scope, schedule, and budget (e.g., capital and operational budgets)			
3	Manage project scope, schedule, and budget			
4	Determine client and/or public objectives			
5	Establish quality control procedures			
6	Develop contract			
7	Negotiate contract			
8	Execute marketing activities			
9	Prepare RFPs or RFQs			
10	Respond to RFPs or RFQs			
11	Review RFPs or RFQs			
12	Select project team			
13	Facilitate meetings (e.g., staff, regulators, consultants, clients, public)			
14	Coordinate work of/with other disciplines (e.g., deliverables, reports, drawings, reviews)			
15	Establish common project goals (e.g., with client, other disciplines, stakeholders)			
16	Document design decisions and project communication			
17	Execute records retention policy			
B	**Site Inventory and Analysis**			
1	Determine applicable codes, regulations, and permitting requirements	• accessibility requirements • active living • codes, ordinances, and regulations • costal environments • crime prevention (CPTED) • cultural heritage landscape • drainage • drainage • ecological systems • ecological systems • environmental justice • erosion control • flora and fauna • geography	• ability to assess the sense of place • ability to grade • ability to identify data sources • ability to identify plants • ability to manage data • ability to read plans and reports • ability to use your senses to inventory a site (seeing, hearing, smelling the site)	• aerial photographs • census data • codes, ordinances, and regulations • collaboration tools (e.g., Skype, WebEx) • data collection and analysis tools • documentation tools • drones • GIS • GPS • interpreter • maps (e.g., soil, floodplain, aerial,
2	Collect contextual data (e.g., natural systems, road networks, demographics, cultural and historical, land use)			
3	Gather stakeholder input			
4	Identify policy objectives (e.g., community plans, sustainability, climate change)			
5	Conduct project related research (e.g., precedents, best practices)			
6	Conduct onsite investigation and fieldwork			

2016 Task Analysis for Landscape Architects

Task Inventory	Knowledge of	Skills and Abilities	Tools, Equipment, and Other Resources
7 Document site inventory 8 Analyze codes, regulations, and permitting requirements 9 Determine appropriate types of analyses 10 Perform circulation analysis (e.g., multi-modal mobility, access, connectivity) 11 Interpret utility analysis 12 Perform visual resources analysis (e.g., view sheds, view corridors, aesthetics) 13 Perform micro and macro climate analysis (e.g., solar, wind, precipitation) 14 Perform hydrological analysis (e.g., floodplain, site drainage, water shed, surface and sub-surface) 15 Perform vegetation analysis 16 Interpret ecological analysis (e.g., habitat, biodiversity, ecosystem services) 17 Perform topographical analysis 18 Interpret soil analysis (e.g., soil classifications, organic content, ph analysis) 19 Interpret geotechnical/geological analysis (e.g., bearing capacity, plasticity, permeability, swelling) 20 Interpret environmental studies (e.g., contamination, erosion, air quality, water quality) 21 Interpret cultural, historical, and archeological analysis 22 Interpret social analysis (e.g., demographics, access to resources or amenities, equity) 23 Interpret economic analysis 24 Analyze contextual data 25 Analyze stakeholder feedback 26 Collect and analyze performance metrics	• green infrastructure • green roof technology • historic preservation • human factors influencing design • hydrological system • industry best practices • invasive species • job site safety • landfill/brownfield • landforms • landscape architecture • landscape ecology • landscape irrigation • landscape trails • limits of practice (i.e., when to bring in a specialist) • low impact development • microclimates • noise impacts • other technical disciplines • photometrics • physiography • planned communities • plant hardiness zone • plant materials • plant toxicity • playground safety • property-related legal restrictions (e.g., covenant, easements, deed restrictions) • quantitative and qualitative research • resiliency planning (e.g., climate change, sea level rise, seismic, fire) • sediment control • sight distances, recovery zones, and sight triangles • soil types • stormwater management • threatened and endangered species • urban agriculture • utility systems and infrastructure • vegetation • vegetation management • visual assessment methods • wetlands, floodplains, aquifer protection • wildlife habitat	• analysis skills • analytical • computer skills • critical thinking • data inquiry skills • documentation skills • graphic communication skills • observation skills • presentation skills • quantitative and qualitative research skills • strategic thinking • verbal communication skills • written communication skills	land use, zoning, thoroughfare) • other disciplines • PPE • sample kit • site survey tools • studies and reports

2016 Task Analysis for Landscape Architects

Task Inventory		Knowledge of	Skills and Abilities	Tools, Equipment, and Other Resources
C	**Planning**			
1	Synthesize analysis into opportunities and constraints	• available funding sources	• ability to conduct focus groups	• charrette tools
2	Design public participation process	• basic statistics	• ability to engage others	• codes, ordinances, and regulations
3	Execute public participation process	• benchmarking	• ability to have difficult conversations	• community communication platform (e.g., mind mixer, next door, my sidewalk)
4	Prioritize stakeholder goals	• bioregions	• ability to interpret statistical results	• design software
5	Initiate stakeholder communication strategy	• brownfields	• ability to lead teams	• design tools
6	Develop regional plan	• budgeting and estimating	• ability to remain objective	• GIS
7	Develop vision plan	• climate influences	• coalition building	• graphic software
8	Develop framework plan	• coastal systems	• collaboration skills	• interpreter
9	Develop urban plan	• codes, ordinances, and regulations	• conceptual thinking skills	• maps (e.g., soil, floodplain, aerial, land use, zoning, thoroughfare)
10	Develop land use plan	• cultural and historical resources	• context sensitivity	
11	Develop strategic implementation plan	• cultural diversity	• creativity	• models (e.g., 3D, digital, physical)
12	Develop site master plan	• demographics	• critical thinking	• presentation tools
13	Develop historic restoration and preservation plan	• design principles	• cultural sensitivity	• site analysis outcomes
14	Develop parks, open space, and trails master plan	• development policies (e.g., HUD, CMHC, community redevelopment areas)	• data interpretation skills	• site inventory outcomes
15	Develop urban green system plan	• economic development	• documentation skills	• social media
16	Develop design guidelines	• environmental law (e.g., EPA, 4O4, army corps of engineers, species at risk, clean water act, clean air act, endangered species list)	• facilitation skills	• spreadsheet software
17	Develop a feasibility study		• fundraising skills	• sub consultants and other disciplines
18	Develop active transportation plan		• grant writing skills	• VRM
19	Develop mobility plan	• geometrics (e.g. road alignment, gradient, radius, grade)	• graphic communication skills	
20	Develop view corridor plan	• green infrastructure	• hospitality skills	
21	Develop redevelopment plan	• habitats	• interpersonal skills	
22	Develop ecological restoration plan	• how to develop capital improvements budget	• leadership skills	
23	Develop urban forest management plan	• how to facilitate a charrette	• listening skills	
24	Develop area and district plan	• how to meet public participation needs (e.g., setting up the venue, language barriers, accessibility)	• low impact design	
25	Conduct urban design and planning	• human factors influencing design	• mediation skills	
26	Initiate public communication strategy	• implementation processes	• negotiation skills	
		• industry best practices	• organization skills	
		• land use patterns	• patience	
		• landscape architecture	• presentation skills	
		• natural systems	• problem-solving skills	
		• permitting	• savvy (e.g., media, politically, technology)	
		• plant associations	• situational leadership skills	
		• political processes	• strategic thinking	
		• precedence	• synthesis skills	
		• recruitment strategies	• team player	
		• related professions	• team-building skills	
		• riparian zones	• verbal communication skills	
		• scalability	• visual/spatial awareness	
		• scale and units		
		• social equity considerations		
		• stormwater management (e.g. traditional, alternative methods, LID)		
		• sustainability certifications (e.g., LEED, SITES, green globe, SEED)		

Task Inventory		Knowledge of	Skills and Abilities	Tools, Equipment, and Other Resources
		• sustainable design (e.g., smart growth, sustainable sites initiative) • topography • transportation patterns • transportation policies (e.g., FHWA, AASHTO, MUTCD, NACTO, TAC) • utility and infrastructure • water sheds	• written communication skills	
D	**Design**			
1	Synthesize and apply the site analysis	• accessibility requirements • adaptive reuse • basic architectural and engineering elements • basic mathematics • budgeting • categories of design • climate change • codes, ordinances, and regulations • community outreach strategies • consensus techniques • construction detailing • construction material • construction techniques • crime prevention through environmental design • cultural and demographic trends • design of social spaces • design precedent • design principles (e.g. balance, color, proportions, sequence, unity, rhythm, scale, texture) • design process • design vocabulary • drainage • environmental resiliency (e.g. climate change, fire, seismic, sea level rise, flood) • grading • green infrastructure • historic construction techniques, technologies, and materials • human factors influencing design • landscape architecture • landscape ecology • landscape irrigation • low impact development • microclimates • mixed-use development • multi-modal circulation (e.g., pedestrian, bicycle, vehicular, equestrian)	• ability to articulate a vision • ability to conduct focus groups • ability to engage others • ability to have difficult conversations • ability to interpret statistical results • ability to lead teams • ability to receive/process criticism • ability to remain objective • coalition building • collaboration skills • context sensitivity • creativity • critical thinking • cultural sensitivity • data interpretation skills • digital-drawing skills • documentation skills • facilitation skills • graphic communication skills • hand-drawing skills • hospitality skills • interpersonal skills • leadership skills • listening skills • mediation skills • negotiation skills • organization skills • passionate • patience • presentation skills • problem-solving skills • savvy (e.g., media,	• charrette tools • codes, ordinances, and regulations • communication tools • community communication platform (e.g., mind mixer, next door, my sidewalk) • design software • design tools • digital-drawing tools • GIS • graphic software • hand-drawing materials • interpreter • maps (e.g., soil, floodplain, aerial, land use, zoning, thoroughfare) • models (e.g., 3D, digital, physical) • presentation tools • site analysis outcomes • site inventory outcomes • social media • spreadsheet software • sub consultants and other disciplines • VRM
2	Develop and refine the program			
3	Create the basis for the design (e.g. inspiration, precedent)			
4	Identify design inspiration			
5	Create conceptual design alternatives and scenarios			
6	Evaluate design alternatives			
7	Develop a design narrative			
8	Refine and synthesize concept alternative			
9	Develop schematic design (e.g. layout, grading, planting, materials, detailing, lighting)			
10	Prepare preliminary cost estimate			
11	Prepare presentation drawings and communication tools			
12	Communicate concept(s)/schematic(s) to stakeholders			
13	Identify and develop performance metrics			
14	Synthesize stakeholder feedback (including client, public, users, funding agencies)			

Task Inventory	Knowledge of	Skills and Abilities	Tools, Equipment, and Other Resources
	• noise mitigation • park planning • performance metrics • plant communities • plant materials • plant toxicity • playground safety • pollution mitigation • recreational facility design • recreational trail design • rendering techniques • restoration ecology • road alignment • site lighting design • site surveys • social impacts of design • spatial composition • stormwater management practices • stream restoration • structural considerations • sustainability • therapeutic landscape design • transit-oriented design • urban design • water conservation • water dynamics • water features • wayfinding and signage	politically, technology) • situational leadership skills • strategic thinking • synthesis skills • team player • team-building skills • verbal communication skills • written communication skills	

	E	Construction Documentation			

Task Inventory	Knowledge of	Skills and Abilities	Tools, Equipment, and Other Resources
1 Develop layout plan 2 Develop demolition plan 3 Develop sediment control plan 4 Develop existing conditions plan 5 Develop outline specifications 6 Develop technical specifications 7 Develop general notes 8 Develop grading plan 9 Develop planting plan 10 Develop irrigation plan 11 Develop details (e.g., retaining walls, pavements, structures, planting, specialty features)	• accessibility requirements • alternative materials • associated professions • backflow prevention • basic architecture and engineering • basic mathematics • bid process • building and construction materials • codes, ordinances, and regulations • construction delivery methods • construction detailing • construction materials • construction techniques	• ability to digest criticism • ability to manage budgets • ability to manage staff • ability to manage workflow • attention to detail • computer aided design skills • coordination skills • critical thinking skills	• accessibility standards • aerial photographs • apps • botanic gardens • budget tools • catalogs • codes, ordinances, and regulations • contractors • databases • design software • industry standards

2016 Task Analysis for Landscape Architects

Task Inventory		Knowledge of	Skills and Abilities	Tools, Equipment, and Other Resources
12	Develop code summary	• cost estimating	• decision making skills	• master specifications
13	Prepare sections	• crime prevention through environmental design	• drafting skills	• plotters
14	Prepare elevations	• cut and fill calculations	• estimating skills	• precedence
15	Prepare plan enlargements	• decking systems	• ethical	• reference materials
16	Develop stormwater pollution prevention plan	• design and drafting tools	• focused	• reprographics
17	Prepare lighting plan	• design precedence	• grant writing skills	• scanners
18	Develop site furnishings plan	• design principles	• graphic communication skills	• spreadsheet software
19	Develop signage and wayfinding plan	• design process	• grit	• suppliers
20	Develop materials plan	• design vocabulary	• leadership skills	• testing standards (e.g., ASTM, ISO, CSA, ACI)
21	Develop traffic control plan	• drafting standards	• mathematics skills	• translators
22	Develop phasing plan	• drainage calculations	• observation skills	• vendors
23	Develop key plan	• ethics and integrity	• organization skills	
24	Prepare cover sheet	• fasteners	• patience	
25	Develop tree protection plan	• front end specifications	• problem-solving skills	
26	Compile materials sample board	• grading and drainage	• productive	
27	Develop mitigation plan (e.g., wetland, tree)	• green infrastructure	• quantity surveying (take-offs) skills	
28	Develop emergency access plan	• historic construction techniques, technologies, and materials	• red lining skills	
29	Prepare soil boring location plan	• horizontal and vertical alignment	• research skills	
30	Prepare pavement markings plan	• horticulture	• scheduling skills	
31	Prepare cost estimate	• how to interpret technical reports	• team player	
32	Prepare bid alternate plan	• human factors influencing design	• time management skills	
33	Prepare bid form/schedule	• hydraulics	• verbal communication skills	
34	Develop project manual/front end specifications	• insurance and bonding	• written communication skills	
35	Conduct quality control review	• irrigation		
36	Prepare summary of quantities	• irrigation design		
37	Facilitate client review	• landscape architecture		
38	Obtain permits	• landscape ecology		
39	Prepare bid/tender documents	• lighting and irrigation controls		
		• local and regional health standards		
		• low impact design		
		• material and construction testing		
		• microclimates		
		• multi-modal circulation		
		• noise mitigation		
		• other disciplines		
		• performance metrics		
		• phasing process		
		• photometrics		
		• plant materials		
		• playground safety		
		• plumbing		
		• pollution mitigation		
		• quality control processes		
		• retaining and slope stabilization		
		• roadway alignment		
		• signage and wayfinding		
		• technical specifications		
		• testing standards		
		• trail design		

2016 Task Analysis for Landscape Architects

	Task Inventory	Knowledge of	Skills and Abilities	Tools, Equipment, and Other Resources
F	**Bidding and Construction Related Services**			
1	Facilitate pre-bid meeting/site visit	• access and phasing requirements • accountant	• ability to accept constructive criticism	• construction administration software
2	Prepare and issue addenda	• basic accounting	• ability to provide constructive criticism	• documentation tools
3	Coordinate with sub consultants	• basic legal terminology (e.g., liquidated damages, liens)	• ability to think on your feet	• environmental regulations
4	Respond to RFIs	• basic mathematics	• adaptive	• measuring tools
5	Conduct bid opening	• bidding process	• analytical	• personal protective equipment
6	Evaluate bids and make recommendations (e.g., check insurance, check references, check math, check bonds)	• builder's lien act • construction administration process • construction delivery methods	• assertive • attention to detail • confidence	• procurement regulations • professional experience
7	Identify delivery methods	• construction law	• cost estimating skills	• quality measurement standards
8	Evaluate contractor qualifications	• construction means and methods	• critical observation skills	• safety equipment
9	Assist with construction contract execution	• construction site safety	• critical thinking skills	• sample kit
10	Facilitate pre-construction meeting	• construction testing	• decision making skills	• scanners
11	Document pre-construction existing conditions	• construction tools and equipment	• diplomacy	• scheduling software
12	Review submittals	• contract law	• ethical	• weather protection (e.g., sunscreen, warm clothing, gloves)
13	Prepare change orders	• cost estimating	• good judgment	
14	Conduct onsite construction-related actions (e.g., construction observation, progress meetings, field reports)	• cultural differences • environmental regulations • erosion and dust control requirements	• inquisitive • listening skills • mathematics skills	
15	Prepare drawing revisions	• ethics and integrity	• mediating skills	
16	Prepare clarification sketches	• front end requirements (e.g., employment equity, workers compensation, surety)	• negotiation skills	
17	Document construction observation (e.g., field reports)	• landscape architecture	• organization skills	
18	Attend substantial completion (practical completion) walkthrough	• lawyer • maintenance requirements	• persistence • proactive	
19	Prepare punch list (deficiency list)	• occupational health, safety, and welfare	• problem-solving skills	
20	Attend final completion walkthrough	• offsite impacts, notification, and mitigation	• verbal communication skills	
21	Prepare as-built (record) drawings	• procurement regulations	• written communication skills	
22	Conduct warranty review	• project scheduling		
23	Compile close-out documents	• public outreach methods		
24	Collect and analyze performance metrics	• stormwater management • temporary facilities (e.g., security, parking, sanitation, site office) • traffic control		
G	**Post-Construction Services**			
1	Estimate maintenance and management costs	• accessibility requirements	• ability to accept constructive criticism	• catalogs
2	Prepare maintenance and operation manual	• adaptive reuse • arboriculture	• analytical skills • critical thinking skills	• contractors • documentation tools
3	Review maintenance services	• associated professions	• data collection skills	• maintenance contractors
4	Prepare management plan	• clients' needs • climate influences	• diplomacy	• O&M manuals
5	Conduct post-occupancy	• construction law	• ethical	• post-occupancy

2016 Task Analysis for Landscape Architects

Task Inventory	Knowledge of	Skills and Abilities	Tools, Equipment, and Other Resources
evaluation	• construction materials	• graphic communication skill	evaluation tools
6 Estimate lifecycle costs	• data collection methodology	• grit	• product data
7 Provide inputs to the asset management plan	• drainage and stormwater	• humility	• professional experience
8 Collect and analyze performance metrics	• evaluation techniques	• initiative	• record drawings
9 Perform forensic evaluation	• horticultural practices	• investigative skills	• reference sites
	• industry standards	• negotiation skills	• sample kit
	• insurance	• observation skills	• suppliers
	• invasive species	• passionate	• vendors
	• irrigation system principles	• reporting skills	
	• landscape architecture	• verbal communication skills	
	• liabilities	• written communication skills	
	• life expectancy of materials		
	• local wildlife		
	• maintenance equipment		
	• maintenance practices		
	• maintenance requirements		
	• material resiliency (e.g., vandalism)		
	• material tolerances		
	• microclimate influences		
	• other disciplines		
	• performance metrics		
	• pests and diseases		
	• plant fertilization requirements		
	• plant health		
	• precedence		
	• procurement methods		
	• repair methods		
	• safety standards		
	• soil science		
	• specifications		
	• sports facility safety		
	• survey methods		
	• trip hazards		
	• turf grass management		
	• urban forestry		
	• vegetation management		
	• warranties		

Appendix F: Phase III – Validation Survey

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Please click on the "next" button below to begin the survey.

It should take about 30 minutes, and your response will be kept confidential. You can stop during the survey and finish it later.

If you have difficulty completing the survey, please contact acadle@proftesting.com or call 1-800-330-3776.

CLARB

IFLA
INTERNATIONAL FEDERATION
OF LANDSCAPE ARCHITECTS

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* Do you primarily practice in the United States, Canada, or Puerto Rico?

◯ Yes

◯ No

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Below is a list of tasks that could be performed by Landscape Architects. The tasks are organized into seven work areas:

Project Management
Site Inventory and Analysis
Planning
Design
Construction Documentation
Bidding and Construction Related Services
Post-Construction Services

For each task, please indicate the frequency with which you, as a landscape architect, perform these tasks and the criticality of performing the task incorrectly (or not at all).

Frequency is defined as how often a task is performed over a period of time.
Criticality is defined as the potential for public harm if the task is not performed properly.

Project Management

	Frequency	Criticality
Manage project team		
Determine project scope, schedule, and budget (e.g., capital and operational budgets)		
Manage project scope, schedule, and budget		
Determine client and/or public objectives		
Establish quality control procedures		
Develop contract		
Negotiate contract		
Execute marketing activities		
Prepare RFPs or RFQs (Request for Proposals or Request for Quotations)		
Respond to RFPs or RFQs (Request for Proposals or Request for Quotations)		
Review RFPs or RFQs (Request for Proposals or Request for Quotations)		
Select project team		
Facilitate meetings (e.g., staff, regulators, consultants, clients, public)		
Coordinate work of/with other disciplines (e.g., deliverables, reports, drawings, reviews)		
Establish common project goals (e.g., with client, other disciplines, stakeholders)		
Document design decisions and project communication		
Execute records retention policy		

Site Inventory and Analysis

	Frequency	Criticality
Determine applicable codes, regulations, and permitting requirements		

	Frequency	Criticality
Collect contextual data (e.g., natural systems, road networks, demographics, cultural and historical, land use)		
Gather stakeholder input		
Identify policy objectives (e.g., community plans, sustainability, climate change)		
Conduct project-related research (e.g., precedents, best practices)		
Conduct on-site investigation and fieldwork		
Document site inventory		
Analyze codes, regulations, and permitting requirements		
Determine appropriate types of analyses		
Perform circulation analysis (e.g., multi-modal mobility, access, connectivity)		
Interpret utility analysis		
Perform visual resources analysis (e.g., view sheds, view corridors, aesthetics)		
Perform micro and macro climate analysis (e.g., solar, wind, precipitation)		
Perform hydrological analysis (e.g., floodplain, site drainage, watershed, surface and sub-surface)		
Perform vegetation analysis		
Interpret ecological analysis (e.g., habitat, biodiversity, ecosystem services)		
Perform topographical analysis		
Interpret soil analysis (e.g., soil classifications, organic content, pH analysis)		
Interpret geotechnical/geological analysis (e.g., bearing capacity, plasticity, permeability, swelling)		

	Frequency	Criticality
Interpret environmental studies (e.g., contamination, erosion, air quality, water quality)		
Interpret cultural, historical, and archeological analysis		
Interpret social analysis (e.g., demographics, access to resources or amenities, equity)		
Interpret economic analysis		
Analyze contextual data		
Analyze stakeholder feedback		
Collect and analyze performance metrics (demonstration of how the project accomplished its intended purpose)		

Planning

	Frequency	Criticality
Synthesize analysis into opportunities and constraints		
Design public participation process		
Execute public participation process		
Prioritize stakeholder goals		
Initiate stakeholder communication strategy		
Develop regional plan		
Develop vision plan		
Develop framework plan		
Develop urban plan		
Develop land use plan		
Develop strategic implementation plan		
Develop site master plan		

	Frequency	Criticality
Develop historic restoration and preservation plan	⬍	⬍
Develop parks, open space, and trails master plan	⬍	⬍
Develop urban green system plan	⬍	⬍
Develop design guidelines	⬍	⬍
Develop a feasibility study	⬍	⬍
Develop active transportation plan	⬍	⬍
Develop mobility plan	⬍	⬍
Develop view corridor plan	⬍	⬍
Develop redevelopment plan	⬍	⬍
Develop ecological restoration plan	⬍	⬍
Develop urban forest management plan	⬍	⬍
Develop area and district plan	⬍	⬍
Conduct urban design and planning	⬍	⬍
Initiate public communication strategy	⬍	⬍

Design

	Frequency	Criticality
Synthesize and apply the site analysis	⬍	⬍
Develop and refine the program	⬍	⬍
Create the basis for the design (e.g. inspiration, precedent)	⬍	⬍
Identify design inspiration	⬍	⬍
Create conceptual design alternatives and scenarios	⬍	⬍
Evaluate design alternatives	⬍	⬍
Develop a design narrative	⬍	⬍
Refine and synthesize concept alternative	⬍	⬍
Develop schematic design (e.g. layout, grading, planting, materials, detailing, lighting)	⬍	⬍
Prepare preliminary cost estimate	⬍	⬍
Prepare presentation drawings and communication tools	⬍	⬍
Communicate concept(s)/schematic(s) to stakeholders	⬍	⬍
Identify and develop performance metrics	⬍	⬍
Synthesize stakeholder feedback (including client, public, users, funding agencies)	⬍	⬍

Construction Documentation

	Frequency	Criticality
Develop layout plan	⬍	⬍
Develop demolition plan	⬍	⬍
Develop sediment control plan	⬍	⬍
Develop existing conditions plan	⬍	⬍
Develop outline specifications	⬍	⬍

	Frequency	Criticality
Develop technical specifications	⬍	⬍
Develop general notes	⬍	⬍
Develop grading plan	⬍	⬍
Develop planting plan	⬍	⬍
Develop irrigation plan	⬍	⬍
Develop details (e.g., retaining walls, pavements, structures, planting, specialty features)	⬍	⬍
Develop code summary	⬍	⬍
Prepare sections	⬍	⬍
Prepare elevations	⬍	⬍
Prepare plan enlargements	⬍	⬍
Develop stormwater pollution prevention plan	⬍	⬍
Prepare lighting plan	⬍	⬍
Develop site furnishings plan	⬍	⬍
Develop signage and wayfinding plan	⬍	⬍
Develop materials plan	⬍	⬍
Develop traffic control plan	⬍	⬍
Develop phasing plan	⬍	⬍
Develop key plan	⬍	⬍
Prepare cover sheet	⬍	⬍
Develop tree protection plan	⬍	⬍
Compile materials sample board	⬍	⬍
Develop mitigation plan (e.g., wetland, tree)	⬍	⬍
Develop emergency access plan	⬍	⬍
Prepare soil boring location plan	⬍	⬍

	Frequency	Criticality
Prepare pavement markings plan	⬍	⬍
Prepare cost estimate	⬍	⬍
Prepare bid alternate plan	⬍	⬍
Prepare bid form/schedule	⬍	⬍
Develop project manual/front end specifications	⬍	⬍
Conduct quality control review	⬍	⬍
Prepare summary of quantities	⬍	⬍
Facilitate client review	⬍	⬍
Obtain permits	⬍	⬍
Prepare bid/tender documents	⬍	⬍

Bidding and Construction Related Services

	Frequency	Criticality
Facilitate pre-bid meeting/site visit	⬍	⬍
Prepare and issue addenda	⬍	⬍
Coordinate with sub-consultants	⬍	⬍
Respond to RFIs	⬍	⬍
Conduct bid opening	⬍	⬍
Evaluate bids and make recommendations (e.g., check insurance, check references, check math, check bonds)	⬍	⬍
Identify delivery methods	⬍	⬍
Evaluate contractor qualifications	⬍	⬍
Assist with construction contract execution	⬍	⬍
Facilitate pre-construction meeting	⬍	⬍
Document pre-construction existing conditions	⬍	⬍

	Frequency	Criticality
Review submittals		
Prepare change orders		
Conduct onsite construction-related actions (e.g., construction observation, progress meetings, field reports)		
Prepare drawing revisions		
Prepare clarification sketches		
Document construction observation (e.g., field reports)		
Attend substantial completion (practical completion) walkthrough		
Prepare punch list (deficiency list)		
Attend final completion walkthrough		
Prepare as-built (record) drawings		
Conduct warranty review		
Compile close-out documents		
Collect and analyze performance metrics		

Post-Construction Services

	Frequency	Criticality
Estimate maintenance and management costs	⬍	⬍
Prepare maintenance and operation manual	⬍	⬍
Review maintenance services	⬍	⬍
Prepare management plan	⬍	⬍
Conduct post-occupancy evaluation	⬍	⬍
Estimate lifecycle costs	⬍	⬍
Provide inputs to the asset management plan	⬍	⬍
Collect and analyze performance metrics	⬍	⬍
Perform forensic evaluation	⬍	⬍

Are there any job-related tasks missing from this survey?

◯ No

◯ Yes

If Yes, what?

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The following questions are for statistical purposes only and your responses will be kept confidential.

Which of the following BEST describes where you currently are in your landscape architecture career?"

◯ Currently enrolled in a landscape architecture college/university program

◯ Recent graduate from a landscape architecture college/university program

◯ Started taking the L.A.R.E. but have not completed all sections

◯ Recently completed the L.A.R.E. but not yet licensed

◯ Licensed/registered landscape architect

◯ Full-time faculty member in a landscape architecture college/university program

How long have you been working in landscape architecture?

◯ Less than 1 year

◯ 1-2 years

◯ 3-5 years

◯ 6-10 years

◯ 11-15 years

◯ 16 or more years

◯ I am not currently working in landscape architecture

In which of the following locations have you worked in the past 5 years? *(Choose all that apply.)*

☐ Alabama	☐ Maryland	☐ Pennsylvania
☐ Alaska	☐ Massachusetts	☐ Prince Edward Island
☐ Alberta	☐ Michigan	☐ Puerto Rico
☐ Arizona	☐ Minnesota	☐ Quebec
☐ Arkansas	☐ Mississippi	☐ Rhode Island
☐ British Columbia	☐ Missouri	☐ Saskatchewan
☐ California	☐ Montana	☐ South Carolina
☐ Colorado	☐ Nebraska	☐ South Dakota
☐ Connecticut	☐ Nevada	☐ Tennessee
☐ Delaware	☐ New Brunswick	☐ Texas
☐ Florida	☐ New Hampshire	☐ Utah
☐ Georgia	☐ New Jersey	☐ Vermont
☐ Hawaii	☐ New Mexico	☐ Virginia
☐ Idaho	☐ New York	☐ Washington
☐ Illinois	☐ Newfoundland and Labrador	☐ West Virginia
☐ Indiana	☐ North Carolina	☐ Wisconsin
☐ Iowa	☐ North Dakota	☐ Wyoming
☐ Kansas	☐ Nova Scotia	☐ District of Columbia
☐ Kentucky	☐ Ohio	☐ Yukon
☐ Louisiana	☐ Oklahoma	☐ North West Territories
☐ Maine	☐ Ontario	☐ Nunavut
☐ Manitoba	☐ Oregon	
☐ Other (please specify)		

[   ]

If you practice internationally, in which regions do you practice? *(Choose all that apply.)*

☐ Africa

☐ Americas

☐ Asia-Pacific

☐ Europe

☐ Middle East

Are you a licensed or registered landscape architect?

○ Yes

○ No, but I am currently pursuing a license

○ No

If you are a licensed or registered landscape architect, how long have you been licensed or registered?

○ Less than 1 year

○ 1-2 years

○ 3-5 years

○ 5-10 years

○ 11-15 years

○ 16 or more years

○ I am not currently licensed or registered

What is your highest level of education?

○ High school

○ Some college

○ Two-year technical degree

○ Bachelor's degree

○ Master's degree

○ Doctoral degree

Do you have a degree in landscape architecture? *(Choose all that apply)*

☐ Yes, I have a bachelor's degree

☐ Yes, I have a master's degree

☐ Yes, I have a doctoral degree

☐ No, I do not have a degree in landscape architecture

How old are you?

○ 18-24

○ 25-30

○ 31-35

○ 36-40

○ 41-45

○ 46-50

○ 51-55

○ 56-60

○ 61-65

○ 66-70

○ 71-75

○ 76 or older

What is your gender?

○ Male

○ Female

What is the size of the organization in which you work?

○ 1 employee

○ 2-10 employees

○ 11-50 employees

○ 51-100 employees

○ 101-200 employees

○ 200-500 employees

○ 500+ employees

○ I am not currently working

In which sector are you employed?

○ Public

○ Private

○ Academic

○ Other (please specify)

[   ]

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Below is a list of tasks that could be performed by Landscape Architects. The tasks are organized into seven work areas:

- Project Management
- Site Inventory and Analysis
- Planning
- Design
- Construction Documentation
- Bidding and Construction Related Services
- Post-Construction Services

For each task, please indicate the frequency with which you, as a landscape architect, perform these tasks.

Project Management

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Manage project team	○	○	○	○	○
Determine project scope, schedule, and budget (e.g., capital and operational budgets)	○	○	○	○	○
Manage project scope, schedule, and budget	○	○	○	○	○
Determine client and/or public objectives	○	○	○	○	○
Establish quality control procedures	○	○	○	○	○
Develop contract	○	○	○	○	○
Negotiate contract	○	○	○	○	○
Execute marketing activities	○	○	○	○	○
Prepare RFPs or RFQs (Request for Proposals or Request for Quotations)	○	○	○	○	○
Respond to RFPs or RFQs (Request for Proposals or Request for Quotations)	○	○	○	○	○
Review RFPs or RFQs (Request for Proposals or Request for Quotations)	○	○	○	○	○
Select project team	○	○	○	○	○
Facilitate meetings (e.g., staff, regulators, consultants, clients, public)	○	○	○	○	○
Coordinate work of/with other disciplines (e.g., deliverables, reports, drawings, reviews)	○	○	○	○	○
Establish common project goals (e.g., with client, other disciplines, stakeholders)	○	○	○	○	○
Document design decisions and project communication	○	○	○	○	○
Execute records retention policy	○	○	○	○	○

Site Inventory and Analysis

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Determine applicable codes, regulations, and permitting requirements	○	○	○	○	○
Collect contextual data (e.g., natural systems, road networks, demographics, cultural and historical, land use)	○	○	○	○	○
Gather stakeholder input	○	○	○	○	○
Identify policy objectives (e.g., community plans, sustainability, climate change)	○	○	○	○	○
Conduct project-related research (e.g., precedents, best practices)	○	○	○	○	○
Conduct on-site investigation and fieldwork	○	○	○	○	○
Document site inventory	○	○	○	○	○
Analyze codes, regulations, and permitting requirements	○	○	○	○	○
Determine appropriate types of analyses	○	○	○	○	○
Perform circulation analysis (e.g., multi-modal mobility, access, connectivity)	○	○	○	○	○
Interpret utility analysis	○	○	○	○	○
Perform visual resources analysis (e.g., view sheds, view corridors, aesthetics)	○	○	○	○	○
Perform micro and macro climate analysis (e.g., solar, wind, precipitation)	○	○	○	○	○
Perform hydrological analysis (e.g., floodplain, site drainage, watershed, surface and sub-surface)	○	○	○	○	○
Perform vegetation analysis	○	○	○	○	○
Interpret ecological analysis (e.g., habitat, biodiversity, ecosystem services)	○	○	○	○	○
Perform topographical analysis	○	○	○	○	○
Interpret soil analysis (e.g., soil classifications, organic content, pH analysis)	○	○	○	○	○

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Interpret geotechnical/geological analysis (e.g., bearing capacity, plasticity, permeability, swelling)	○	○	○	○	○
Interpret environmental studies (e.g., contamination, erosion, air quality, water quality)	○	○	○	○	○
Interpret cultural, historical, and archeological analysis	○	○	○	○	○
Interpret social analysis (e.g., demographics, access to resources or amenities, equity)	○	○	○	○	○
Interpret economic analysis	○	○	○	○	○
Analyze contextual data	○	○	○	○	○
Analyze stakeholder feedback	○	○	○	○	○
Collect and analyze performance metrics (demonstration of how the project accomplished its intended purpose)	○	○	○	○	○

Planning

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Synthesize analysis into opportunities and constraints	○	○	○	○	○
Design public participation process	○	○	○	○	○
Execute public participation process	○	○	○	○	○
Prioritize stakeholder goals	○	○	○	○	○
Initiate stakeholder communication strategy	○	○	○	○	○
Develop regional plan	○	○	○	○	○
Develop vision plan	○	○	○	○	○
Develop framework plan	○	○	○	○	○
Develop urban plan	○	○	○	○	○

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Develop land use plan	○	○	○	○	○
Develop strategic implementation plan	○	○	○	○	○
Develop site master plan	○	○	○	○	○
Develop historic restoration and preservation plan	○	○	○	○	○
Develop parks, open space, and trails master plan	○	○	○	○	○
Develop urban green system plan	○	○	○	○	○
Develop design guidelines	○	○	○	○	○
Develop a feasibility study	○	○	○	○	○
Develop active transportation plan	○	○	○	○	○
Develop mobility plan	○	○	○	○	○
Develop view corridor plan	○	○	○	○	○
Develop redevelopment plan	○	○	○	○	○
Develop ecological restoration plan	○	○	○	○	○
Develop urban forest management plan	○	○	○	○	○
Develop area and district plan	○	○	○	○	○
Conduct urban design and planning	○	○	○	○	○
Initiate public communication strategy	○	○	○	○	○

Design

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Synthesize and apply the site analysis	○	○	○	○	○
Develop and refine the program	○	○	○	○	○
Create the basis for the design (e.g. inspiration, precedent)	○	○	○	○	○
Identify design inspiration	○	○	○	○	○
Create conceptual design alternatives and scenarios	○	○	○	○	○
Evaluate design alternatives	○	○	○	○	○
Develop a design narrative	○	○	○	○	○
Refine and synthesize concept alternative	○	○	○	○	○
Develop schematic design (e.g. layout, grading, planting, materials, detailing, lighting)	○	○	○	○	○
Prepare preliminary cost estimate	○	○	○	○	○
Prepare presentation drawings and communication tools	○	○	○	○	○
Communicate concept(s)/schematic(s) to stakeholders	○	○	○	○	○
Identify and develop performance metrics	○	○	○	○	○
Synthesize stakeholder feedback (including client, public, users, funding agencies)	○	○	○	○	○

Construction Documentation

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Develop layout plan	○	○	○	○	○
Develop demolition plan	○	○	○	○	○
Develop sediment control plan	○	○	○	○	○
Develop existing conditions plan	○	○	○	○	○

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Develop outline specifications	○	○	○	○	○
Develop technical specifications	○	○	○	○	○
Develop general notes	○	○	○	○	○
Develop grading plan	○	○	○	○	○
Develop planting plan	○	○	○	○	○
Develop irrigation plan	○	○	○	○	○
Develop details (e.g., retaining walls, pavements, structures, planting, specialty features)	○	○	○	○	○
Develop code summary	○	○	○	○	○
Prepare sections	○	○	○	○	○
Prepare elevations	○	○	○	○	○
Prepare plan enlargements	○	○	○	○	○
Develop stormwater pollution prevention plan	○	○	○	○	○
Prepare lighting plan	○	○	○	○	○
Develop site furnishings plan	○	○	○	○	○
Develop signage and wayfinding plan	○	○	○	○	○
Develop materials plan	○	○	○	○	○
Develop traffic control plan	○	○	○	○	○
Develop phasing plan	○	○	○	○	○
Develop key plan	○	○	○	○	○
Prepare cover sheet	○	○	○	○	○
Develop tree protection plan	○	○	○	○	○
Compile materials sample board	○	○	○	○	○
Develop mitigation plan (e.g., wetland, tree)	○	○	○	○	○
Develop emergency access plan	○	○	○	○	○
Prepare soil boring location plan	○	○	○	○	○
Prepare pavement markings plan	○	○	○	○	○

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Prepare cost estimate	○	○	○	○	○
Prepare bid alternate plan	○	○	○	○	○
Prepare bid form/schedule	○	○	○	○	○
Develop project manual/front end specifications	○	○	○	○	○
Conduct quality control review	○	○	○	○	○
Prepare summary of quantities	○	○	○	○	○
Facilitate client review	○	○	○	○	○
Obtain permits	○	○	○	○	○
Prepare bid/tender documents	○	○	○	○	○

Bidding and Construction Related Services

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Facilitate pre-bid meeting/site visit	○	○	○	○	○
Prepare and issue addenda	○	○	○	○	○
Coordinate with sub-consultants	○	○	○	○	○
Respond to RFIs	○	○	○	○	○
Conduct bid opening	○	○	○	○	○
Evaluate bids and make recommendations (e.g., check insurance, check references, check math, check bonds)	○	○	○	○	○
Identify delivery methods	○	○	○	○	○
Evaluate contractor qualifications	○	○	○	○	○
Assist with construction contract execution	○	○	○	○	○
Facilitate pre-construction meeting	○	○	○	○	○
Document pre-construction existing conditions	○	○	○	○	○
Review submittals	○	○	○	○	○

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Prepare change orders	◯	◯	◯	◯	◯
Conduct onsite construction-related actions (e.g., construction observation, progress meetings, field reports)	◯	◯	◯	◯	◯
Prepare drawing revisions	◯	◯	◯	◯	◯
Prepare clarification sketches	◯	◯	◯	◯	◯
Document construction observation (e.g., field reports)	◯	◯	◯	◯	◯
Attend substantial completion (practical completion) walkthrough	◯	◯	◯	◯	◯
Prepare punch list (deficiency list)	◯	◯	◯	◯	◯
Attend final completion walkthrough	◯	◯	◯	◯	◯
Prepare as-built (record) drawings	◯	◯	◯	◯	◯
Conduct warranty review	◯	◯	◯	◯	◯
Compile close-out documents	◯	◯	◯	◯	◯
Collect and analyze performance metrics	◯	◯	◯	◯	◯

Post-Construction Services

	Perform very often	Perform fairly often	Occasionally perform	Seldom perform	Never perform
Estimate maintenance and management costs	◯	◯	◯	◯	◯
Prepare maintenance and operation manual	◯	◯	◯	◯	◯
Review maintenance services	◯	◯	◯	◯	◯
Prepare management plan	◯	◯	◯	◯	◯
Conduct post-occupancy evaluation	◯	◯	◯	◯	◯
Estimate lifecycle costs	◯	◯	◯	◯	◯
Provide inputs to the asset management plan	◯	◯	◯	◯	◯
Collect and analyze performance metrics	◯	◯	◯	◯	◯
Perform forensic evaluation	◯	◯	◯	◯	◯

Are there any job-related tasks missing from this survey?

○ No

○ Yes

If Yes, what?

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In which country do you primarily practice landscape architecture? (Please select the country in which you work 51% or more of the time.)

[▲▼]

Which of the following BEST describes where you currently are in your landscape architecture career?"

( ) Currently enrolled in a landscape architecture college/university program

( ) Recent graduate from a landscape architecture college/university program

( ) Practicing landscape architecture professionally

( ) Full-time faculty member in a landscape architecture college/university program

How long have you been working in landscape architecture?

( ) Less than 1 year

( ) 1-2 years

( ) 3-5 years

( ) 6-10 years

( ) 11-15 years

( ) 16 or more years

( ) I am not currently working in landscape architecture

If you practice internationally, in which regions do you practice? *(Choose all that apply.)*

[ ] Africa

[ ] Americas

[ ] Asia-Pacific

[ ] Europe

[ ] Middle East

Are you a licensed or registered landscape architect?

◯ Yes

◯ No, but I am currently pursuing a license or registration

◯ No

If you are a licensed or registered landscape architect, how long have you been licensed or registered?

◯ Less than 1 year

◯ 1-2 years

◯ 3-5 years

◯ 5-10 years

◯ 11-15 years

◯ 16 or more years

◯ I am not currently licensed or registered

What is your highest level of education?

◯ High school

◯ Some College/University

◯ Two-year technical degree

◯ Bachelor's degree

◯ Master's degree

◯ Doctoral degree

Do you have a degree in landscape architecture? *(Choose all that apply)*

☐ Yes, I have a bachelor's degree

☐ Yes, I have a master's degree

☐ Yes, I have a doctoral degree

☐ No, I do not have a degree in landscape architecture

How old are you?

○ 18-24

○ 25-30

○ 31-35

○ 36-40

○ 41-45

○ 46-50

○ 51-55

○ 56-60

○ 61-65

○ 66-70

○ 71-75

○ 76 or older

What is your gender?

○ Male

○ Female

What is the size of the organization in which you work?

○ 1 employee

○ 2-10 employees

○ 11-50 employees

○ 51-100 employees

○ 101-200 employees

○ 200-500 employees

○ 500+ employees

○ I am not currently working

In which sector are you employed?

◯ Public

◯ Private

◯ Academic

◯ Other (please specify)

[   ]

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In which type of firm do you work?

◯ Architecture

◯ Engineering

◯ Landscape Architecture

◯ Multi-discipline

◯ Construction/Contracting

◯ Planning

◯ Other (please specify)

☐ Entry-level

☐ Mid-level/Management

☐ Leadership

☐ Other (please specify)

Are you currently an adjunct faculty member?

◯ Yes

◯ No

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In which type of department do you work?

◯ Parks and recreation

◯ Planning

◯ Public works

◯ Redevelopment

◯ Transportation

◯ Economic

◯ Other (please specify)

[   ]

At which governmental level do you work?

◯ Local

◯ Regional

◯ State/Provincial

◯ Federal

◯ Other (please specify)

[   ]

Are you currently an adjunct faculty member?

◯ Yes

◯ No

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Do you also practice outside of the educational setting in which you work?

◯ Yes

◯ No

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Please enter the percentage of time you, as a landscape architect, spend in the following areas.

(Note: Your responses should add up to 100.)

Project Management

[   ]

Site Inventory and Analysis

[   ]

Planning

[   ]

Design

[   ]

Construction Documentation

[   ]

Bidding and Construction Related Services

[   ]

Post-Construction Services

[   ]

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Which of the following projects do you perform as a landscape architect? *Choose all that apply.*

☐ Agricultural	☐ Industrial	☐ Resort
☐ Botanical gardens	☐ Interior	☐ Rural
☐ Campus and institutional	☐ Landscape planning	☐ Sport facilities
☐ Commercial and retail	☐ Landscape research	☐ Spiritual centers
☐ Corridor and transit	☐ Master planning	☐ Theme parks
☐ Cultural and historic	☐ Memorial and cemeteries	☐ Therapeutic gardens
☐ Ecological	☐ Parks and recreation	☐ Urban
☐ Feasibility	☐ Playgrounds	☐ Water
☐ Green roofs and walls	☐ Private gardens	☐ Zoo
☐ Guidelines	☐ Residential	

Are there any projects missing from this survey?

○ No

○ Yes

○ If Yes, what?

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Is there anything that we did not include in this survey that should have been included?

○ No

○ Yes

If Yes, what?

Would you like to receive the results of the survey?

○ Yes

○ No

○ If Yes, please leave us your email address.

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Thank you for completing the survey!

CLARB

IFLA
INTERNATIONAL FEDERATION
OF LANDSCAPE ARCHITECTS

Appendix G: Job Related Tasks Identified as Missing from United States, Canada, or Puerto Rico Survey Participants

Are there any *job related* tasks missing from this survey?
Perform water use calculations
1. Design considerations for various Arizona climates.2. knowledge of poisonous plants.3. Aspects of shading, heat gain and mitigation.4. Water conservation measures.5. Landscape structures such as retaining walls, fences, walls, decks,etc.
1. Evaluate plants at nursery source of contractors. Determine their acceptability. Inspect source of field grown plants. 2. Prepare wetland permit plan. 3. Arrange for contact growing oh plants for a project.
1. MANAGE/MONITOR COMMUNICATIONS/EMAILS ON MULTIPLE PROJECTS (MULTI-DISCIPLINE FIRM)2. CONTINUING EDUCATION/SOFTWARE TRAININGA. DIGITAL GRAPHICS ON PROJECTS MORE AND MORE.
1. Prepare Irrigation related water calculations for California AB 1881 law.2. Conduct Irrigation Audits
1. Prepare, coordinate and submit permit application documents.2. Participate in, manage public review of project applications.
1. You should be more specific in regard to landscape code and tree regulation evaluation, summary and compliance. General codes pertain more to architecture and engineering, but these coded directly effect the work of the landscape architect.2. Landsdcape sustainability is rarely mentioned above. It should be taken more seriously.3. The above is more about process than getting a project built for a client.4. It seems as though art and it's principles pay little if any part of the above
1-Irrigation-related design and construction services (estimate irrigation use/demand, develop irrigation plans, oversee water audits, develop irrigation watering schedules)2-Plant material selection
-3D modeling and LiDAR visulization.-Design/Build (Build side is 100% lacking)-Incorporation of water into site's design. (Bioactive- functional and aesthetically pleasing pools, ponds and fountains)
3D study models
A time context in answering the question...is it today, past year, 2, 5 or entire career.
Act as Owner's Representative.
Ada evaluation during design process
Aesthetics Planning And Renderings
All personnel management functions
Almost none of what I do is includedI work for one client landscaping his projects. He give me most of what you ask about.
Analyze Final Site Plan conditions and Proffers.Open Space PlanSoil Volume PlanOn Structure Design and detailsHardscape PlansADA
Any mention of 3D modeling or design software.
applying for grants on behalf of client
approve applications for payment
Approve payment applications from contractor
Are you ever a subconsultant for other disciplines (i.e. Architects)

Professional Testing

As development director of a not for profit there are all of the roles and responsibilities associated with partnership development, funding, community capacity building and outreach as well as design and project management. LAs have a variety of skills that need to be recognized outside of the for profit firm.

Assess/assign LEED credits

Assisting in the development of strategic planning. Maybe that is what was meant by framework plan, but that term is unclear to me.

Attend depositions, prepare defense or litigation analysis, evaluate performance of systems for litigation.Prepare white papers to defend or substantiate design decisions.

Attend public planning commission meetings to present landscape portion of entitlement submittal package.Attend City Council meetings to present landscape portion of entitlement submittal package for final City approval.

Attending Board of Zoning meetings and presenting case information for clients, etc. Cut/ Fill analysisInterpreting local zoning codes.Conducting city required parking studies.

Best Management Practice design

Billing, accounting, computer/technology management, software management.

Brief Congressional Interests on project proposals, status and construction progress.

Build stakeholder consensus.

Business Administration; HR, Insurance, Financial, Training, etc.

Business management

Business ManagementBusiness Development (Marketing)

but- the questions are kind of confussing because some vary depending on project scale, client, use, ect

Cad and management of data. Essential in today's offices

CADD document preparation standards and consistency review.Review and adjust 3-D models (SketchUp, etc.) for accuracy before presentation to the client's team.

Check dam embankment safety. Check sight distance. Check overhead utility clearance. Analyze traffic safety barrier layout. Analyze slope embankment stability. Review critical area mitigation plantings. Check to see if plantings meet MAA requirements. Check to see if plans meet ADA requirements.

children's play areas (playgrounds) are frequently designed by landscape architects to meet safety standards from ASTM and CPSC

Civil related tasks including:Develop Utility Plans - layout water lines, storm, and sanitary. Also develop profilesCalculate Site Distance ProfilesCreate SurfacesEarthwork Calculations

Client invoicing and follow up

Client/user education

Code enforcement activities.

Code required drawings, planting plans, and irrigation for municipal work

Collaborative liability with other professionals or disciplines

Complete lifecycle analysis for various materials in different environments. Develop shop drawings for custom structures and site amenities. Facilitate material orders and monitor construction/installation for these custom products.

Conducting professional development training; Develop Project Management Training/Skill Development; Professional/Interpersonal Communication Skill Development

Construction inspection, not admin but actual monitoring testing and recording qua ties, field reports, etc.
Consultant oversight
Continuing education/professional development
Contract environmental and heritage assessment servicesContract environmental and heritage monitoring servicesPrepare presentations and/or provide input into Others presentations
Coordinate BIM models across disciplines
Coordinate planning, design and construction efforts with local communities, cities, states, and federal agencies. (Performed very often, Serious or severe harm)Manage project team to prepare and meet to environmental requirements under statutes like the Endangered Species Act and National Historic Preservation Act, National Environmental Policy Act (NEPA), Executive Orders on Environmental Justice, and other Federal, State, tribal, and local laws and regulations. (Performed very often, Serious or severe harm)
coordinate with asset management
Coordinating/obtaining approvals from varying level of municipal departments (local, provinicial/state, federal levels)
Coordination with Engineers in instances where computations are needed i.e. stormwater hydrology and hydraulics, retaining walls, foundations and more that require a PE to seal the work.
Coordination with funding and permitting authorities.
Coordination with specific disciplines; such as surveyor. We really on surveyor to accurately depict the existing condition's.
CPTED analysis, which can have a serious level of harm.
CREATIVE WRITING SKILLS AND COMMUNICATION PRESENTATION TECHNIQUES THAT ARE INCLUSIVE TO DIVERSESTAKEHOLDER GROUPS, THAT WILL ENCOURAGE MAXIMUM CITIZEN INPUT INTO PROJECT PLANNING/DESIGN
curriculum developmentmentoring and trainingselecting and hiring consultants
Design / plan review role of landscape architects working for government / public agency
Design Outdoor spaces (i.e. outdoor kitchen, pool, patio, driveway).
Design/Build Operations and Activities
Design/Planning: Review plans of other disciplines (i.e. Structural Engineer, Civil Engineer, Soils Engineer, Architect).Design: Coordinate plan consistency with other disciplines.
Details
Develop digital modeling
Develop enahnced and research informed responses to evolving perceptions of the built environemnt.
Develop new systems, e.g., extensions to GIS, CAD to support greater efficiency and accuracy
Develop planting palletteDevelop planting schedule Develop planting details
Develop small area watershed implementation plans. Design non-structural BMPs (ie ESD). Delineate drainage areas. Calculate storm water run-off volumes (eg TR-55). Calculate BMP credits.
Develop storm pipe profilesDevelop hydrology studiesDesign Stormwater managment facilities
Develop vegetation management plan
Develop visual impact assessmentsDevelop scenic inventoriesPrepare planning publicationsPrepare photosimulations of future conditions

Development of Graphic representation of existing and proposed Site Utilities, Site Inventory and Analysis for Owner, Governmental Officials and Contractors interpretation and understanding - Moderate Level of Harm
Did I put on clean underwear before I went to work today.
Do you evaluate or inspect playgrounds for safety standards compliance?Do you evaluate sites for ADA (accessibility) compliance?
DOCUMENT FILE MANAGEMENT
Does "Review maintenance services" mean with owner? Proper handoff of required maintenance. Not just preparing maintenance and management plans, but properly executing hand off and implementation.
Don't quite understand how to fill out the 'Criticality' column.
Drainage Design
Educate homeowners and train contractors, engineers, architects and landscape architects on city codes and state ordinances.
Educating clients throughout the design and construction process. Explaining design intent, safety issues, code compliance and costs.
Educating Public Agencies, Owners, and user groups 25% of time on a project.
Education
Educational/outreach tasks such as educating the public/stakeholders/sub-contractors/related disciplines about the principles of landscape architecture, particularly xeriscaping (what it actually is) and how storm water features and landscapes interact. Or hosting high-school students in design/engineering curriculum in the office, etc.
Engage in expert witness tyestimony in civil cases
Enterprise leadership and management! Professional Landscape Architects are not limited only to minor technical, project or planning roles! That self-induced view of the Profession is why it is so little known and valued outside the insular design community of practice.
Entitlement coordinationDue Dilegence researchresearching legal/adjacent property information
Entitlements (Approvals from Boards)Resolution Conditions ComplianceAssist in Legal Matters, Professional Testimony
Environmental Impact Analysis, CEQA/NEPA review, use of the rational method for calculating stormwater discharges, sizing stormwater inlets and pipes, designing decks and arbors, calculating loads for decking, railings and other outdoor structures, playground design and safety standards.
Environmental impact assessment
Evaluate and specify off-the-shelf materials and vendors
Evaluate suitability and health of existing and proposed trees, especially in an urban environment. Hazardous trees are a Critical life-safety concern.
Evaluate tree risk (hazard evaluation).
Evaluating potential materials such as site furnishing for durability and design parameters. Reviewing the work of others. Mentoring junior staff.
Evaluating the client and the prospective project.

Every client is different with the tasks requested for us to complete. I think a major task that we are involved in a lot as a firm is grading and construction detailing. A lot of times we are taking care of the site grading concepts plans and supplying them to an engineering firm. Engineers get caught up with so many other taks that a lot of times there are better solutions to the grading plans.
Expense reports, timesheets & annual employee reviews.
Expert witness testimony, deposition, reportFact witness testimony, deposition, reportCV preparation to serve as expert witnessStream channel delineationWetland delineation reportCritical Areas reportBuffer averaging plan for stream, wetland or slopeTimber management plan Market analysis reportBasis of design (BOD) report for LEED documentation of site creditsBasis of estimate (BOE)
Expert witness testimony.
Facilitate or participate in Contractor, Owner or Government medications, either formal or informal.
Facilitate site plan submissions to governing authorities for review.Review and QA/QC Surveys: topo, physical, as-builtReview and QA/QC other engineer's work: grading, storm, utilitiesUtility research and analysis of existing services availablePump Station analysisReview architect's site plans and provide QA/QC
Finding a job that pays well enough to cover the unnecessary and outrageous cost of the LARE exam.
firm or group development - culture, goals, working processes, ect.
fund raising documents, grant applications, 3D drawings, color renderings, on-going client and contractor communications/administration
Geez, it could be anything. The scope of services this profession provides seems to change daily.
General CAD & Civil 3d Skills, People & Client Management, Office management, Etc..
Generation of marketing materials (business cards, brochures, posters, flyers, and other critical in house work for a small business)Multiple project coordination and scheduling (multi-tasking through multiple project design phases)
Government/Public Sector Review and inspection work
Grant applications and administration, financial reporting
Grant applications, administration. Park impact fee ordinance writing. Property acquisition. Design Review Board and Park Board staff support. City Design Guidelines preparation. Citizen task force management. Consultant selection process. Urban horticulturist for city staff. Write planning regulations for landscape requirements, land use code for park uses.
Graphic design. Branding. Signage design.
Graphics
Grass roots and community based project initiation and develpment
Hand holding
holy crap, this is insane! Many duplicate items, and some of them I don't even understand. Evaluate criticality? To whom? Me? My office? the client? the public? Under what conditions? Over what time frame? sheesh.
how are designs related to CO2 reductions?is there an energy security plan- like what will the demands be in 2030?Do you develop working relationships with craftsmen and trades?do you address natural providence for plantings?are planting plans related to local climate changes?...... there was no statement on insurances....why?

How can I tell? This is ridiculously long and tedious to complete. If you want more folks to complete it, make it reasonable in scope.
How the above questions and tasks relate to design build firms. This survey is directed to design firms.
I am a Planner with our local Park and Rec Department so the tasks surveyed do not cover all the things I do on a day-by-day basis.
I am a Sr Project Manager in an transit agency, we are currently developing a light rail project which is moving into final design. - Prepare and review technical documents (for example EIS related), respond to stakeholder comments; develop/review design criteria; coordinate development review with state and local governments; develop and make presentations using PowerPoint;academic practice - lecture in Landscape Architect and related fields and perform student design critiques; prepare documents for adoption by elected bodies; participate in property acquisition related activities;
I am licensed as both an engineer and a landscape architect. My work is primarily engineering. Therefore, these questions are difficult to answer.
I am not currently in active practice
I am retired.
I am unsure if 'stormwater pollution prevention' covers what we do. My practice is involved in stormwater plans for about 40% of the work load. This includes erosion control plan, stormwater quantity and quality plans and mass grading permit applications. These have the potential to cause serious harm if not performed correctly. It seems odd that such a large part of my practice would be lumped into one small bullet point.
I didn't see anything related to accessibility knowledge and requirements - serious harm if done incorrectly.
I feel this listing is comprehensive, but answers will vary based upon context and role of employment.
I found it hard o determine 'criticality' of some tasks because I felt some tasks poorly done would annoy rather than harm the public. Might also be economically wasteful, & disrespectful, and bot ecologically supportive but not sure that is outright 'harming' the public. On the other hand, on a philosophical level anything poorly done could be considered to 'harm'.
I perform expert witness work.
I recently retired, so I think my answers would be "N/A" right now
I think the criticality differs between public projects and private projects such as residential.
I work as a planner in municipal government. Not everything I do is represented in this survey, but perhaps these duties are not considered landscape architecture Duties such as organize and hold public events, market those events, seek funding to complete projects, identify partners to help organize, implement, fund projects.
id and apply for public conservation funding and assistance (nys480a, crep, eqip...)
Identifying safety concerns with projects previously performed on Corporate Campuses, where we are the ongoing Landscape Architect (over years and decades), such as tree roots uplifting paving, settlement issues affecting accessibility, materials degradation that may affect children in contact, solar exposure at people use areas that may affect long term potential for skin cancer, etc.
I'm sure there are tasks missing as we do so many things. Cannot name one at this moment, though.
irrigation
irrigation is understated.

It is ambiguous in the sense of responsibility, differentiating "develop" versus "prepare" and challenging for leadership staff to convey roles. I typically review all deliverables leaving my office but seldom actually develop or prepare them on my own.Form is onerous in length.
It may be helpful to ask what role(s) are typically performed by the participant as some are more design-oriented and others more technical.
I've never seen an RFQ be referenced as a request for quotes. The typical term is Request for Qualifications...
land use applications, entitlements, rezoning applications.
Landscape Architecture is practised in many different ways. I play an administrative role in local government to review designs and installations, instead of preparing the design drawings with planting and paving.
Lead volunteers during installation.
LEED Credit ParticipationPreparation of presentation graphicsPreparation of 3-D modelsPerform field tree inventory workPrepare low voltage lighting plan
Little information about leadership - of client and/or of consultant teams; are you typically a sub consultant? Or a prime/lead? Leadership of a project , assembling and managing consultant teams, coordination and interdisciplinary collaboration.Many topics mentioned, i.e. lighting, tree preservation , storm water, but only "prepare sections" seems to cover the major critical components of developing construction plans for hardscape elements and small architectural structures (trellis, pavilions), which we design all the time. There are numerous important public safety issues with hardscape plans, detailing, materials and grading, which could be assumed to be within your categories, but not expressed as you did with planting and furnishings.
Make presentations and recommendations to decision makers/elected officials.Disseminate knowledge to colleagues and allied professionals.
manage and schedule staffinvoicing and billing
Manage teams of Landscape professionals from Landscape Architects to Landscape Maintenance Team.
Management of staff and company
Managing the financial side of the business, invoicing and collecting fees.
Managing an office of professionals that do the above, without actually doing it yourself.
Managing officeParticipating in advisory counsels / community serviceMentoring and teaching next generation
Many LA's spend a very large chunk of time developing visual graphics (illustratives, 3d modelling, etc.)
Marketing, business development, billing, invoicing, administrative and human resources tasks of running a design officeContinuing education requirements
Marketing, sustainability of work.
master planning, site planning, conceptual and feasibility studies
Materials ResearchEnergy ModelingEngaging in Continuing Education activities (lectures, event coordination)Mentoring students
Maybe, but this was so long and tedious (redundant) I almost quit. Keep it Simple.   This also creates confusion on how to apply criticality to so many deconstructed items.
Mentoring and Training junior (unlicensed) staff

MentoringManaging junior professionals
Mentoring, training, evaluating staff. Office management.
Mentoring/training
Mentorship/Staff Development
Mgmt of other LASs / staff
Model making Discussions with fabricators, maintenance staff and conservators during design
Modelling
more about managing personnel?
More emphasis should have been placed on client relationships and communications. Landscape architects are very strong at working with clients and taking on tasks that don't have an "easy" answer.
More information regarding the Design Devlopment phases. More information regarding technical research, ie. webinars and conferences.
Most of my work is at the management level. There is not one word on this aspect of the practice of land. arch.There is nothing on the rehab of older projects and/or the reworking of projects as they age.
Need much more information on different maintenance activities. Vegetation control, water management, tree maintenance, etc.
Negotiations
No idea. So many tasks.
No longer practicing. Thw whole survery is therefore pointless for me. Nancy Hardesty
Normally I love surveys but this was a little tooooo long. I had to fill it out because I want to retain the need for licensure! A great long list and reminder of all the tasks Landscape Architect have the opportunity to do!
Not entirely clear how to answer as we are mostly the client and oversee this work. I have answered related to my part as coordinator and reviewer with oversight on the project.
Not so much tasks missing - rather too much overlap in tasks - some are esoteric enough to warrant explanation.
Not that I can tell
Office standard maintenance and creation
On site consultations for planting design, and evaluation and treatment for soil erosion potential, which is very important in California. I no longer draft planting plans, but design in field. I work with landscape contractors and gardeners to implement the "plan".
On-site topographic surveysUnderground utility location not covered by OUPS services - Serious level of harmCoordination and review with utility transmission companies, oil,gas,electric - Serious level of harmPerform playground safety inspections - Serious level of harmConduct ADA assessments and produce inspection checklists - Serious level of harm
Ordinance and design standards preparation.
Organization Management: setting ethical standardOrganization Management: hiring, training and mentoring staff
Oversee construction contractor on site. (perform very often) (severe harm)
Pay Application Processing - Perform fairly often and little or no harm

perform landscape maintenance
Perhaps the survey implies this, but my practice coordinates directly with other disciplines and other Landscape Architects often throughout the planning process through construction, especially regarding wetlands, endangered species, and cultural resources.
periodic onsite inspections for ongoing maintenance.Annual maintenance evaluations.
Permit Compliance
Personal management
Place making, design iteration, story telling, narrative
Plan Review and Approval, Code Enforcement, Direct Communication with and Presentation to Elected and Appointed Officials.
Plan review for code compliance
Planning application review
Plant and product selection and approval, both at vendor location and site location.
Plant Procurement, Contractor Contract Monitoring, RE: Public Meetings- you might add Design Workshops
post construction stormwater performance
Post project meeting with clients to evaluate their needs being met and satisfaction with the project
Preparation of entitlement documents for permission to build
Prepare & evaluate easement documents
Prepare and develops ADA plans; obtain entitlement approvals from regulatory Comissioner and elected boards. Floodplain management plans. Floodplain delineation plans. Stream restoration plans. Research and provide recommendations s regarding local. State. And federal regulatory codes. Codify codes that preserve the health safety and welfare of the public and the environment. Educate the public regarding issues of concern affecting their properties surrounding adjacent development. Prepare and develops pedestrian safety plans. Bicycle and pedestrian impact statements and reports, design bicycle and pedestrian safety improvements plans. Water and sewer utility plans. Wildlife and endangered species assessments, wetland and groundwater table delineation test, analysis, and recommendations. Forest interior dwelling species assessments. Stream and wetland delineations,prepare, design and develope beach and coastal restoration plans, design and develop flood hazard construction plans, land use analysis, deed and property land record research, construction plans, prepare, design, draft subdivision plats, building permit plans, permit packages, storm drainage plans; collect, analyze, and make recommendations regarding environmental, building, engineering and public policy; and decision.
Prepare environmental analysis (NEPA) documentsPrepare universal accessibility recommendations
Prepare legal agreements; expert testimony; and legal determinations.
Prepare preliminary stormwater management plan; prepare preliminary stormwater analysis, calculations, and report; prepare drainage and stormwater management plan; prepare and submit stormwater management calculations and report; prepare drainage and stormwater management details including LID and GI techniques;
Prepare Stormwater management plans, stormwater quality plans, and stormwater quality calculations.
Prepare tree hazard reports and tree maintenance recommendationsPrepare structural details for minor elementsDesign guard rails and parapet wallsDesign ADA ramps and stairsDevelop emergency pathway identification Develop planting design to avoid poisonous and potentially harmful plants

Prepare wetland delineation plans; prepare forest stand delineation and forest conservation plans. These are plans required by state of Maryland and probably 50% of my job. Also, preparing supporting documents for wetland permits (primarily Impact sheets)
Preparing photo-realistic and accurate simulations. (probably in Analysis)Conduct peer review and write technical reportPrepare pre-filed testimonyTestify before a board/court, representing a clientPrepare GIS models to conduct site analysis
Present plan/project to regulatory boards and commissions.
Presentation graphics, renderings, illustrations, for concept development
Presentations, speaking invitations/assignments, teaching and lecturing
Probably in certain special cases or projects. I didn't see anything specific to accessibility.
Professional business/office side of LA work;qualified employees, proper insurance, good business management, proper accounting, licenses, avoiding fraud regarding employees, subcontractors, vendors, office managers, - public relations, and consultants.
Program Management
project accounting
Project feasibility/desireability studies
Provide information/education to owner of options, and hidden costs,Preparing them to make informed choices.
providing expert testimony on application before planning or zoning boardsprovide variance testimony before planning or zoning boardsprepare perspective sketches or 3D modelsdevelop municipal comprehensive plan or master planparticipate in sales activitiesparticipate on project sales interviews/presentations to win jobManage project financial performanceCADD file managementelectronically filing emails dailycoordination CAD translationsset up CAD project filesPrinter coordination and filing documents with government authoritiesMeetings with public officialsin-house Quality Control reviews (check/red line prints)Participate in Value engineering of project w design team & contractorassist with preparation of developer pro formaprepare planning reportsdevelop site plan concept plandevelop subdivision concept plan
Providing training in any number of these tasks.Analyze, define, support, propose project funding plans.
Public art design & construction managementAsset Management of highway roadside facilities (including public rest stops, park & ride lots)Highway construction administrationHighway worker safety design Specialized design (ie, increase pollinator habitat)Visual impact reportsFacilitate annual meetings with Contracting Industry to gather construct ability and biddability issues on public works projects
Public hearings: P n Z, Council, Architecture Review.
public meetingsclient presentations
public outreach, public presentations
Pursue regular professional development to ensure currency of procedural and technical knowledge.
Recent graduate, not yet working in the field
Renderings and Graphic generation.   Detailed meeting minutes.

Research into best practicesTeaching and mentoring future professionalsIdentifying and managing political issues and opticsTeam and personnel managementWork distribution and project management (including timelines)Training personnelPreparing and delivering presentations to public and private groups (non-client)Facilitating public meetings and participatory design processesDesigning surveys to collect informationDesigning on-site data collection research (such as parking use studies)Managing data coding, analysis and interpretationReport writing and distributionWebsite management and online outreach tools
Resolve legal issues with contractors
Review development applications (local government)
Reviewing other consultants' plans. "Conduct Quality Control Review" and "Coordinate with subconsultants" were listed and between the two, they should cover it. But, "Coordinate with Subconsultants was under "Bidding and CRS". Coordinating with them is crucial during the CD phase.... which could be part of the "Quality Control Review".
Re-zoning plans, Preliminary Plat planning. These may fall under other questions, but the survey isn't clear on that.
Role of Landscape Architect in Residential Design and Construction approach to design issues, installation management and project close out.
RPA and flood plain delineation are not specifically mentioned. Coordination with permitting also is a big part of the job (ie stormwater, MS4, Ches Bay requirements) not specifically mentioned. Both preparing docs and coordinating with authorizing agency to obtain permitted plans.
Sales
Sales and marketing related to small businesses and project management for timesheets and accounting.
Select and tag plant material
Serve as a Prime Design Consultant on certain projects.
Serve as the primary lead on design and integration of design projects. Lead other disciplines and coordinate workflows and design intent.
Site investigations, summary of findings reportslitigation support
Site searches based upon the Client's needs.
So far, this is depressing for me. The tasks that I perform now are "technical services" advising, observing, specifiying, training re: maintenance/soils analysis/vegetation management for state highways/dept of transportation dept. It is totally different from all the planning and construction documentation, observation, and project mgmt tasks that I routinely performed for my entire career.
Specific questions regarding public meeting facilitation practices
specific to irrigation - grey water reuse for irrigation.
Staff management.
Stakeholder consultation, dealing with permitting ie conservation authorities, MNR,
Storm sewer design and stormwater management quality and quantity control design.

Storm water (lack thereof too) in Southern California is a HUGE topic. Metropolitan LA, especially the the City of LA, has new ordinances in the books, that new construction MUST CONTAIN all storm water on site to extent feasible. We are no longer allowed to convey our storm water off site to the city storm water system. All new structures now have either a SUSMP or LID component, planters that must be on structure, have required free board to hold a storm surge, and slowly allow water to release if necessary back to city storm water infrastructure. Or direct water into cisterns or dry-wells within the property line boundary. This is a BIG deal for any landscape architect working in the urban environment in SoCal, especially as our metropolitan centers are getting more and more dense. Many built projects are mixed use now too, so opportunities to address storm water and residential landscape needs on structure. The challenge, how to get these god-awful SUSMP planters (giant concrete bathtubs) integrated in an aesthetic manner onto the site - requires coordination with Civil and Structural, especially as many SUSMP planters must be ON structure. Coordinating and detailing with water proofing is a big deal too. AND, new AB1881 low water requirements for California, getting more and more strict. Nearly all new irrigation now must be on sub surface drip now to meet the numbers game between irrigation efficiency and evapotranspiration rates, and using Low to Very Low water use plant palette.   Old school thinking is not cutting it. AND, there is an education trend in the works to get new street work revised to start to reverse the roadway crowns/ridges into swales, redirect and capture storm water in the center of the road to a planted median, recharge the ground, rather than convey water in the gutter to the storm drain system and out to sea. Landscape architects really are starting to re-educate the Civil Engineers in SoCal, who dogmatically go from point A to B as quickly as possible. Meantime, Sanitation Plan Check in the City of LA is promoting interesting alternatives, like passive irrigation using capillary action in sand media rather than pumping water through an irrigation system. This is a hot area actively being explored on all new projects.

Stormwater planning, modeling, analysis, management & mitigation design.Water quality planning, modeling, analysis, management & mitigation design.Mitigation master planning for pollution generating sources and pollution mitigation planning using surface BMP's, including wetland design and detention landscaping.Security planning and analysis, design, modeling and mitigation using landscape elements. Integration of digital technology into landscapes for mitigation of security risks.

Stormwater Quality Protection Plan / Design Functional Landscape Ecological Design / RestorationDevelop Post-construction Stormwater Quality Protection CMs/BMPsDevelop Native Seeding Specs, Seed Mix Design and Revegetation Plans in considerations of elevation range, native seed availability, soil, and biotic community analysis

Supervising/ teaching younger landscape architect the trade...

Supervision of unlicensed staff and design work (under project management)Interpret and incorporate accessible guidelines for pedestrian designInspect and approve layout and construction of pedestrian facilities for ADA compliance.Select and approve materials (trees, site amenities, paving materials)

Support fellow staff Manage office scheduleAdministration tasks

Sustainable Materials Use Tracking

tagging trees and other materials

Tasks related to knowing and understanding materials and products from manufacturers and suppliers.

Teaching / mentoring in the practice of landscape architecture.

Technical skills for modelling, mapping, rendering could be broken out of representation, deliverables, and analysis.

The importance of plant procurement
the role of testing during the construction phase
This is inanely written!
This is the worst survey I have ever taken! What are you thinking. I would anticipate a response of less than 20%. Way to waste my time and anyone else who had to sit through this miserable survey.
This survey is very oriented towards public projects. I only do private residential projects.
This survey is way to long.
This survey seems to be heavy on the planning and specification documentation side of the profession. Plant materials, a professionally unique design tool, has little mention, yet familiarity with growth characteristics, eg growth rate, form, ultimate size, resistance to breakage, tendency to develop dead wood, fruit/nut characteristics are all necessary for specifying vegetation for the safe design of streetscapes, parks, parking lots, commercial and residential development.Environmental issues are practically absent. Planning and design considerations for natural features such as wetlands, water courses, water bodies: Critical Environmental Areas, sustainability of site design.
too many questions here - out of time
Tracking project & construction costsMonitoring project expensesManagement of consultant servicesPreparing reports for contract awardPreparing reports to councilPreparing documents for grants/incentive programs
Training and mentoring staff.
Tree tagging and nursery visits, presentation preparation for community meetings
under construction documentation, you mention planting/irrigation, signage, traffic, mitigation, soils. . . no hardscape plan, no waterfeatures, which are both huge aspects of our work. . .
Utility Analysis, Safety Review and Protocol,
vegetation identification and health of specimen
Verify On Site Safety Training and Orientation Regularly Occurs.
Visual impact assessmentEnvironmental impact statement
Visual simulations, 3d modeling
Visualization - 3D Modeling/presentation graphicsHand Drawn GraphicsOral Presentations
Water Budget Calculations
We are often involved in planting over structures
We do alot of water quality design.
We negotiate/work with municipalities and governing boards all the time...didn't see much listed about that?
We spend a lot of time on Pool safety and ADA issues
Who knows. Way too long a survey. I can't find time to finish......
Wildland Fire Assessment, Water Conservation, Habitat Preservation and Enhancement, Complex erosion Control Plans-Specifications-Calculations.
Working with and Zoning Issues. This could be covered under the Code question. I would also consider more administration contacts. Such as any needed buy-in from Local Political Elected Officials. This could also be looked at as some of the Stake Holders, but they like to be considered in a class by themselves.

Working with elected officialsPersonnel management Testifying in court
Wow - I think you covered everything :-)
writing cultural landscape reports, conducting planning and design charettes
Writing guidance manuals for landscape architects and engineers.Reviewing utility franchise proposals.Review of consultant landscape architectural work.
Writing up of master plans, concept plans and other reports.
Written correspondence with stake holders and the general public. Public education on construction processes.
You did touch on it. I am engaged in expert witness consulting.
You have "Prepare Change Orders"...I would add, "Review Contractor Proposed Change Orders"

 Note: Responses are listed here exactly as they were entered into the online survey. No edits were made to participants' responses.

Appendix H: Job Related Tasks Identified as Missing from non-United States, Canada, or Puerto Rico Survey Participants

Are there any *job related tasks* that are missing from this survey?
- Academic, academic-practice, inter/trans-disciplinary pursuits have been relatively less placed. More emphasis was rendered to common L.A. works.- Regional context and its engagement with local interventions missed.- Some recently significant socio-ecological topics such as climate change effects, migration and social equality, before and post recovery schemes have not been placed.
- the job position title- the difficulties met by the landscape architects and the way to solve them ?- it is a survey done by the IFLA, it was for me an evidence they would be a supplementary question about how the landscape architects would appreciate the IFLA network input in their everyday work
I answered the issue of criticality and harm in terms of "bodily harm". There is a wide range of how respondents can think about 'harm'. Public sector versus private sector clientsPercentage of time writing Percentage of time designingPercentage of time drafting Level of autonomy in the work place Percentage of work reviewed by other qualified professionalsNumber of years employed as a landscape architect and number of different employers during that period
"What accredited LA college did you attend?"
....
1. How well my landscape architectural education prepared me for different aspects of work in the profession.2. How well the L.A.R.E. tested for different aspects of work in the profession.
1. questions about perceptions of landscape Architects in society.2. Level of study required to fully address the profession.3. Impact of profession of life, safety and welfare.
A category for semi retired landscape architects that have scaled back their practice.
A correction: RFQ is Request for Qualifications, not Quotation. at least that is how it is on the west coast. Usually an RFQ is issued to select a short list based on quals only. An RFP may follow, which then asks for scope and budget from multiple firms, or a direct selection may be made and then the scope and budget are negotiated with the selected firm.
A distinction between the acale of our work. I do design in my work, but not objects, I design neighbourhoods and the public space as a whole and it's functions, not the individual physical parts it contains.
a lot of - it's made for a default LA, not for me. :)
A question on what is unique to landscape architecture, which differentiates it from overlapping or related fields, such as civil engineering, ecology, botany, landscape design, urban planning, natural and cultural resource planning, soil science. This question is critical in understanding the importance of licensure. One of the key unique qualities is precisely this -that landscape architecture does encompass the understanding and synthesis of these many fields, which no other profession does. Landscape architects uniquely design land forms and land uses with a totality of considerations: user experience (aesthetic, spiritual, qualitative); ecological and natural systems integrity; design function integrity; cost; durability; safety.
A summary description of the CLARB research on the 7 identified HSW impacts upon the public may have provided additional insight and context to those participating in survey.

Ability to respond to how applicable the LARE is in relation to what LA's do in the profession.
Active transportation planning You won't get a good perspective on those who function in interdisciplinary practice:You did not ask about work in allied professions, other education, other professional memberships, many LAs have other degrees, work in allied areas and are members of other professional associations - you need to know this.
Ada accessibility
Ada code and building code compliance
ADA compliance and application of ADA requirements, identification of natural and man-made hazards, formulation of climate adaptation strategies, risk assessments, bio-remediation.
ADA reviews and submittals
Add a time frame (i.e. Last five years, career, etc). No provision for response by retired LA's
add master planning, site planning, and concept/feasibility studies as a focus area and military/DoD as a project type
Advocacy, policy development, personnel and human resources
All tasks in the survey are related to land-use. Working as head of strategic planning in a municipality I have a lot of other questions such as labour market, human rights, participation etc that not necessarily are connected to land-use.
Already answered that.
Also degreed and licensed PE (in several states) and work in military / aviation industry.
Also licensed as a P.E.
Amount of firm and individual participation with the local ASLA Chapter, and professional advocacy efforts.
An acknowledgement that all Landscape Architects are not working in design studios or planning shops and actually are providing informed leadership across many other sectors, including, Government, NGO and International Development firms, organizations and agencies.
anythung that matteredthis is ridiculousare you aware that no one under 40 gives a shit about this
Are there local jurisdictions that prohibit landscape architecture stamps for permit drawings in states where practice law has passed, such as Cincinnati, Ohio?
Are you happy with the current status/ recognition of the value of the profession?NO
Are you satisfied with your job? What would you change?Where do you think are the most sensible points which can hinder effective working in a team?Landscape Architecture is much more than only gardening. I think this survey has shown it.I wish to work for a bigger office or for NYC DOT or NYC DDC. Thank you.
As a public sector employee a substantial amount of time is spend responding to public inquiries
As I run / own a small practice with 2 other directors quite a lot of my time is spent on human resources such as staff reviews, workload distribution, review of work by others, design reviews, and recruitment. Also we are developing a new website, generating content for Twitter & LinkedIn, developing the business plan, succession planning, recently developed an employee handbook and project plan as a guide for staff to refer to at each stage of a job.i am an examiner for the charter ship exam and also sit on a design review panel. Attending cpd events, networking and winning new work!oh and keeping an eye on finances.
As we as LA's continue on in our career, we progress out of design, details, and other activities that are geared more for entry level people. Career progression then, is another area of consideration.

Ask for titel, my titel is not landscape architect. It is urban planner or similar. My education is landscape architect.
Ask if we are full time , part time or semi retired or retired...
ask what we think of the LARE exams and available resources
Basically, I have a small and expanding practice with a focus on serving private residential clients. We primarily are involved with site development for new construction and major renovations.
Because landscape architecture practice can be VERY different between the East Coast and the West Coast, you need to include questions for both places within the LARE exam. Clearly East Coast Landscape Architects have a more robust storm water / grading practice requirement than in Southern California, where the conventional practice here turns over grading and drainage to Civil consultants. However, water conservation and re-use is a big topic for SoCal.
Better definition of "criticality"
Bi-annual Required continuing education including ADA (Disabilities) and Legal.
BIM Capability
Business management
Business management
Can Landscape Architects develop a unique highly technical specialty that cannot be replaced by other disciplines?
climate and water management
Climate Change Adaptation and skills in managing climate risks from extreme weather events and natural hazards
climate impact on plannings.local weather impacts.energy efficiency planningpotential for change at later stageswhat type of research/readings do you do
Communications, marketing
Community based projects in the academic realm
Community Planning, Zoning
Community projects, educational project, environmental services
computer skills
Conceptual Land Use Planning alternatives
Conservation of plants, Wild plants
correct assessment of how long the survey would take.
Country category for Bermuda. I practice in Bermuda but this country is not listed.
County Planning uses our skills forEcology, wild land corridors and setbacks. View sheds and schoolSite traffic evaluating for growth management and zoning changes.
Depends on what you're trying to measure. Didn't seem to be a very interesting survey.
Design Build
design historical research and teaching
Design review. As an LA in a state transportation department, I primarily review and comment on plans.
Designing bridges, furniture and development of new pavementmaterials and transformationplans.

Determining what level of Government the Landscape Architect has interface   1. Local Governments 2. State Governments   3. Federal / National Governments   4. Intenational Governing Bodies/ United Nations Agencies
Discussion on what we do independently v. what we do in collaboration with other design professionalsNo mention of the role of technology in what we do
Do we feel WE have benefitted in any way by licensure?
Do you as LA ever do the site plan?How much of your work is collaborative?How often do you lead projects as Prime?
Do you lead/coordinate multiple disciplines?
Do you mentor landscape architects that are working towards registration
Do you think the LARE is relevant to real world professional practice?NO
documentation? how is it done?
Doing the survey from an iPad with intermittent wifi connection was a test of my patience. I would suggest that the first portion that included the drop downs for frequency and importance should have been broken out by task. I had to redo this portion many times.
Drainage design
Ecotourism and tourism, educational
Education jobs
Eia Environmental Impact Assessment.
emerging areas of study, research and practice:ecological/landscape urbanismgreen infrastructurelow impact developmentgeodesignWhile the above are aspects of landscape architecture, their emergence is significant.
Entertainment design and planning
Environmental impact assessment
Environmental impact assessment, ie landscape and visual assessmentClimate change mitigation and adaption measuresEnergy (esp. renewable)
ENVIRONMENTAL JUSTICE INITIATIVES, SOCIAL EQUITY AND ADVOCACY ROLES IN UNDER REPRESENTATIVE COMMUNITIES, BY PRACTICIONERS AND ACADEMIA...
Expert Speaker
explaining to consulting landscape architects what their role and responsibility is.reminding consultants to include a north arrow, title block, use a conventional scale, labels etc on their DRAWING SUBMISSIONS!
Extent of collaboration with other professionals, i.e. Civil Engineers, Architects and Planners
Far too many questions with unclear criteria for good responses. You really need to define harm. The only way we can support our licenses is to connect them to human health, safety and welfare. That needs to be the context to answer. Also, since we frequently collaborate there should be options for acting in collaboration. Lastly, the answers need to be based on a common standard of practice, if you do all of the tasks to the highest standard you would probably reliably uphold the health, safety and welfare standards. If not there are bigger questions.
Feedback should have been requested about how non-licensed parties are succeeding in the industry. You should know why several individuals are not completing their licenses because the liability increases with the receipt of license but the pay scale does not increase. Many people under the age of 40 have

determined that it is more profitable to perform similar tasks as a licensed party without being licensed. Licensed parties over 80 are offering to stamp plans of non-licensed parties because they are too old to keep up with the computer work involved, and the young parties are not as successful with a license.
Financial ranges on services (for geographic purposes and universal price determination).
Five year Bachelor degree distinguished from a four year BLA.
For a some of questions, a "Not Applicable" would have applied to some of my answers
For the tasks, ask when they were performed, such as within the past year, 1-5 years, 6-10 years, etc. You might ask if there were employment hiatus from landscape architecture.
Frequency of K-12/School type of work.How much Safety and Security work has increased since 9/11 and Sandy Hook and other similar tragedies.
Gender discrimination task.
GIS
Grant writting
Grass roots community based visioning and development
Green Infrastructure & Stormwater Management; Energy
Green infrastructure projects, active transportation
health benefits or programs
highway beautification/street scapes
Historic Landscapes
History of Landscape Architecture is often overlooked but is essential to overall health and welfare of the public since it largely conveys basis of design, precedent, and inspiration. People's failure to recognize that planning was birthed from landscape architecture, for example, will default to use a "planner" over a landscape architect. Even many landscape architects fail to see this and in so call themselves "planners". Planning has little to no legal requirement in most states to uphold HSW of the public. If public (and our own profession) knew that landscape architecture is the only profession that is specifically educated, trained, and tested for elements like grading and drainage, stormwater, and site planning, perhaps the public would be less confused and would rely more on landscape architects where their trust is best placed.
How about number of years it took to get licensed? We go through extensive processes to achieve licensure. Engineers take one exam.
How about questions related to licensing and the relationship to CE credits.Need?Desire for?
How can I survive as a Landscape Architect in my country?
How did you become registered?
How many landscape architects do you work with?what is the most pressing issues affecting landscape architecture right now? Licensure, regulatory over reach, What is the key role you serve in protecting the health safety and wellness of the public?
How much Errors & Insurance Coverage Client's require us to carry.
How much time public education takes.
how much time we have to spend learning technology
How much work is done as a landscape architect outside of full time position - I work in local govt but moonlight outside of my municipality, of course
How often LA firms collaborate with other LA firms and why

I actually have two jobs: part time at a landscape architecture firm and part time serving the transportation needs of my community (including conducting public meetings and doing transportation design and planning). Not sure if that can be reflected in this survey.
I always find these types of surveys so broad and general I am unable to tell exactly where it is all going.
I always wondered if LAs should be licensed according to specific fields of study similar to PEs (ie civil, electrical, mechanical, etc)
I am 1st a Registered Architect. Did the full LA apprentice program, took the LARE, waiting on boss to submit CLARB paperwork (but have done my hours/time) and now back to being a RA. This filled the recession gap for me as a 'bonus' my firm that laid me off asked me to do. I appreciate it has a lot to do with grading. 1 of 9 tests in the ARE was grading. I say this supplements my architecture license. People often ask for plants and I don't feel the LARE covered many plants at all. And thus, finding a job in the landscape world is tough. It either goes to someone that knows plants or someone that is more civil engineer. This license lands in the middle of nowhere and almost a waste of time/effort/money for me. I wish it was different. I am so far removed (3 ish years now) that I didn't feel I could answer the majority of the questions.
I am a Landscape Architect moving into a new job where I will bring the principles, sensitivities and training of Landscape Architecture the management of Forestry both urban and rural as well as Horticultural operations.
I answered the survey from the position I retired from. IMHO there ought to be the option of indicating this status.
I answered the task questions that I do personally. All of the tasks are performed in our offices.
I believe CLARB should have inquired more about the LAREs to get information from those who are currently writing as well as those who have completed them to gather their insights into that process. However, perhaps this should be a whole other survey.
I believe more consideration should be taken into the overall test procedures and test subject matter for those who desire to be licensed. I would encourage those on the board to not look at "how to make the test harder" but how to make the test more accessible and attainable to those who have sacrificed money and hours to pursue the profession. Many of my colleagues have put off plans to attain a license due to a few factors that could be managed by the board. Affordability is a main concern and the hefty fees to take and retake tests is a huge burden to take in our economic disparity. I would like the board to have a discussion on how we can make this process more accessible to those with an accredited bachelors degree and especially to those young and ambitious who wish to lead the profession. Having scholarship or grant opportunities would significantly excel the profession in rewarding those in the field who wish to obtain their licenses through successes and positive impacts to the profession. I would also encourage the board to take a look at the subject and content of the tests. It is a well known fact that as landscape architects it is a responsibility to continue to learn and to be informed about a variety of subjects through out our careers. This does not necessarily require tests to be more challenging or with more "trick" questions but calls to how can we make a test that educates, nurtures, and positively challenges our next generation of landscape architects? If the SAT has to be consistently reworked in order to adapt to the new learning styles of our younger generations than why shouldn't we? I am interested in pursuing my license but am discouraged by the stories of former classmates and coworkers in their pursuit to obtain the word "architect". Choosing between childcare, financial aide, groceries, and rent over one or two tests, with the hopes to pass in order

to lift the financial burden for the following tests is a sad outcome I hear too often. I have known many friends to take tests multiple times and to wonder if they are better suited for something else or to wonder why they are not 'board smart' enough to obtain their dreams. I encourage all these friends that they are indeed smart enough to obtain their license, isn't this why we sacrificed 5 years and obtained so much debt in order to receive a degree from prestigious universities that told us we can change the world with creativity and technical study? How could we have received our degrees without our academic mentors telling us we are smart enough and courageous enough to receive the degree and to be even braver to know that we had another uphill battle even after our 5 year sacrifice? This is the opportunity to help the profession. If you wish for the license to be protected then invest in the young professionals who are fighting to obtain the license. If we do not look for better solutions the profession is indeed under threat. Under threat that the young and bright may move on to more "rewarding" professions or that the young and bright may stay but will never be able to proudly say "architect" because the profession did award them the opportunity for the title.

I consider what I do to be very important to the health, safety and welfare of the public.

I develop conceptual and schematic plans for park buildings. Prepare models of buildings to provide to the Architect.I am the ADA Coordinator for the Park District. I also conduct playground safety inspections.

I do not necessarily PERFORM (as a licensed LA) all of the projects I marked on the previous page. However, as an educator, I have been involved in nearly all types of projects with students in the studio and engineering courses I teach. I hope that, as the data analysis team works through the results of this survey, the team is able to clarify or interpret situations like mine.

I guess there are landscape architects working with research, teaching and information, and also as e.g. journalists, guides, gardeners, educators and authors. This survey was very "locked", particularly with the question where time had to sum up to 100 percent although my main tasks were not included.

I have noted through my work that as a Landscape Architects I have come to increasingly accepts the responsibility of been a steward of the land. My training is in helping to create a beautiful and comfortable landscape for individual use as well as for the greater public benefit. With this training, I have the opportunity to bring environmental awareness to everyone I work with. I have become an educator and an inventor, (e.g., I bring native plants to back yards and reuse materials on site, introduce recycled material, replenish the groundwater and reduce water use, etc.,). I take pride in creating solutions that ties best with people's life styles and values and incorporating into the designs of their yards. This kind of life style changes through design work (not forced), therefore has a better survivability in the long run as it helps people feel connected to their contribution towards slowing down climate change.

I may have missed this in the lists; Storm water management, restoration, roadway design, regional planning

I previously began filling out this survey, but it did not let me log in and therefore I could not close it and come back to it later. When I closed it, it submitted, but answers are poor. I hope it can be thrown away. If you can identify my previous survey, please discount it. I practiced in both Massachusetts and BC, have MLA, 36-40 yrs old, Female, job has 500+ employees, is a public institution and I'm in the Planning Dept., which might help you identify. Thank you!

I should be licensed, but technically I am not. The reasons are twofold. First, I practiced in Colorado for 8 years and should have been grandfathered in, but moved to Texas when licensure became possible in Colorado. I passed all L.A.R.E. in Texas and got licensed just in time for the firm I was working for to dissolve

in 2009-10. Then I moved back to Colorado but couldn't find full time work and was so busy trying to scrape together a living that I could afford neither the time nor money to maintain licensure nor figure out the website to obtain reciprocity. If there is some option for me now, I would like to know it.

I spend a lot of my time performing the task of 'marketing' and securing project leads...that should be a big item under your '% of time' question

I spend the majority of my time working on drainage calculations and swppp reports. I feel this item overlaps site analysis and design development and my need its own category in previous questions

I teach in a community college system in the area of Landscape Construction and Management. I do a little practice of landscape architecture, so this survey was difficult to fill out and I have probably effected the results.

I think may of the questions on the first page differ between civic projects and private projects, therefore I think the survey could have been broken up differently. Much of what we do in the residential arena I do not believe needs licensure.

I think more surveys with shared results among landscape architects can help everyone understand the up-to-date "ecology" of our profession. The topics could include pay, work environment, roles, challenges, etc. These can help us understand if the profession is actually growing or declining, and the direction for improvements.

I think the gap of lack of access to public spaces suitable in developing countries in poor areas is very serious and I think that landscape architects can do a lot from design and environmental education for adequate understanding of public space in quality of life of people . There is a lot to do...

I think the meaning of "harm" needs specific definition in terms of criticality. My responses concerned themselves primarily with economic, health, safety, and welfare. Certainly, the difference between "severe" and "moderate" is significant in terms of human life but are less dramatic, and therefore, less critical, in other aspects of the definition. Some may feel the erosion of any resource (natural or economic) is "severe" but perhaps less so when human life is the definition standard. I view the category as ambiguous and probably not very useful in determining the relative importance of each component as ALL the components could ostensibly be viewed as highly critical in terms of holistic design solutions.

I value the continuing education requirement. There weren't any questions about that.

I was a landscape architect with Texas Parks and Wildlife Department and was involved in planning State Parks and in local assistance planning for urban parks in small communities. I retired years ago and now am Landscape Architect Emeritus and have not practiced for several years. I did not find a category for retired members.

I was sent this survey, and I am a Landscape Architectural Technologist, not a LA.

I work part-time as a teacher and researcher in landscape architecture. One of the research themes is local food production.

I would be difficult to include and maintain the simplicity of the survey, but it would be good to know the hierarchy of the types of the projects the individuals work on.... What type of projects do they work on most.

I would like to know how frequently or how many communities require a registered/licensed Landscape Architect to seal drawings for site plan approvals (and in which states/countries). I would also like to know if these same communities will accept a civil engineers seal instead.

I would like to see this survey address the topic of sustainability, regenerative designs, climate change, high species extinction, creating sustainable wildlife habitat, creating sustainable cities, sustainable transportation, sustainable agriculture, sustainable manufacturing, and what you are doing as a landscape architect to address these issues.
I would think working for an LA firm verses using LA skills in other types of businesses would be useful to quantify, understand, and ultimately, leverage.
I´m dealing with people in the organisation and the politicians as the head gardener of a municipality.
Identifying the interaction and importance of the role of the landscape architect in team projects with architects and civil engineers and how many times we act as the lead in many of the site development and coordination roles. Questions that showed how important the accuracy and quality of construction documentation for public spaces and construction coordination can be for public safety, health and welfare.
If licensed, how many intern landscape architects or landscape architects in training work under you?
If you are not currently in active practice there should be an option for such
If you are not practicing landscape architecture, what other professional work are you are doing? Also ask if not practicing as a licensed landscape architect then why? I think this would enable us to build a coalition with other professions that could be a support network. You need to glean what skill sets people are using if they are in other industries. These verify the strengths that are built up in a classic landscape architecture education.
I'm not entirely sure that this captures just how much client education and management LA's do on every project.
I'm not sure exactly what metrics you are looking for, but I think some general questions about career satisfaction would be interesting. What are people doing as landscape architects and are they enjoying it?
Importance of LA's role when working with other disciplines. We are often the ones that tie everyone else's work together.
In Arizona a significant number of Landscape Architects are employed with in 'ADOT and by consultants. In any given year there is 17 to 25 million dollars landscape architectural construction underway.
In the time percentages, office management/promotion/etc
Income information
Income per year
indicated before
infrastructure
instruction (academic, technical or professional)
investigacion - asesoramiento
Involvement in advocacy areas, lecturing on landscape related topics
Is the current licensing exam geared towards practitioners in the everyday Landscape Architectural duties or is it geared towards test takers. Having recently been studying for the exam, I feel that the applicable nature of the questioning is not in alignment with the everyday practitioner. Also the registration process is ridiculous and should be easier to get all of your qualification's approved.
It feels like there are more to a landscape architect than going through a building project...
It is very hard to comprehensively include many fields that landscape architects are included, independently or as the members of project teams. At the same time, omitting some of the fields can be very dangerous! I

Professional Testing

would recommend to consult the results of the EU project related to the content of the European higher education of landscape architects (http://www.eu-teach.eu/downloads/), as well as several other sources identifying scope of wok of Landscape Architects (IFLA-ECLAS Birmingham document, ECLAS Tuning Project, Le:Notre Institute, etc.)

It may be implied in the questions however Landscape Architects provide important consultation to other Landscape Architects as specialists. Our firm for example specializes responsible environmental planning and consultation especially regarding wetlands, endangered species, and cultural resources, which usually provides important early planning direction. There is an important role for Landscape Architects in these very specialized roles.

It seems there was not enough related to planting design, use of plants and ecosystems.

It should be noted that public safety is always the number one priority. Failure to adhere to guidelines can result is injury or even death. Locating trees too close to a road, poor sight distance, fruit bearing trees near an airport, poor stair design, locating trees on a dam embankment, using the wrong chemical to treat invasive plants near a stream, poor grading, and slope failure because of poor plant selection are just some of the things landscape architect's deal with that can affect public safety.

it would be interesting to know how many professionals volunteer for local boards or commissions, are elected officials, or serve on non-profits related to our profession.

It would be nice to get an average range of salaries based on years experience.

It would have been nice if it was a little broader to encompass more planning and upper level management tasks such as program management, policy development and advice to decision makers.

It wouldv'e been great to have a save point to fill it out in segments.

It's pretty thorough. Thanks for expanding the options.

it's too long of a survey

I've been doing LA for 40 years ... but licensing in Colorado has been less than 10.

job satisfaction

LA owners of firms that employ other disciplines, and work we technically oversee.

Landscape architects role in environmental impact assessments.

Landscape architects working for other disciplines/industries such as oil & gas, mining.

Landscape architecture as part of cultural & art-work and a political statement/engagement

Landscape architecture crosses over into landscape planning, engineering, planning, heritage assessment, environmental assessment, and project management. My employment position in a utility involves all of them to some degree.

landscape characterisation and mapping; assessment; scenario analysis; modelling of landscapes

landscape irrigation and water conservation

Leadership as a skill

Leadership, training,

legal frame work

Level of stress at workplace

Listed "Government" in previous question.

Make the first part of the survey a little less time consuming to go through. I think you might get better participation.

Management of multi-disciplinary licensed professional teamsContracting and management of sub-consultants
Managing staff, professional development, continuing education
Many colleges work at national boards of eg. housing, planning and building with a broad ranch of investigations, national planning and policy work
Masonry and carpentry residential construction
Maybe a bit about continuing ed
Maybe a survey with a time frame, such us - that you perform before, now, future
maybe specific references to sustainable/regenerative design areas that are a growing part of my practice such as forest management, agriculture/growing food/raising livestock and energy plans including wind/solar/microhydro. maybe a reference to identifying invasive plant and animal species in the landscape which require special attention and management...
Military installation
More identification of coordinating labor associated with Landscape Architecture. Beyond design many of us work and coordinate landscape maintenance, arborists, chemical applications, and assuring public safety.
More information regarding design/ build/ maintenance companies
More items related to stormwater/drainage analysis; post construction stormwater services
more of visual resouces
More open ended questions.
More questions about interactions with other disciplines.
more questions about interrelationships between disciplines
More Questions that hash out the role of Landscape Architects in Public Sector.
Most if not all question are project oriented. In public practice, much of our work is program management, policy and process development and implementation. Its serious work. Our counterparts are licensed engineers. No one questions the need for licensed engineers to be making policy decisions. These decisions do, in fact, protect or harm public health safety and welfare.
My firm (company) is divided into many different parts, my company has 100-200 people but my immediate department has 2. We are the only ones educated as Landscape Architects, and therefore have that knowledge.
national trails
Nationality - I am PolishOther relevant education/ mixed education background - I have a degree in biology and in landscape architectureMaybe salary wood be good to provide a view on income levels around the world at different levels
Need a clearer definition of public harm in the first exercise. Does this include psychological harm, litigation risk, discomfort? Or is it just physical harm?
Need to be clear if the questions pertain to one's whole career or what they are currently doing in their career.
Needs to have questions regarding stormwater management - quality and quantity; preparation of environmental impact statements; questions of environmental justice.
Not enough Green Infrastructure
not sure

Not sure, don't have much time to think about it.
noted in above text boxes
Nothing about streetscape design
Nothing related to transportation activities (highways) or maintenance of roadside elements (vegetation control, trees, rest areas, water management, litter/adopt-a-highway, etc.)
Obtaining entitlements
Obviously I have been a nontraditional "macro scale" LA. I cannot speak for all the other nontraditional practitioners, but they need to be accounted for. All of us have contributed to the strength/stability of the profession, while feeling somewhat disconnected from it. And some of us are pioneers in its future growth areas, but may not be recruited or encouraged to advocate for that expansion.
Office management, training of younger staff, Landscape Architect as Client and employer of other Landscape Architects (role of many institutional LAs working for Cities, Parks, Universities, etc.); public relations and community education--outreach on LA issues, projects, environment, etc.
Other certifications held by LAs - such as ISA, LEED, APA, GRP
Other degrees that enhance a practitioner's area(s) of expertise as a landscape architecture
Other professional designations - LEED AP, Certified Arborist, Certified Horticultural Therapist
Our practice is very collaborative. We commonly work in teams with many other professionals. So, answering a question pertaining to the client risk's of a task always assigned to, for example, the civil engineer, was impossible to properly answer. I found myself in the dilemma of answering many questions as 'never done' but 'very important if not done correctly', which I feel does not adequately express the situation.
overly restrictive in terms of too much emphasis and language around projects and construction. Insufficient attention to policy work, planning development management (i.e. in-house advisory role, as a public practioner, to other built environment professionals-planners, engineers etc.)No option to demonstrative extra-curricular activities of relevance to the profession, i.e. involvement in national and international professional bodies. In my case, I'm a Past President, The Irish Landscape Institute; and like other Irish landscape architects, I'm active at Irish and European levels in promoting the cause of Landscape Architect. Much of that activity is inherently-linked to my daily proactice. I'm sure the same applies to many l.a's across the globe. The survey will miss key data in this area, hiding the energetic, passionate committments of many to this beautufiul, honourable profession
Participation in various community volunteer positions is very important. As Landscape Architects we have unique training that allows us to be very effective as volunteer members of our community. It would be interesting to see how much time other Landscape Architects spend with volunteer endeavors.
Participation, volunteerism in professional association.
People who have retired or have diverged into "alternative practice" don't know how to fill this out. As we used to practice? It isn't flexible to alternative practices.
Perceptions of registered LA's about how licensure is viewed in their respective states or locations. In MD, for example, LA's cannot seal hydraulic calculations and it would be good to find out how engineers and surveyors have hampered LA work in other locations.
Perhaps ask what other certifications landscape architects hold.
Perhaps asking how one's work is checked by others prior to submission.

Perhaps gear more towards students in the program.
Perhaps including how much of my education I use and what I would keep/ change.
Permitting such as for obtaining a wetland permit. Expert witness
Plan review and code enforcement activities.
planning elements which touch upon landscape architecture.
Plant selection
Please categorize my country as Taiwan which is not show in dropdown. The practice situation here in Taiwan is quite different from China.
Prediction or trend of landscape and planning
preparation in college towards what we are really doing as landscape architects
Presentation graphics including color rendering of master plans etc
Private Instructor (not as faculty or an adjunct faculty) in landscape architecture practiceAuthor in landscape architecture
professional practice
Project Management
Project management skillsworking with multi disciplinary teams/leadingTransportation design/planning - roads, bridges, safety, aviation, etc.
Public agency projects
Public art - siting, construction methods, coordination with allied professionals, public input
Public awareness raising, through civic engagement in associations and publication of opinion articles in newspapers
Public debate; scientific survey; marketing, publications; narratives, visualisations;
Public Outreach
Public policy, conservation strategy and planning
Public Schools, Prisons, Safety Department and Transportation Department Support Facilities
Public sector/ private sectorIf public sector- what key health safety and welfare duties and responsibilities do you take part in by listing or description...check the box
Quantity of licensed LA's and/or other professionals in your organization/office.
Questions about urban design scope of work
Questions are asked with regard to current work. Ask about past work too.
Questions pertaining to the management of a company, more questions about your roles and responsibility within an organizaiton.
questions regarding computer generated graphics vs hand drawn graphics.does photography play a role in your work?
Questions related to the expansion of Landscape Architecture worldwide
Race/ ethnicity- There is a clear disadvantage to minorities in this field.
reasons why we feel licensure protects the health safety and welfare of the public. you could offer a set of choices--i.e.: 1. because other professions doing this work are not educated in the same diversity? 2. because there's a general ignorance of how aspects of 'landscaping' affect the health safety/welfare. . . etc.
Relationship of the profession to other professionals.

Relavency of the LARE to actual practice of Landscape Architecture
Research
Residential
Restoration analysis and documentation, site restoration assessment, environmental damage appraisals, arboriculture preservation and assessment.Construction Implementation analysis and specification
Retired LA's
Retired or semi retired as I am.Site Management and Management Planning
Review of new development projects including meeting with other city staff, developers, consultants and attorneys.
re-zoning
Role in firm.
said already: entrepreneurial related skills
salary bracketing. This was done by the Landscape Institute previously
Salary comparison
Salary information
Salary Range
salary survey
Sarlary
Satisfaction with the registration process!
Scissors. This survey is too long, has repetitive questions and the first page, which is presumably the 'value' section, where we try and justify a huge scope of work capabilities, has no instruction on how to answer vague questions and ranking criteria.
Scope of work that can be done by landscape architects (site planning, grading and drainage, irrigation) that is currently required by cities but is typically done by architects, civil engineers or irrigation consultants. If regulatory bodies required landscape architects to include these services, the solution would be much more wholistic and would benefit projects in the long term.
Security design principles in today's society
see above
See before, regarding cooperation's, integral teams etc. etc.Position in a team: leading, main specialist, specialist etc. etc.Other disciplines you work with: traffic specialist, water specialist, energy specialists etc. etc. etc. (often or not often).Type of clients.New developments or re-developments.Why not rank the type of projects: often/seldom?
See earlier comments re missing/under represented elements of the profession.
See last answer
see other responses   Environmental services to save the planet
See previous comments
See previous comments. Rezones plans, site plans, stormwater plans, Roadway plans, ES & PC plans, Septic plans, Etc...
See previous notes
See previous notes

Professional Testing

Serving as an expert witness in litigation casescrafting and obtaining approval for new zoning districts
Should have asked if retired.
Site investigations, litigation support, technical consulting
SITES
Skills ie communication, negotiation, ecological knowledge, climate change, horticulture and construction knowledge. Ability to synthesize, address risks and work towards public benefit.Technical computer skills or awareness of possibilities of technology to influence the design. Ability to work with engineers, explain and resolve issues
Social equality, democracy, gender, urban strategy
Soils and Arboriculture
some emphasis on emerging trends such as Green Infrastructure, Low Impact Design, SWPPP preparation and permitting, sustainability issues, water harvesting and reuse,
Some form of acknowledgement as to need for licensure. Do I need a license to do what I currently do - no. Does not having the license mean you aren't capable - no. It would be great to have something other than licensure and the expense associated with it reflect professionalism in the field.
some might consider projects aimed at branding and identity to be a project category
Some of the questions were biased towards private practice, such as asking what type of firm the respondent works for; as opposed to asking what type of practice and including public, non-profit and academia.
some professionals have both a BS and a BLA (prior to most / all accredited programs being 5 years
Speaking and writing articles & books
Storm water related work, i.e. Green infrastructure design
Stormwater management
Stormwater management design, review, regulation compliance, performance standards.
Stormwater management strategies, design, etc.
Supervision of contractors
Sure, missing a profile of the individual.
Survey not clear regarding current vs. past experiences; could focus more on overall career experiences, rather than current circumstances
Survey should define type/focus of the landscape architect at start of survey.
Sustainable landscapes
Teaching. research, writing
Technical computer skills (CAD, BIM) that are becoming increasingly important to coordinate with other disciplines
The amazing amount of time we have to spend dealing with ever fluctuating state stormwater requirements.
The CLARB licensing examination process is respected. However, the examination is just a glorified test written by professional test writers.. It doesn't measure a candidates real knowledge of Health, Safety and Welfare of the Public. Candidates are passing and don't have a clue. Individuals working under a Registered Landscape Architect for a specific amount of years should be given some preference from the examination.

Being a master of the exam process doesn't make one a master of knowledge on Health, Safety and Welfare of the Public.
The degree of social and ecological impact that our work has. The harm questions were framed in terms of people getting injured, but lots are at stake with climate change, non-human species, ecosystems, economic systems, working with impoverished people etc. that uphold the value of the profession and the need to be licensed and trained properly.
The first page needs to be overhauled in concept. I'm not sure how things like 'manage projects' and 'interpret economic analysis' and many other of the listed tasks relate to public safety... unless perhaps we work in the public sector? It conjures up some serious interpolation which I can only guess distorts the results of the survey considerably.
The frequency with which LA firms must address serious environmental impacts created by other consultants in initial planning in which they are not involved. Primarily related to tree loss, storm water quality, and habitat loss. Often as a technical consultant we are brought in after initial planning has been done by other consultants and are asked to do an env assessment. It is often very hard to have these plans changed to preserve the above if there is inadequate federal, provincial, or local legislation to enforce design changes.
The initial questions about harm seem odd. They ignore the fact that participation in many of the aspects add value (but may not have a lot of potential for harm). The public good is served when these aspects are done well, even if there is not a lot of risk of public harm. If those aspects are not done well, then there is an unrealized lose to the public. Should that be considered a harm? Better explanation of the harm element would be helpful to be sure people are clicking the right risk level.
the landascape of remedatation land
The Landscape Architects that are dealing with city landscapes.... roadways and medians, etc.
The majority of my current design work involves master planning and site planning for Master Planned Communities, Industrial Parks, and Commercial Centers. There needs to be more recognition that LA's design with land as the medium as well as the full spectrum of Hardscape and Landscape Design for to be developed projects..
the options for harm, some harm, no harm do not address health or welfare. Should have been H, S, W.....as the 3 options.
The percent of working time spent on leadership, board work (and other kind of work) done by landscape architects.
The Project Management Section was unclear for me: were the questions about the project as managed internally by my firm, or to the public/client? The task section might have included time (%) allocations for drafting and specification writing.
The role of landscape architects with other professionsContinuing education requirements;   state licensure, USGBC, PMP, etc. and their efficacy.Areas of knowledge the profession needs to learn/embrace
The role of Leadership as Landscape Architect & Unity among all people races.
The role of the landscape architect is changing. There is now such scope and breadth to our work from 3D modelling of flood plains to graphic recording and facilitation. I think it would be very hard in a survey to capture it all but it would be interesting to know all the things that LA's do. That is a survey in itself.

the role of visualisation and visual presentation might be an interesting issue. We get now and then commissions tot visualise the ideas of others.
The scope as freelance professional
The size of the organization might not be the size of your department or size of landscape architecture component . Eg my organization is more than 100 people, although my department consist of less than 3 people.
The specific role of the landscape architect in complex planning processes and environmental challenges, ranging from first initiator / driving force to subcontractor / final touch.
The survey focuses on design. I missed planning issues.
The survey seems to target planning, design, construction, and implementation and there wasn't much applicable for the teaching / educational sectors - not that it affects me much, but it is another region in which to practice LA.Also responsibility / time allotment for categories of work including marketing, response for proposals / qualifications, and grant writing. A large portion of time is sometimes required to pursue / secure work.
The time spent as a studio manager is missed, which consists of strategic market meatings and documents, employee issues, resource planning, budget, salary and so forth. Thanks for an interesting survey :-)
Therapeutic parks/gardens (for health aspect), regulatory compliance for mobility (as a design task for safety and accessibility),
There are a lot of things you included that were not necessary.
There are no questions about the content of the exam. A large sample of questions asked on the exam had zero relevance to anything I do as a Landscape Architect. In addition, some of the questions are so vague it is nearly impossible to understand what the question is trying to ask. The fact that you ask grading question in 'units' vs 'feet or inches' still blows my mind. I'm still waiting to come across another LA or civil engineer who works in 'Units'. I do not believe that this exam is a valid representation of a professional Landscape Architect.
There are no questions about the LARE and its applicability to everyday practice. My personal opinion is that there is a big disconnect between what you learn in school, what you study for the exam, and what you actually do on a daily basis in an office.
There is a huge emphasis on LID, Green infrastructure and graphic representation of work missing from this survey.
There is a large number of landscape architects that are in the residential design section this survey seemed to focus on larger firms
There is not one person that can do what a landscape architect can do without the proper education, apprenticeship, testing, licensure mandated by government, continuing education and professional practice.
There is practically nothing related to natural resources - impact assessments, NEPA analysis etc.
There should be a discussion on continuing education.
There's always something, but I don't know what that might be.
This isn't really what should have been included, but it was really difficult for me to determine the criticality of tasks. That is something that is determined on a project type basis and not on a general category. If a project manager doesn't communicate/organize a team well on a commercial project, there will be little to

no harm for the public, but moderate harm to the developer's budget. However, if a project manager doesn't communicate well on a large infrastructure project, the teams might miss something important, compromising the safety of the project and safety of the public.
This survey seems best directed to ONLY landscape architects that do public projects. My current work does not involve many of the tasks listed at all and I'm not sure that my responses are valid. Also, the definition of "public harm" needs more explanation - is an over budget public project causing public harm by costing the taxpayer too much?
This survey was far too long, specifically the first section. Having a survey that is far too long brings into question the quality of the responses you receive. I would recommend making this survey much shorter or breaking it down into multiple surveys that are administered quarterly. I believe that would provide you with much more reliable data. A good book that might be helpful in the future when developing surveys is Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 4th Edition.
time spent on continuing education, networking, other professional development and outreach in the community.Community service: Promoting the profession through service.
To bel ont or not into professionnal Organization registration
Too many LA embrace the artistic side of the industry and fail to accept the technical responsibilities. How involved and what technical design elements do you accept?
Trade Union and political work by landscape architects
Trails
Training and development. Not all of our landscape architect colleagues have used their degree/license to pursue the traditional LA career project and design path. For instance, I work in a large engineering firm, and managed to use my diverse experiences and creativeness to find a niche in training and development.I work on many different project where my experience can utilized, but my role within the company is to also utilize these skills, as well as my communication skills, to create training programs for engineers, environmental scientists, surveyors, planners, landscape architects, etc. One of the most exciting things about landscape architects, is our ability to link the creative design process to the technical requirements of the various governing agencies.
Tree preservation & replacement plans required by local jurisdictional ordinances for development permitting.I am also an ISA certified arborist and quite often perform tree assessments as part of preparing a tree preservation & replacement plan.
Type of documentation: software platforms, rendering software, computer drawing platforms, other digital tools
Universal design
Urban agriculture issuesPollinator garden and bio diversityStorm water BMPs Overall this is a great comprehensive survey
Use of technology.... Revit, GIS, big-data..... How these things are helping us to make more informed decisions about design of the public realm.
Very cumbersome format.
Very little was said about educating your Clients. There was mention of 'Stakeholders', but in many practices a lot of time is spent explaining to Clients why you make the decisions you do. In public projects

there are by-laws and guidelines dictating many of your decisions, not so in private practice. It's a hidden cost in a practice that consumes lots of time and money.
We have landscape architects that are certified arborist doing tree surveys that could be represented as a service. We are also using 3d models, animations and looking into VR for presentations. Not sure where that fits in the industry.
We have more degree levels in Germany!
What are planners doing that should fall into the category of landscape architecture expertise, and therefore be licensed? There are a lot of planners making decisions on dimensional qualities of streets, cities and developments, as well as preparing design guidelines and budgetary cost estimates. They may not have the knowledge to be guiding communities on these topics. Those kinds of projects should require landscape architects, engineers and architects to be on the planning team.
What are the things we have done to broaden our profession and public awareness of our profession
What is the personal expense of this profession? Education fees, licensure fees, LARE test fees, other certification fees, and continuing education fees vs salary. I think this portrays a better picture of how much we personally invest to become Landscape Architects. There could be more specific questions about health, safety and welfare - to indicate the critical role we play in protecting the public.
What is your outlook for this field based upon your own personal experience.
What percentage of the tasks that you perform as a professional Landscape Architect may have overlap with tasks performed by Architects, Civil Engineers, Professional Land Surveyors and Professional Foresters in the practice areas of planning, site design, ecological restoration, storm water management, grading, sediment & erosion control and forest conservation plans.My answer: About 70%
what sort of networks and affiliations do you have to stay connected to the profession and for business developmenthow many firms have you worked for since graduating schooldid you do internships while in school
what type of software is used in the practice
When you get involved in the project. Towards the beginning or end?
Where do you frequently see competition from other disciplines for scope items?
Which software do you utilize?
While I am a licensed landscape architect, I am currently working as a project manager in real estate so I am working outside the profession yet using all those skills as a landscape architect to excel in my role as a project manager in the development of leased clinics for US Veterans and land acquisition projects. The survey doesn't really adequately address people in my situation: using the skills but not actively practicing specifically in the profession. I use my role now to influence better work by contractors and consultants to improve the quality of the landscape and site plans on the projects I work on.
While my firm has only 1 employee, I use several outside consultants to perform tasks that would be done by an employee. Such as CAD work, rederings.
Who do you most collaborate with? Are you a prime consultant? or Sub-consultant; if yes, to whom? Architect, Engineer, Planner, Artist, etc..
who knows????

with more than 30 years of practice, I found that in answering the questions that I used the entire 30 years of experience in public and private practice. I'm sure that will bias my response, the next time you might want to define the time frame
work in developing countries
world fares, master plan developments
Would be curious to learn how others perceive our work, and the roles we playAlso curious how landscape architects feel they are providing "leadership" within organizations
Would be interesting to assess the graphic skills/programs used by survey takers (i.e. hand drawing vs. computer renderings, Photoshop vs more advanced 3D modeling, etc).
Would think it is important to:1.Determine drawing methods both digital and freehand and their importance to practice2. More concentration on the importance of working with plant materials particularly in regard to species, plant characteristics, plant culture and design use.3. Sustainability does not seem to be recognized in this survey yet it has been part of this profession since at least old Man Olmsted's time particularly in regard to canopy, site use percentages, water, erosion, vegetation mix, open space use and quantity.
Writing and research are not included.
You should ask how often your LA stamp has been rejected by Local/State Reviewing Agencies. It happens a lot in NE Ohio. An LA stamp is useless.
You should be asking about mid-career transitions, and why NONE of the experience, even that related to managing LARGE (over $100m) infrastructure projects count towards LA licensure, but answering the phones at an LA firm do. Or why acting as a CAD monkey for a large firm counts towards licensure.
You should have asked about the lare exam and improvements that should be made to help candidates better prepare for the exam.
Your age cutoff intervals were too limited. I don't believe you went beyond 16 years for either professional work experience or years registered. In many states the change over to a reduced level of continuing education credits is more than 25 years of registration. You should have included a category for that demographic and beyond; 20+ years, 25+, 30+. 35+. I would bet that the vast majority of registered landscape architects are going to be in the 15+ years registered category.
Your survey is very focused on traditional design/construction.Aggregate Licensing fits some of these categories but your survey will assume that my responses are for traditional design/constructionLikewise your "criticality" limits my response to public protection ans for me that is low. It would be very high to my clients

 Note: Responses are listed here exactly as they were entered into the online survey. No edits were made to participants' responses.