



'voice for the BC landscape horticulture industry'

BC Landscape, Arborist & Turf Industry

Labour Market Partnerships Project

Sector Engagement
Final Report
January, 2017

BC Landscape & Nursery Association



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1.0 Executive Summary

With funding support from the Ministry of Jobs, Tourism and Skills Training's Sector Labour Market Partnerships (LMP) program, this project has engaged the following stakeholders for this 5 Phase project:

- the BC Landscape & Nursery Association (BCLNA),
- the Western Canada Turfgrass Association (WCTA),
- the Pacific Northwest Chapter of the International Society of Arboriculture (PNW ISA),
- the BC Recreation & Parks Association (BCRPA),
- the BC Golf Superintendents Association (BCGSA).

All have agreed to be participants in this project, initially as Steering Committee members, and also moving forward as Partnership Committee members. This engagement activity is a first step in the informing, developing, implementing, and evaluating strategies designed to address labour market challenges identified and prioritized by the sector.

Initially a Steering Committee was formed to enable efficient and effective communications and input from the participating sub-sectors. The Steering Committee provided guidance early in the project, identifying perceived issues with labour management in each individual sub-sector.

The Steering Committee also forms the backbone of the Partnership Committee, which was expanded from this original group to include key business members of the industry sub-sectors.

A survey has been conducted to determine labour market issues, challenges, and priorities. Meetings were held on a one-to-one basis to review the parameters of the project as well as to gather information and collaborate on appropriate survey questions. Of the survey respondents, 40% noted that they would require more labour to keep up with demand. When asked for the reasons why, the following responses provided a very good prognosis for the future of the industry:

- | | |
|------------|---|
| 50% cited | Growth in the number of temporary/on-off projects |
| 25% cited | Longer growing season requiring more maintenance |
| 100% cited | Increased demand for services from consumers |
| 50% cited | Expanded range service and products |
| 50% cited | Perceived gap in market |

When asked what are the operating challenges relating to labour, there were four significant responses:

- | | |
|-----------|------------------------------------|
| 50% cited | Unskilled labour shortage |
| 83% cited | Skilled labour shortage |
| 83% cited | Lack of qualified applicants |
| 30% cited | Too few available training options |

The survey results also identified the positions that were most necessary and which jobs went unfilled (Section 8.1). It should be noted that many companies report posting jobs consistently through the year for workers in various capacities, with limited response from job-seekers. Additionally, one large landscape company noted in discussions that they have significant intake of 10-15 recruits for orientation every 2 weeks, resulting in only one or two workers remaining past 1-3 days of actual workplace employment. This points to the challenge the industry has of high attrition rates.

Job openings in the sector to 2025 are forecast to total 7,390¹. Much of these openings will be in NOC 2225 (landscape and horticulture technicians and specialists) 1,190, and NOC 8612, (landscaping and grounds maintenance labourers) 4,140.

Between 22%² and 32%³ of the new job openings, will need to come from new workers, with the balance being replacement workers.

Wages in the sector range from minimum wage at the low end to a high of \$35.68⁴. While data for wages shows that minimum wage may be paid by employers, it was evident through discussions with the sector that the starting wage typically is in the range of \$15.00-\$16.00 due to competitive influence from within and from outside the sector.

The sector includes various types of employers. The largest portion of private landscape maintenance and construction companies is comprised of 5 or less workers. Stats Canada December 2014 data indicates that there are approximately 19,000 landscaping establishments in Canada – most have fewer than five employees, and only about 50 companies have more than 100 employees, as documented in (see **Appendix – 1 CNLA Industry Economic Profile**).

Wages paid by small employers are often lower than wages paid by larger companies or by the public sector for similar work, and typically, there are no benefits. The same worker working within the public sector would receive higher compensation as well as a complete benefits package. This difference between private and public sector employers is common in all sub-sectors. This factor contributes to retention issues for the private sector, with workers often leaving the private sector for a similar job in the public sector.

Another issue affecting retention is the low barrier for individual workers to become self-employed. Often companies invest heavily in recruiting and training, only to have workers leave to start their own business as soon as they become capable.

¹ Canada. British Columbia. Ministry of Jobs, Tourism and Skills Training. Work BC Division. British Columbia 2025 Labour Market Outlook. 5th Edition. Victoria, B.C., 2016. <https://www.workbc.ca/getmedia/00de3b15-0551-4f70-9e6b-23ffb6c9cb86/LabourMarketOutlook.pdf.aspx>

² "Landscape and horticulture technicians and specialists (NOC 2225)." WorkBC Official Website - Explore Career Profiles. Accessed December 23, 2016. <https://www.workbc.ca/Jobs-Careers/Explore-Careers/Browse-Career-Profile/2225>.

³ "Landscaping and grounds maintenance labourers (NOC 8612)." WorkBC Official Website - Explore Career Profiles. Accessed December 23, 2016. <https://www.workbc.ca/Jobs-Careers/Explore-Careers/Browse-Career-Profile/8612>.

⁴ Canada. British Columbia. Ministry of Jobs, Tourism and Skills Training. Work BC Division. British Columbia 2025 Labour Market Outlook. 5th Edition. Victoria, B.C., 2016. <https://www.workbc.ca/getmedia/00de3b15-0551-4f70-9e6b-23ffb6c9cb86/LabourMarketOutlook.pdf.aspx>

Workers are often attracted to the sector because of a desire to work outside and be creative, with the option of becoming self-employed. These positive considerations often outweigh negative considerations, such as relatively low rates of pay, and for some, working outside in inclement weather.

2.0 Background

2.1 BCLNA Background

The BCLNA represents over 500 nursery growers, landscapers, and garden retailers in the province of BC. The BCLNA is closely aligned with educational institutions and organizations which provide training and services to the industry. Since 1958, the BCLNA has been the voice of the ornamental landscape industry in the province of BC, providing advocacy, services, and benefits to its members. Membership in the BCLNA is voluntary and the BCLNA is a not-for-profit industry association supported by its members.

The BCLNA is aligned with provincial counterparts, under the umbrella of the Canadian Nursery Landscape Association, which is a partner in the Canadian Ornamental Horticulture Alliance and a member of the Canadian Federation of Labour. The BCLNA also works with its national partners dealing with labour issues at the Canadian Agricultural Human Resource Council (CAHRC).

2.2 Current Labour Environment

The ornamental landscape industry in BC is a burgeoning industry, with significant growth and the potential to provide meaningful work with the opportunity to advance from low-skilled work to more technical jobs and then management within the industry. Forty years ago, landscape services were only for the wealthy and for commercial and industrial sites. Today, many people simply do not have the time or energy to provide plant care and maintenance, but still want an attractive green space. With many people living in stratas and apartments, their lawns and gardens are maintained by professional landscape companies who provide services ranging from mowing lawns to designing and installing new garden beds. While these are the ‘pretty’ aspects of landscaping, there are also issues of drainage, runoff, pest issues as well as security and site safety.

The ‘Ornamental Horticulture’ sector is an important industry in Canada. **Appendix – 1 CNLA Industry Economic Profile** summarizes several sources and reports the following, for Canada:

- \$2.4 billion in producer sales,
- \$8.1 billion in consumer sales (\$6.3 billion retail product sales and \$1.8 billion landscaping services),
- \$14 billion contribution to the economy (output plus value-added impact),
- \$3.8 billion in employment income,
- Estimated \$1 billion in retail taxes to government.

Climate change and extreme weather events are raising awareness of the sector’s importance especially in urban areas. This is one of several contributing factors to the increased demand identified in this report. Cities are increasingly looking toward green infrastructure solutions to mitigate the effects of climate and weather related events such as flooding following an extreme rainfall. Urban centres’ heat island effect requires cooling. Cooling can be achieved by increasing the urban tree canopy as well as

constructing and installing green roofs and walls. These increasingly popular measures also slow down the flow of water and reduce the amount entering the storm water system. The growth in activity in these areas has significant implications on the sector's labour market.

Additionally, as environmental concerns become a focus, professionals throughout the sector need to learn new skills such as integrated pest management, as the use of pesticides becomes much more limited or prohibited altogether. New skill requirements for the industry are expected to have an impact on the content of training programs as well. The Red Seal Landscape Horticulturist apprenticeship program in the 2015 national occupational analysis identified green infrastructure and environmental issues as subjects worthy of adding to the competency of landscape professionals. This increased awareness and importance will lead to landscape professionals and city workers needing to improve their knowledge and skills in these areas.

In addition to the changing skill requirements of the industry, the industry is also seeing considerable growth. As the industry grows, there is a significant challenge to find workers to fill the jobs available across the industry including arborists, landscapers and 'greens keepers' in the turf sub-sector. There are few barriers to entry to the landscape sector, with many workers 'picking up' just what they need to know. While established industry standards are in place, workers who enter the industry without training, or perform with unacceptable standards of work, result in substandard work that is in some cases also hazardous to workers as well as those who work or reside close to the work site. These unaccountable 'companies' are often unregistered with CRA or WorkSafeBC and also do not have licenses or acquire permits to do work. Anecdotally, it is common for trained 'bonafide' landscapers to be hired to remediate this substandard work. Examples of this are issues of site integrity (such as support walls on hillsides that have failed) and plant mortality (death due to poor planting or lack of good soil and substructure).

Many of the untrained landscapers take on crews and continue the poor workmanship ethic, working 'under the table' and with just a cell phone number displayed on a truck to attract clients. Many young people work seasonally on landscape crews in summer, often for these unscrupulous employers. For these young workers, as well as older ones, the health and safety aspect of the work is of considerable concern. Since jobs are often awarded based on the low bid system, small unregistered businesses continue to proliferate. The businesses included as partners in this project are 'bona-fide' with full accountability, registrations, and licenses.

There is also significant competition for workers amongst the landscape industry and with its immediate counterparts, particularly construction, where wages are significantly higher. While the lower skilled landscape work is often seasonal, middle, and upper management work is normally year-round, and will include preparing presentations, designs, budgets and contract preparation. Because of the extreme shortage of workers, and the competition from other industries as well as internal competition, entry level wages have recently risen to approximately \$16.50 hourly for unskilled workers including lawn mowers and trimmers in the Metro Vancouver area. For supervisors and forepersons, the hourly rate

varies between \$28 and \$35. It is common for managers in the Metro Vancouver area to be paid \$50 hourly.

2.3 Labour Market Partnership Beginnings

This project was initiated by the BCLNA following a presentation on the Sector Labour Market Partnerships (LMP) program of the Ministry of Jobs, Tourism and Skills Training at a BC Agriculture Council meeting in June 2016. Representatives attended the meeting from the majority of BC's agriculture sector associations. The potential of the Sector LMP program was viewed with interest by the BCLNA, and upon discussion with other allied associations, all agreed to pursue the program further in an effort to address common labour market issues, including the need for new workers, considered especially urgent by employers in the landscape and arborist sub-sectors.

Upon initial discussions with WCTA (turf grass), arborists and HortEducationBC, the group agreed that the Sector LMP program would allow the sector and its employers to understand their labour market needs and develop strategies to access and train the required number of new workers.

3.0 About the Labour Market Project

This five-phase project provides an opportunity to research the options for attracting workers into the industry and retaining them. This would include developing the processes to attract them, determining the skills required for proficiency to do the work effectively and safely, and putting the processes into place.

4.0 Groundwork and Preliminary Meetings

The industry is well connected with established professional networks, with the following organizations contacted to participate:

Steering Committee Members			
Organization	Staff	Email	Website
Western Canada Turfgrass Association	Jerry Rousseau	exec.director@wctaturf.com	www.wcta-online.com
PNW Chapter - International Society of Arboriculture	Patty Williams	pwilliams@pnwisa.org	www.pnwisa.org
BC Golf Superintendents Assn	Ginny Tromp	admin@bcgsa.com	www.bcgsa.com
BC Recreation & Parks Assn	Rebecca Tunnaclyffe	rtunnaclyffe@bcrpa.bc.ca	www.bcrpa.ca
BC Landscape & Nursery Assn	Hedy Dyck	hdyck@bclna.com	www.bclna.com

Communications were initiated through the Executive Directors (staff) of each organization, with selection of the Partnership Committee members determined by the organizations. See Section 7.5 for the list.

5.0 Identify Scope and Breadth of Industry

In this sector, the following sub-sector associations and their members were identified as potential participants: the Western Canada Turfgrass Association (WCTA), the Pacific Northwest Chapter of the International Society of Arboriculture (PNW-(SA), BC Golf Superintendents Association, (BCGSA) the BC Recreation and Parks Association (BCRPA) and the BC Landscape & Nursery Association.

British Columbia's ornamental landscape professionals work in specialized fields within the broader horticultural sector. Landscape technicians build and maintain landscapes, including hardscape structures, irrigation and drainage schemes and walkways, as well as install and maintain plant schemes. Turfgrass technicians install and maintain lawns and greens for parks, golf courses and private residences. Arborists plant, prune and fell trees, often within the built urban landscape.

The specific scope of the industry for this project includes the arborist, utility arborist, landscape construction and maintenance professionals, as well as golf and sports turf professionals.

5.1 Current Situation

WorkSafeBC data shows 2,700 companies involved in landscaping, a further 325 companies providing trees services, and 308 companies involved in turfgrass maintenance and grounds keeping. It is estimated that, approximately 15,000 individuals are employed in the ornamental landscape sector.

Employers and workers are required to handle a variety of mechanized tools, chemicals, construction material, and plants. Larger operations require specialized horticulture managers often liaising with designers and landscape architects.

The BC Landscape & Nursery Association reports frequent and persistent challenges in recruiting skilled and unskilled workers for the ornamental landscape industry. The coordination of employers' efforts and sector collaboration to address labour and skills shortages has not occurred. The large number of small employers and associations has made a systematic assessment of the size and nature of the labour market imbalance difficult. The BCLNA, its members and related associations recognize the need to come together to coordinate a labour market study to inform approaches to addressing labour challenges. While traditional sources of labour are seen to shrink, the sector feels it has lacked the knowledge to prepare for, and make fuller use of, new sources of labour including newcomers and refugees.

The current landscape industry 'Landscape':

While other areas of Canada have 'real' winters, this sector has 12 month a year employment on the coast of BC (Metro Vancouver and Vancouver Island) where most horticultural jobs are located.

The ultimate purpose of this the five phase Sector LMP project is to address labour and skills shortages in the landscape construction and maintenance industry (public and private), including the arboriculture

trade and sports turf professionals including golf courses. The objective of the project is to identify, quantify, and develop options, then implement actions to deal with the labour shortages in the landscape horticulture industry.

The lack of available labour at all skill levels is limiting the growth and profitability of the industry. However, the sector needs to know where that labour could be sourced from, how many workers the industry needs at the different skill levels, and labour requirements in different regions of the province.

Current Worker Statistics from WorkSafeBC: Total Current Workers: 13,446

- Landscapers: including gardening and landscape services
 - Employers: 3690
 - Payroll: \$333,345,412
 - Workers: 8279
- Arborists: including technicians, field and climbing arborists
 - Employers: 325
 - Payroll: \$46,239,148
 - Workers: 1034
- Golf Course/turf workers, including groundskeepers, turf technicians
 - Employers: 308
 - Payroll: \$141,895,893
 - Workers: 4133 workers, which would include greens keepers and turf technicians as well as other staff (i.e. food service, admin, etc.)
- Total Current Workers: 13,446 workers.

Another distinctly new issue is the potential opportunity to access labour from the refugee and immigrant populations. Further exploration is required to include an examination of practices to integrate workers as well as identify required language and skills training, investigate requirements to help new Canadians understand workplace culture, and research the optimal methods to achieve cultural accommodation and inclusion in the workplace.

5.2 NOC / NAICS Codes

The landscape industry as defined by this project includes the following NOC (National Occupation Classification) / NAICS (North American Industry Classification System) codes:

- NOC 8255 - Contractors and supervisors, landscaping, grounds maintenance and horticulture services
- NOC 8612 - Landscaping and grounds maintenance labourers
- NOC 0822 - Managers in horticulture
- NOC 2225 - Landscape and horticulture technicians and specialists
- NOC 7522 - Public works maintenance equipment operators and related workers
- NAICS 56173 - Landscaping Services
- NAICS 71391 - Golf Courses and Country Clubs

5.3 Job / Occupation Titles

The broad diversity of jobs covered by a handful NOCs / NAICS codes is considerable. There are 180 distinct job titles and occupations identified in the five NOCs covered by this project.

- 0822 – Managers in Horticulture – 18
- 2225 – Landscape and Horticulture Technicians and Specialists – 30
- 7522 – Public Works Maintenance Equipment Operators and Related Workers – 47
- 8255 - Contractors and Supervisors, Landscaping, Grounds Maintenance and Horticulture Services – 45
- 8612 - Landscaping and Grounds Maintenance Labourers – 40

While many of the job and occupation titles are similar in name, the skills required vary dependant on the specific sub-sector.

The job and occupation titles are identified in the following pages and with references at **Appendix – 2 LMP Phase 1 Landscape Data**

NOC	Category and Employment	Job Titles
0822	<p>Managers in horticulture</p> <p>Managers in horticulture plan, organize, direct and control the activities of nursery and greenhouse staff who grow and market trees, shrubs, flowers and plants.</p>	<ul style="list-style-type: none"> - Christmas tree farm operator - evergreen grower - flower grower - greenhouse manager - greenhouse operator - horticultural greenhouse operator - hothouse flower grower - hydroponic greenhouse operator - hydroponics grower - hydroponics operator - nursery manager - nursery operator - nurseryman/woman - plant grower – nursery - rose grower - shrub grower - tree grower – nursery - tree nursery operator
2225	<p>Landscape and horticulture technicians and specialists</p> <p>This unit group includes those who survey and assess landscapes; draw sketches and build models of landscape designs; construct and maintain gardens, parks, golf courses and other landscaped environments; advise clients on issues related to horticulture such as irrigation; breed, cultivate and study plants; and treat injured and diseased trees and plants.</p> <p>They are employed by landscape designers and contractors, lawn service and tree care establishments, golf courses, nurseries and greenhouses, and municipal, provincial and national parks, or they may be self-employed.</p>	<ul style="list-style-type: none"> - arboriculturist - arborist - floriculturist - gardener - golf course superintendent - greens superintendent - greenskeeper - horticultural technician - horticultural technologist - horticulture specialist - horticulture technician - horticulture technologist - horticulturist - hydroponics technician - interior plantscape specialist - irrigation technician (except agriculture) - landscape architectural technician - landscape architectural technologist - landscape designer - landscape gardener - landscape horticulturist - landscape technician - landscaper - lawn care specialist - lawn care superintendent - plant doctor - plantscape technician - tree and shrub specialist

		<ul style="list-style-type: none"> - tree service technician - turfgrass management specialist
7522	<p>Public works maintenance equipment operators and related workers</p> <p>This unit group includes workers who operate vehicles and equipment to maintain streets, highways and sewer systems and operate trucks to collect garbage and recyclable materials.</p> <p>This group also includes workers who clear vegetation close to power lines, workers who inspect the condition of utility poles and workers who locate underground utility lines and pipes.</p> <p>They are employed by municipal, provincial and federal public works departments, private contractors under contract with government public works departments and private companies involved in the collection of refuse and recyclable materials.</p>	<ul style="list-style-type: none"> - collection truck driver – public works - drain roto servicer – public works - electrical forester - equipment operator – municipal public work - garbage collector – driver - garbage truck driver - garbage truck driver – public works - highway snow removal equipment operator - highway snowplough operator - maintenance equipment operator – public works - mechanical sweeper operator – public works - municipal maintenance equipment operator - municipal servicer drain roto - power pole inspector - power sweeper operator – public works - public works maintenance equipment operator - recycling truck driver - recycling truck driver – public works - refuse truck driver – public works - road snowplough operator – public works - salt truck operator - salt truck operator – public works - sand spreader operator - sand spreader operator – public works - sanding truck operator – public works - sanitation truck driver - sewer flusher operator-driver – public works - sewer jet cleaner operator – public works - sewer jet machine operator – public works - sewer-flushing truck operator - sewer-flushing truck operator – public works - sewer-pipe-cleaning machine operator – public works - snow removal equipment operator – public works - sprinkling truck driver – public works - street flusher operator - street flusher operator – public works - street sprinkler operator – public works - street sweeper operator - street sweeper operator – public works - urban snow removal equipment operator – public works - utility arborist - utility forester

		<ul style="list-style-type: none"> - utility locator - utility pole inspector - utility pole tester - utility tree trimmer - utility tree worker
8255	<p>Contractors and supervisors, landscaping, grounds maintenance and horticulture services.</p> <p>This unit group includes landscaping and grounds maintenance contractors, who own and operate their own businesses.</p> <p>This group also includes supervisors who supervise and co-ordinate the activities of workers in the following unit groups: Nursery and Greenhouse Workers (8432) and Landscaping and Grounds Maintenance Labourers (8612).</p> <p>They are employed by landscaping companies, cemeteries, lawn care and tree service companies, nurseries and greenhouses and by landscaping operations of public works departments and private establishments.</p>	<ul style="list-style-type: none"> - cemetery foreman/woman - country club grounds supervisor - greenhouse foreman/woman - greenhouse supervisor - greenhouse worker crew chief - grounds maintenance contractor - grounds maintenance park supervisor - grounds maintenance supervisor - groundskeeper supervisor - groundskeeping foreman/woman - groundskeeping supervisor - groundskeeping supervisor – cemetery - groundsman/woman supervisor - groundsperson supervisor – campground - horticultural contractor - horticulture workers supervisor - interior plantscaping contractor - landscape design contractor - landscape maintenance contractor - landscape service contractor - landscaping contractor - landscaping foreman/woman - landscaping supervisor - lawn care contractor - lawn care service contractor - lawn care supervisor - lawn maintenance contractor - maintenance worker supervisor – campground - nursery foreman/woman - nursery supervisor - nursery worker crew chief - nursery worker foreman/woman - nursery workers supervisor - park caretaker - park labourers supervisor - park maintenance head - park maintenance supervisor - park section head – arboriculture - plantscape maintenance contractor - public works grounds maintenance labourer supervisor - public works grounds maintenance worker supervisor

		<ul style="list-style-type: none"> - tree removal contractor - tree service contractor - tree service supervisor - weed control foreman/woman
8612	<p>Landscaping and grounds maintenance labourers.</p> <p>Landscaping and grounds maintenance labourers perform work to assist in the construction of landscapes and related structures, and to maintain lawns, gardens, athletic fields, golf courses, cemeteries, parks, landscaped interiors and other landscaped areas.</p> <p>They are employed by landscaping and lawn care companies, golf courses, cemeteries, and landscaping operations of public works departments and private establishments.</p>	<ul style="list-style-type: none"> - bulb planter – landscaping - campground maintenance worker - cemetery labourer - cemetery worker - chemical applicator – lawn care - gardener helper - gardening helper - golf course labourer - golf course worker - grass cutter - grave digger - greens worker - greenskeeper helper - grounds maintainer - grounds maintenance labourer - grounds maintenance worker - groundskeeper - groundsman/woman - groundsperson – campground - landscape gardener helper - landscape gardening helper - landscape labourer - landscape worker lawn care labourer - lawn care worker - lawn mower - lawn-mowing worker - park maintenance labourer - park maintenance worker - plant care worker - plant doctor helper - snow shoveller – grounds maintenance - sod layer - sod laying labourer - stadium groundskeeper - transplanter – landscape maintenance - tree pruner – landscaping - tree sprayer - tree surgeon helper - tree trimmer – landscaping

5.4 Data Collection Results

There are significant opportunities for workers in this sector based on projections of 7,390 job openings by 2025. Of particular interest is that horticulture technicians and specialists are 33% women – a very high percentage compared to most trades where participation rates of women tend to lie in the 3% to 5% range. For details, refer to **Appendix 2 – LMP Phase 1 Landscape Data**

5.5 Survey Design

The survey for industry was designed based on the issues identified by the Steering Committee members and the experience of the BCLNA and its subcontractors. The structure of the survey reflected similar work and reports of previous Sector LMP project reports available online. The survey is comprehensive and was very time consuming to construct, administer and test.

A single, comprehensive survey instrument was chosen. Its length was seen as a contributing factor in the low rate of completions. However, the completed surveys are of a very high quality and were received from key informants.

Another factor that may have contributed to the lower level of completion is that fact that the sector spends a minimal amount of time working in an office environment; most of their time is spent out in the field. Often sector employers consider their truck as an equivalent to an office. As the survey required 20-30 minutes of time spent in front of a large screen, the number of employers able to complete the survey was reduced.

The survey may have been over complex for the purposes of Phase 1. This may have adversely affected the survey response rate. However, the survey results have been very informative and will guide the project forward with a strong focus.

See Appendix 3 – LMP Complete Survey Questionnaire

See Appendix 4 – Survey Participant Response Summary for the list of combined survey responses.

6.0 Current Training Opportunities Inventory

Currently British Columbia has very good public training for the entire sector covered within this report. A robust apprenticeship system exists for the Arborist, Utility Arborist, Red Seal Landscape Horticulturist, as well as Production Horticulturist (overlapping with the landscape sector).

Foundation training (pre-apprenticeship), certificate, diploma, and degree programs exist for the landscape industry. Diploma programs are also offered for golf and sports turf professionals. Additionally, new programs around sustainability and green infrastructure are becoming increasingly available and important to the landscape sector where there is now increasing overlap between the sector and allied occupations, especially in the urban and municipal setting.

Many training programs are available throughout the Province apart from block training for Red Seal Landscape, which is only offered in the Metro Vancouver area.

Colleges, Universities and other Institutions with related programs include:

- Burnaby School District's Community & Continuing Education Division, Burnaby
- Camosun College, Victoria
- Electrical Industry Training Institute, Mission
- Kwantlen Polytechnic University, Langley
- North Island College, Courtenay
- Pacific Horticulture College, Victoria
- Thompson Rivers University, Kamloops
- Thompson Rivers University, Williams Lake
- UBC Botanical Garden & Centre for Plant Research, Vancouver
- Vancouver Island University, Nanaimo
- College of New Caledonia, Quesnel

Further information regarding these programs can be found here -

<http://www.horteducationbc.com/training-options>

Detailed information about the apprenticeship system within BC can be found in **Appendix 5 – Apprenticeship Training Opportunities**

Additionally, each sub-sector association offers various conferences at various points in each calendar year, as well as ad-hoc workshops and training opportunities. E.g. the CanWest Horticulture Expo, BCRPA Spring Training, the WCTA Conference and Trade Show, and others.

7.0 Stakeholder Engagement Process

7.1 *Landscape Partnership Committee (LPC) Terms of Reference*

Phase 1: Sector Engagement provides support for Sector LMP program partners to engage a sector and key partners to identify relevant labour force issues. Engagement projects support sectors to develop broad-based partnerships, establish a leadership and governance structure for potential subsequent program phases, and build clear consensus and direction on labour market issues to be addressed.

One of the initial components of governance and stakeholder engagement included the development of a Landscape Partnership Committee Terms of Reference. This document lays out the roles and responsibilities of the project participants.

A project steering committee was established. The Steering Committee supported the preliminary engagement of the sector, developed the Landscape Partnership Committee's membership and Terms of Reference (see below), and approved Phase 1 deliverables. It also established the Landscape Partnership Committee which steered the sector through completion of Phase 1 and will steer subsequent LMP project phases.

This initial Steering Committee includes:

- Western Canada Turfgrass Association - Jerry Rousseau
- PNW Chapter – Int'l Society of Arboriculture - Patty Williams
- BC Golf Superintendents Association – Ginny Tromp
- BC Parks & Recreation Association – Rebecca Tunnacliffe
- BC Landscape & Nursery Association – Hedy Dyck

Ex-officio Members

- Sector Labour Market Partnership's representative

The Landscape Partnership Committee Terms of Reference as provided on the next page:

Landscape Partnership Committee Terms of Reference

1. General Purpose

This Committee is established for the purposes of supporting and guiding the Landscape Labour Market Partnership Project to complete effectively the Phase 1 Engagement project.

This committee assisted the BC Landscape & Nursery Association and HortEducationBC in its function of governance by:

- Meeting as required by the program to provide input for the sector represented and to ensure the project progresses and reflects the needs of the sector,
- Working together with the organizations and employers to gather and provide the information required to meet deliverables and complete Phase 1.

2. Duties & Assignments:

- To review the statistics, information and reports as requested by the Project Manager.
- To communicate and cooperate with all member associations.
- To hold conference calls and/or meetings to provide input.
- To consider options for continuance of the program into Phase 2 based on information gathered in Phase 1.

3. Appointments and Composition

The Landscape Partnership Committee will be comprised of one or two representatives from each of the landscape, turf, and arborist sector groups (list following) if they choose to participate. Representation will be the senior staff and/or a representative appointed by the respective association.

4. Duration of Appointment

The term of appointment will be for the duration of Phase 1. Should the association agree to participate in subsequent project phases, the appointment may extend to future phases.

5. Resources:

The Landscape Partnership Committee is provided with funding for meeting expenses and conference calls as per the project work plan and budget. HortEducationBC will provide the staff support for this project, with overall administration of the project by BCLNA.

7.2 Project Introduction and Background

Individual conversations were held among the Steering Committee members identified in 7.1 to discuss, how to engage the sector and how to steer the sector towards a Phase 2 Labour Market Research project that accurately captures the labour market concerns and priorities being experienced within the sector. Included in discussions was how to determine the availability and willingness of individuals to participate in informing and or guiding the project through its phases.

All the associations recognized the value of the project and agreed to participate from the outset.

A cover letter was developed as well as the project 'Backgrounder' document **Appendix 6 – Landscape Sector Backgrounder** which, were then circulated to each participating association for distribution to a sample of their membership. Follow up emails and or phone calls were completed with each individual association to encourage feedback and completion of surveys.

Below is a sample of the cover letter sent to each participant:

Hello Participant X!

Over the past several years, accessing workers in the landscape horticulture sector has increasingly become a challenge. It seems that while there are people needing jobs, industry is not able to reach them, and when they do sign on, they are not able to retain them.

The BC Landscape & Nursery Association (BCLNA) has been tasked by its members to address this sector wide labour issue. As such, the BCLNA has been looking for government funds to develop and implement a project to assist industry to address these challenges.

We are pleased to announce that we have been successful in finding a funding partner. Please find the details about the project(s) and the Government announcement here.

<https://news.gov.bc.ca/releases/2016JTST0260-002607>

This project includes the entire landscape horticulture sector including landscape maintenance and construction, arboriculture, as well as the turf industry including the golf course industry.

The BCLNA is now looking to engage with stakeholders to begin work on this labour market project.

Please find attached to this email a backgrounder on the project and the involvement / commitment we are hoping to receive from your association and/or some of your members.

As mentioned, this is a very important project for our sector. Labour continues to be one of the

sectors major issues, if not the single largest issue, affecting our ability to maintain and build our businesses'. This project will begin to answer questions about sector needs, identifying clear gaps in available labour and training requirements for each sub-sector.

Your participation is critical to move this project forward!

What we need now is for you to quickly identify and recruit a few key members from PNW Chapter of the ISA to participate in a survey and potentially become further involved as a partnership committee member (which is nothing more than just a Steering Committee).

Over the next few days we will be following up with a phone call to solicit your involvement. We had planned some face-to-face meetings before the New Year. If we can make that happen it would be great, however, given the date and the weather these may need to wait until early in the New Year.

Thank you very much for your time and consideration on this matter. If you have any immediate questions, please feel free to contact me directly. To make this project move forward we will be reaching out to you soon.

Thanks in advance,

Bill Hardy, Project Manager

Appendix 6 – Landscape Sector Backgrounder described the entire LMP project, phases 1 through 5 and clearly identified the deliverables required for the completion of Phase 1.

A specific call to action was identified in the cover letter and in the follow up phone calls and emails, namely to identify and forward participants that could participate in the survey work and potentially move forward as Landscape Partnership Committee members.

While there were almost immediate replies acknowledging the next steps required by all individuals contacted, interestingly, not a single association forwarded any information following the introduction and backgrounder activities. This activity required follow up described in 7.3.

7.3 Individual Outreach / Participation Request and Confirmation

This step began with another phone campaign, again reaching out to the individual associations soliciting contact information from within their sub-sector. Each sub-sector was asked to identify and communicate with five member individuals and companies from diverse regions across BC.

Additionally, the prior knowledge of the BCLNA and Contractor aided with the identification of such individuals and companies within the broad sector.

7.4 Survey Solicitation Process

The next step was to connect individually with each company and contact to secure participation. At this point, the following process was completed.

1. Contact ALL participants individually to:
 - a. Discuss the project and receive feedback on the scope,
 - b. Explain next steps,
 - c. Explain the survey including instructions and outline.
2. Send a personalized email with the Backgrounder (again) and the link to the survey as well as anything else required after the phone interview,
3. Follow up as required to receive completed surveys,

Below is a sample of a personalized email sent to engage each participant in the survey and potential further involvement.

Hello xxx!

As described by Jerry Rousseau the BC Landscape & Nursery Association successfully received funding from the Ministry of Jobs Tourism and Skill Training to complete Phase 1 of a Labour Market Information project. A big piece of this is the survey.

The survey should take about 20-30 minutes to complete. If you don't complete it in one sitting, just close the page (do not submit). When you open the link again it will return you to where you left off. The information gleaned from the survey will help us identify the gaps in our current labour situation so that we can move into the next phases of the project. We are not asking for participation on the Partnership Committee at this point, just the completion of the survey.

I have attached the Backgrounder as well for your information. The survey can be found here - xxx

Thanks so much for your help. If you have any questions at all please feel free to call me on my cell number listed.

Thanks in advance,

Bill Hardy, Project Manager

7.5 Call for Survey Participants

For this project, the following summary provides an overview of participants identified and contacted.

Affiliation	Company	Contact	Location
WCTA	City of Abbotsford	Guy Martin	Metro
	Fairmont Hotsprings	Tom Altman	Interior
	Sunpeaks Resort	Keith Lyall	Interior
	Michaelbrook Golf Club	Garett Squire	Interior
	Nanaimo Golf Club	Garth Sjolie	Island
WCTA	City of Coquitlam	Andre Dionne	Metro
PNW Chapter – Int’l Society of Arboriculture	Bartlett Tree Services	Nicolas Funke	Metro Island Interior
	BC Plant Health Care	Tom Walz	Metro Island Interior
	Davey Tree	Blair Veitch	Metro Island Interior
	Rightway Tree Service	Mike Johnson	Metro
	Mumby’s Tree Service	Verna Mumby	Island
	Tree-Mendous Arb Care	Greg Houghton	Interior
	Give and Take Tree Services	Martin Evans	Island
	Coastal Pacific Landscaping	Ryan Keats	Metro
	Seabrook Tree Care	Christoph Weeks	Island
BC Golf Superintendents Association	Smithers Golf & Country Club	Stephen Kerbrat	Interior
	Shuswapia	Greg Austin	Interior

Affiliation	Company	Contact	Location
	Capilano Golf and Country Club	Jamie Robb	Metro
BC Recreation & Parks Association	City of Vancouver	Brian Quinn	Metro
	City of Vancouver	Guy Potinger	Metro
BC Landscape & Nursery Association	Paraspace Landscaping	Jeff Foley	Metro
	Houston Landscapes	Jeremy Millar	Metro
	Hunter Landscape Design	Bruce Hunter	Metro
	Down to Earth Landscape	Cable Baker	Metro
	Lee Smith Landscaping	Lee Smith	Island
	Sierra Landscaping	Anne Geis	Interior
	The Garden Beautifier	Anthony Krakau	Interior
	Acacia Landscape Inc.	Stephen McLeish	Island

Several survey participants have been identified to participate on the Partnership Committee going forward.

8.0 Results

The report is based on formal and informal conversations with stakeholders, survey responses and conversations prompted by the survey.

Key industry influencers and stakeholders input are reflected in the report. Additional data further refined emerging labour market concerns, themes, and priorities.

In light of response rates and comments made by individuals who completed, started, or declined to complete the survey, the use of paper-based survey instruments as a data gathering tool in this industry may not be the most effective approach. Follow-up and coaching of respondents often provided rich data as valuable as survey responses.

8.1 Responses

Interviews

During interviews that were conducted with participants there was consensus amongst all private industry landscape professionals, maintenance and construction, and arborists, that the lack of available labour was their single most significant challenge in maintaining and growing their business.

Data on labour market conditions prevailing in the public sector, including municipal parks, was insufficient to build a clear picture. Typically, the industry professionals are not involved in the process of recruitment. They are at some distance from those responsible for hiring. The industry professional would submit a staffing request and wait for the process to unfold. Frequently, new staff are transferred from elsewhere in the organization.

Responses that were provided indicated that publically funded positions are coveted, with significant numbers wanting to transfer from the private sector to the public sector where pay and benefits are perceived to be considerably better. Interviewers were also told that the situation in the public sector's horticultural and arboricultural fields is not reflective of the sector as a whole, which is dominated by private sector operators.

Similar distinctions were made with the golf-course subsector. However, private sector golf course respondents indicated that they felt less difficulty or pressure to fill vacancies quickly than other respondents as there was some ability to adjust work around available staffing. Another distinctive feature distinctive of the golf course subsector was the relative stability of workforce numbers: individual golf courses are of a certain size and are unlikely to expand physically or in terms of the number of horticulturalists needed.

Another comment through the interview process of note was the observation by a large landscape construction company that the NOC codes are inadequate for the hardscape side of the industry. A significant portion of a large commercial landscape construction company involves working with unit pavers, engineered modular concrete walls, masonry, etc. Of the many job/occupation titles in the NOC codes used, nothing meets these skill sets. It would be useful for Phase 2 to examine construction industry NOC code to see if there are additional codes that should be added to a survey.

Surveys

There were 10 completed surveys and an 11th abandoned

Despite the low level of early returns of the Survey Monkey survey instrument, the one-on-one conversations held with individuals during the survey recruitment process were valuable. Needs identified for each sub-sector were quite different. The themes that emerged are discussed in the next section.

8.2 General Themes

Several commonalities have been reported in the survey results. The individual interviews conducted also produced some recurrent themes. Interestingly results are distinctly different between public and private. While this is perhaps not surprising it will be valuable to have this distinction well documented for future phases.

Without delving into results per NOC cod, the following significant data emerged:

- Over 40% expect their business to grow in the next 2-5 years,
- 100% indicated the single biggest reason is increased demand,
- 83% indicate that their single biggest barrier to expansion is lack of skilled labour,
- Over 50% indicate that lack of unskilled labour is also an issue,
- 50% indicated that the ability to find workers has worsened in the last 5 years,
- Several employers stated that they had unfilled vacancies,
- The single largest dominant barrier for 83% of employers in attracting workers was skill level.

8.3 Four Points of Emphasis

1. Overwhelmingly in the arborist and landscape professional sub-sectors, the ability to both attract and retain new workers is the single most significant barrier to maintaining and growing business.
2. Competition within the industry and competition from other industries, and unrealistic wage expectations were identified as the main difficulty in attracting workers.
3. Traditional recruitment methods appear to not be nearly as effective now as in the past, as the lack of applicants or interest in the industry was identified as a leading factor in not obtaining enough workers.
4. Job seekers who do seek employment in the sector, often lack the rudimentary work-readiness skills, knowledge, or experience to effectively work in even entry-level positions.

8.4 Generating Consensus

The presentation of the interim report to the Steering Committee and Partnership Committee and follow up interviews validated and refined the findings to secure support for phase two direction and priorities. Some variation of emphasis between sub-sectors was evident.

9.0 Finalization of Governance

The Governance structure and process for Phase 1 Sector Engagement is a critical part of the engagement report. The intention is that the governance structure developed will provide the human capital responsible for the engagement report and all phases going forward.

A Terms of Reference was established and presented in section 7.1 earlier in this document. That document forms a portion of the total governance described below.

9.1 Governance and Sub-Sector Associations

Possibly unique to this project is the fact that each of the sub-sectors identified in the broad overall landscape horticulture sector have their own association.

Each of this group of associations has their own unique membership, their own unique issues, and their own unique personality. All the associations have been established for a long period of time. All have an Executive Director or CEO, and all have their own boards of directors.

Each deal with the issues that are most important to their members. Human resources, particularly labour shortages, are an issue important to all, albeit less so with public sector employers.

9.2 Steering Committee

While establishing the governance for this project it was obvious that each association staff principal would be a significant contributor. Thus, this group forms the top of the governance triangle with multiple levels of participation and includes representatives from the BCLNA, the WCTA, the BCRPA, the PNW-ISA and the BCGSA.

Early correspondence and conversations determined the common issues at the core of this project and participants were enthusiastic to have this project succeed. They provided the guidance to propel this project forward. Not all of them will be available to actively steer the next phase. However, the Phase 2 Labour Market Research project will reflect their on-going input and the labour market challenges they experience, and will demonstrate labour market strategies that will be helpful to them.

This group formed the Steering Committee and all are also ex-officio members of the Phase 1 Partnership Committee. In the event that a designated industry representative for a sector is unable to participate, the Executive Director for the sector may be assigned the designation on the Partnership Committee.

This group and the individuals involved were identified earlier in section 4.0.

The associations represented on the steering committee, and the nature of their involvement, are expected to evolve as the committee's activities unfold. The committee acknowledges, for instance, that

the extent to which the BCRPA's experiences a shortage of entry level workers, is quite different from the experiences of other member associations. With this in mind, an association may choose to vary its input and its level of participation depending on the committee's area of focus and its relevance to each member association.

9.3 Landscape Partnership Committee

The entire Partnership Committee will be comprised of the Steering Committee and additional members selected from industry. During the Phase 1 information gathering and interview process, respondents were advised of the need to identify individuals willing to participate in the Landscape Partnership Committee. The project backgrounder, circulated to all potential respondents, described in detail the Landscape Partnership Committee (LPC), together with the Committee's terms of reference.

Some individuals self-identified as wishing to participate in the LPC. The nascent LPC will secure participation of other representatives as it prepares its application to conduct the Labour Market Research project. While on-going participation cannot be required of members, efforts to ensure commitment for the duration of the remaining four phases of the Sector LMP program will continue. Membership, however, is expected to evolve over the duration of the four phases.

The people who have agreed to stand on the Landscape Labour Partnership Committee are:

- Tom Walz - BC Plant Health Care
- Brian Quinn - City of Vancouver BCRPA
- Jeff Foley - Paraspace Landscaping
- Jeremy Millar - Houston Landscapes
- Cable Baker - Down to Earth Landscapes
- Anne Geis - Sierra Landscaping
- Blair Veitch- Davey Tree Experts

10.0 Next Steps and the Framework for the Phase 2 Labour Market Information Research

Under the guidance of the Landscape Partnership Committee, the BCLNA will be submitting a request for funding through the Sector Labour Market Partnerships program to conduct an in-depth labour market study of the sector. The study will inform the development of strategies designed to address the dominant labour market concerns raised by the sector's employer and representative associations; most notably, the shortage of skilled and unskilled job seekers attracted to the sector and the consequent labour shortage that is impeding the sector's employers from meeting the consumer's demand for services.

To this end, the labour market study is expected to include the following elements:

1. A description of companies and employers within the industry:

This will build upon secondary data identified during the Phase 1 Sector Engagement.

- By sub-sector – sector descriptions are available in WorkBC data and National Occupation Classifications. This can be further refined by employer experience and key informant verification.
- By product and service category – employers can identify the products and services their companies offer. Key informants can verify and add to the category description.
- By location of products and services – a survey of employers, BCLNA member records, and public directories will identify the location of services offered in British Columbia. Further data could be requested from third party resources such as WorkSafeBC to identify the numerous companies. The identification of services offered can be as extensive as contacting all identified companies to enquire what products and services they provide.
- Labour force size – secondary data from the National Household Survey based on the 2010 Census and the 2015 Census. The 2015 Census data will be released in November 2017.

2. A description of the sector's labour force size and composition:

This will determine worker demographics, such as age, educational background, educational training. Information on the composition of the industry workforce will come from a combination of secondary data, survey of employers, and survey of workers. Secondary data will also come from Statistics Canada.

Determine labour market trends and the current and future impact on employers of shortages of skilled and unskilled workers, informed by secondary data and by collection of primary data from key informants. An analysis of labour market entrants is expected to inform future sources of labour supply and gaps.

Secondary data and collection of primary data from key informants will be used to determine labour market trends as well as the current and future impact on employers of shortages of skilled and unskilled

workers. An analysis of labour market entrants is expected to inform future sources of labour supply and gaps.

Determine the composition of the work force by NAICS/NOC category codes:

This can be obtained through official NAICS/NOC category descriptions. Employers can identify which of the subsectors and titles are relevant and inclusive to their business. A collective of employer results can then identify a refined list of jobs by NAICS/NOC category codes. The current category codes are broad and group many titles not related to the landscape, turf, and arborist sectors.

Composition of the workforce by years of experience in each position can be determined by survey of employers, key informants, and survey of employees.

Determine the composition of the workforce by number of workers, part-time, temporary foreign workers, students, and interns:

Secondary data from Statistics Canada and comparison of employer surveys will be used to verify data trends are consistent. Contracted research and analysis can add to, and further develop, findings from LMI Phase 1.

Determine the number and nature of current and forecast job vacancies through secondary data, from statistics and collection of job postings. Employer surveys will be a factor and identifier. Contracted research and analysis will contribute.

Estimate jobs by NAICS/NOC codes for forecasted growth:

- For 2020
- For 2025
- For 2030

Contracted research and analysis will be used to obtain and analyze data. Identified sources are:

- **Census data from past years** that formulates the official StatsCan National Household Surveys. Analysis of growth between Censuses' will be the main formulation of information.
- This will be combined with climatology reports, data, and forecasts to factor in the trend of extended growing season. For example, the extended growing season is affecting the 'type' of jobs available, making permanent full time positions likely to increase as well as seasonal fulltime positions. Climatology data would be analysed for the impact on services offered by companies. For example, drought trends are creating new job positions in watering, irrigation specialization, and pest management. This will be combined with analysis of workforce trends for analysis, which will inform conclusions.

Analysis of workforce trends:

This will be informed by secondary data, employer survey, and key informants, employee survey, and student/youth intentions. This would be informed by both contracted research and analysis and in house research and analysis.

Assessment of current labour pool:

This would be informed by collection of data, contracted research, and analysis of available jobs. Employers and key informants can contribute to the analysis and provide their experienced observations on the current situation. These factors will be combined to form conclusions.

Identification of largest occupational gaps:

Identified job vacancies from secondary data would be combined with employer survey results for job vacancies and training gaps. Findings may require further exploration with training availability options, employee experience, and student/youth intentions. Key informants would discuss findings and contribute to conclusion.

Identification of greatest challenges:

Acquiring skilled workers would be informed by an employer survey, key informants, experiences of employees in their job search and job acquisition, employee training experiences, and student/youth training intentions. Analysis of training availability, training quality, and training options would contribute to this section.

Role of immigration policy changes in labour market shortage:

The experiences of employers utilizing immigration to fill labour shortages would be assessed using employer survey and key informant interviews. The impact of federal immigration and foreign worker policies on employers' access to an additional source of labour would be analyzed to determine what opportunities exist to maximize use, including an examination of barriers to accessing foreign workers.

Identifying skills and training gaps

These sections would be informed by HortEducationBC, the Industry Training Authority, government funding statistics, and training institutions. Skilled labour gap data, employers, and key informants can contribute to this section for identifying how the training helps or hinders their training needs as well as identify training gaps. Employers and key informants would be consulted on where they train their employees. Employee experiences and student/youth training goals should be incorporated into training information and analysis. Training providers are already identified. They can provide training program statistics, experiences, and observations. The research method will combine all research avenues identified with training institutions as an important secondary source of information.

This methodology description applies to the following seven training sections:

1. Identify post-secondary programs related to horticulture:
 - Current curricula
 - Program funding
 - Number of entrants and graduates
 - Number of domestic and international students
 - International students would need to be identified separately. Findings may reveal they are not a factor because the training programs for horticulture trades are apprenticeship. This requires a work visa.
 - Number of domestic students that continue to international programs
 - Co-op/intern options (companies involved, best options for work terms).
2. Identify specific job training within the institutions.
3. Identify high-school programs / mentorships related to horticulture.
4. Ascertain job placement rates.
5. Investigate match between educational training and industry needs.
6. Identify of other global successful programs.
7. Investigate match between student, recent graduate, and industry employees' values, motivators and workplace cultural expectations.

Secondary research as well as employees who are currently working in the industry can provide insight into why workers leave an employer for a different employer. Phase 2 will survey past apprentices who have left the industry sector to provide information on why workers leave an employer for a different trade. Alternatively, secondary sources of previous employees can be identified for query as to reason for leaving the sector for a different sector. Some of this section can be informed by employees who have changed between subsectors of arborist, utility arborist, landscape construction, landscape maintenance, and golf and sports turf professionals.

Provisional scope of the required labour market information research project:

Research Objectives	Proposed Research Method/Line of Evidence				
	Secondary Data Review	Survey of Employers	Key Informant Interviews	Student/ Youth Intentions *	Survey of Employees
Description of companies within the industry - By sub sector - By product category - By location of products - General revenue - Labour force size	X	X	X		
Quantify size and composition of the industry workforce - Determine employee demographics (e.g., age, educational background, educational training)	X	X			X
Identification of labour market trends and skills limited growth of large, medium and small firms in BC	X	X	X		X
Jobs by NAICS/NOC category codes	X	X			
Years of experience in each position		X	X		X
# of workers, part-time, temporary foreign workers, students and interns	X	X			
# of current job vacancies	X	X			
Estimate jobs by NAICS/NOC codes for growth - For 2020 - For 2025 - For 2030	X				
Analysis of workforce trends	X	X	X	X	X
Assessment of current labour pool	X	X	X		
Identification of largest occupational gaps	X	X	X	Possible	Possible
Identification of greatest challenges in acquiring skilled workers		X	X	X	X

Role of immigration in labour market shortage	X	X	X		
Identify post-secondary programs related to horticulture - Current curricula - Program funding - # of entrants and graduates - # of domestic and international students - # of domestic students that continue to international programs - Co-op/intern options (companies involved, best options for work terms)	X	X	X	X	X
Identify specific job training within the institutions	X	X	X	X	X
Identify high-school programs/mentorships related to horticulture	X	X	X	X	X
Job placement rates	X	X	X	X	X
Match between educational training and industry needs	X	X	X	X	X
Identification of other global successful programs	X	X	X	X	X
Match between student, recent graduate and industry employees values, motivators and workplace cultural expectations	X	X	X	X	X
Why workers leave an employer for a different trade					X
Research why workers leave an employer for a different employer					X

11.0 Acknowledgments

The BCLNA wishes to acknowledge the cooperation of the following organizations to bring together this Phase One report:

- Western Canada Turfgrass Association (WCTA)
- Pacific Northwest Chapter of the International Society of Arboriculture (PNW ISA)
- BC Recreation & Parks Association (BCRPA)
- BC Golf Superintendents Association (BCGSA)

The BCLNA also would like to acknowledge the support provided by the staff at the Ministry of Jobs, Tourism and Skills Training for their interest, assistance, and guidance through this inaugural phase.

The BCLNA also acknowledges the work of HortEducationBC as the subcontractor of this project, namely Lindsay Lindholm, and Bill Hardy as Project Manager .

12.0 Conclusions and Next Steps

The statistics and data identifying a significant current and projected shortage of workers particularly in the landscape and arborist sectors are supported by the survey results and anecdotal discussions.

The BCLNA will be developing a Phase 2 Project Proposal that will research the depth and breadth of shortages as well as skill levels required for work at the most significant levels. It will also research processes and pathways to access labour. Also identified as a significant topic is the investigation into new NOC codes that fit the 'hardscape' aspect of the industry, which is currently not included in the codes for landscape.

As the landscape sector has high and low times for work, with spring being the most significant challenge, particularly with limited labour, the BCLNA will be selective in its timing of the next phase, to ensure that industry is available and included in the development of the research and survey process.



*Funding provided through the Canada-British Columbia
Labour Market Development Agreement.*

Appendices

Appendix 1 CNLA Industry Economic Profile



THE ORNAMENTAL HORTICULTURE INDUSTRY IN CANADA

ECONOMIC PROFILE

OVERVIEW

The ornamental horticulture industry includes the following sectors:

Growers

- floriculture production (greenhouse flowers and plants) – NAICS 111422
- nursery and tree production, includes sod and Christmas trees – NAICS 111421

Retailers

- nursery stores and garden centres – NAICS 444220
- many other retail outlets

Landscaping Services

- design, installation and maintenance of green spaces – NAICS 561730



OVERALL INDUSTRY

Ornamental horticulture is an important industry in Canada:

- \$2.4 billion in producer sales¹
- \$8.1 billion in consumer sales (\$6.3 billion retail product sales + \$1.8 billion landscaping services)²
- \$14 billion contribution to the economy (output plus value-added impact)³
- 132,000 full-time equivalent jobs (direct and indirect)⁴
- \$3.8 billion in employment income⁵
- estimated \$1 billion in retail sales taxes to government⁶
- exports of \$426 million, making Canada the 10th largest exporter in the world⁷

¹ Statistics Canada, *Greenhouse, sod and nursery industries*, 2015
<http://www.statcan.gc.ca/daily-quotidien/160421/dq160421c-eng.htm>

² Deloitte, *The impact of ornamental horticulture on Canada's economy*. Data is for the year 2007.

³ Ibid

⁴ Ibid

⁵ Ibid

⁶ Canadian Ornamental Horticulture Alliance, *A Pre-Budgetary Consultation Brief to the House of Commons Standing Committee on Finance*, August 2011

⁷ Innovation, Science and Economic Development Canada, Trade Data Online
<https://www.ic.gc.ca/app/scr/sbms/sbb/cis/internationalTrade.html?Open=1&code=11142&lang=eng&wbdisable=true>

GROWERS

Operations (2015)

- 1,787 greenhouse operations in Canada, totaling 7.8 million sq. metres⁸
- 1,332 nurseries totaling 17,196 hectares⁹
- 190 sod operations with 24,382 hectares total sod area¹⁰
- typically, these operations are small and medium-sized enterprises (SMEs)¹¹

Sales (2015)

Total producer sales (including resales) \$2.4 billion¹² which includes:

- \$1.5 billion in floriculture production (greenhouse flowers and plants), by far the largest sub-sector (63% of total)¹³
- \$713 million in nursery sales (30%)¹⁴
- \$167 million in sod sales (7%)¹⁵

⁸ Statistics Canada (CANSIM Table 001-0047)
<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10047>

⁹ Statistics Canada (CANSIM Table 001-0056)
<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10056>

¹⁰ Statistics Canada (CANSIM Table 001-0060)
<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10060>

¹¹ Statistics Canada, Canadian Business Patterns Database, December 2014.
<https://www.ic.gc.ca/app/scr/sbms/sbb/cis/establishments.html?code=11142&lang=eng>

¹² Statistics Canada, Greenhouse, sod and nursery industries, 2015
<http://www.statcan.gc.ca/daily-quotidien/160421/dq160421c-eng.htm>

¹³ Statistics Canada (CANSIM Table 001-0051)
<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10051>

¹⁴ Statistics Canada (CANSIM Table 001-0058)
<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10058>

¹⁵ Statistics Canada (CANSIM Table 001-0060)
<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10060>

Sales by Province

- three provinces account for more than 80% of farm gate receipts for ornamentals: Ontario (44%), British Columbia (25%) and Québec (14%)¹⁶
- Ontario is the third largest production area in North America, behind California and Florida¹⁷

Sales Channels

The largest sales channels for greenhouse plants and flowers¹⁸

- mass market chain stores (30% of producer sales)
- domestic wholesalers (19%)
- direct to the public (14%)
- retail florists (13%)

The largest sales channels for nursery products¹⁹

- landscape contractors (22%)
- garden centres (19%)
- mass market chain stores (17%)
- direct to public (10%)

¹⁶ Statistics Canada (CANSIM Table 002-0001)

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=20001>

¹⁷ Deloitte, *The impact of ornamental horticulture on Canada's economy*

¹⁸ Statistics Canada (CANSIM Table 001-0050)

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10050>

¹⁹ Statistics Canada (CANSIM Table 001-0059)

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10059>

Employment (2015)

Growers directly employ 33,799 workers. About one-third of workers are permanent and two-thirds are seasonal (seasonal employees are defined as those who work less than eight months during the year).

Employment by sub-sector:

- floriculture production: 18,794 (6,727 permanent + 12,067 seasonal)²⁰
- nursery production: 13,152 (3,665 permanent + 9,487 seasonal)²¹
- sod farming: 1,853 (510 permanent + 1,343 seasonal)²²

Annual Payroll (2015)

Growers pay \$623 million in annual wages and salaries.

Payroll by sub-sector:

- floriculture production: \$347 million²³
- nursery production: \$225 million²⁴
- sod farming: \$51 million²⁵

²⁰ Statistics Canada (CANSIM Table 001-0055)

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10055>

²¹ Statistics Canada (CANSIM Table 001-0054)

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10054>

²² Statistics Canada (CANSIM Table 001-0054)

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10054>

²³ Statistics Canada (CANSIM Table 001-0053)

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10053>

²⁴ Statistics Canada (CANSIM Table 001-0061)

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10061>

²⁵ Statistics Canada (CANSIM Table 001-0061)

<http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=10061>

Exports (2015)

Grower exports totaled \$426 million, including:

- \$89 million of floriculture products²⁶
- \$337 million of nursery products²⁷

Canada's exports of floriculture and nursery products place it 10th in the world²⁸



²⁶ Innovation, Science and Economic Development Canada, Trade Data Online, Floriculture Production
<https://www.ic.gc.ca/app/scr/sbms/sbb/cis/internationalTrade.html?code=111422&lang=eng>

²⁷ Innovation, Science and Economic Development Canada, Trade Data Online, Nursery and Tree Production,
<https://www.ic.gc.ca/app/scr/sbms/sbb/cis/internationalTrade.html?code=111421&lang=eng>

²⁸ Agriculture and Agri-Food Canada, 2014 Statistical Overview of the Canadian Ornamental Industry
http://www.agr.gc.ca/resources/prod/doc/pdf/st_ovrv_orn_ind_2014-eng.pdf

RETAILERS

- consumers spend about \$6.3 billion annually on ornamental horticultural products²⁹
- an estimated 9,000 retail outlets carry these products (including nursery and garden centres, big box/mass merchant stores, and florists)³⁰
- retail sales are poised for double digit growth over the next decade³¹

LANDSCAPING SERVICES

- consumers spend about \$1.8 billion a year on landscaping services³²
- there are approximately 19,000 landscaping establishments in Canada – most have fewer than five employees, and only about 50 companies have more than 100 employees³³
- this sector is represented in all parts of Canada, is locally owned and highly entrepreneurial; many employees go on to own and operate their own businesses

²⁹ Deloitte, *The impact of ornamental horticulture on Canada's economy*. Data is for the year 2007.

³⁰ Ryerson University, Centre for the Study of Commercial Activity, Deloitte analysis

³¹ Deloitte, *The impact of ornamental horticulture on Canada's economy*

³² Deloitte, *The impact of ornamental horticulture on Canada's economy*. Data is for the year 2007.

³³ Statistics Canada, *Canadian Business Patterns Database*, December 2014
<https://www.ic.gc.ca/app/scr/sbms/sbb/cis/establishments.html?code=56173>

INDUSTRY PROSPECTS



Ornamental horticulture is a major industry in Canada in terms of job creation, employment income, training, investment, tax revenue, exports, and new business formation.

More than that, the industry also makes a significant contribution to the health and well-being of Canadians, and is assuming an increasingly important role in helping to address the environmental challenges of the 21st century.

Driving the growth of the industry are several key trends:

- baby boomers reaching retirement age
- increasing concern for the environment, particularly among millennials
- growing awareness that greenscaping can help address environmental problems
- need to offset rising costs of home heating and cooling

Appendix 2 LMP Phase 1 Landscape, Turf, & Arborist Sector Labour Data

British Columbia	NOC ¹	Total Workers Employed 2011 ⁷	Employee ⁷	Self-employed ⁷	Unpaid family worker ⁷	Percent Employed Full Time 2011	Job Openings to 2025 ¹	Expected annual demand growth rate (2015-2025)
Managers in horticulture	0822	1,035	395	615	20	54% ²	210	-0.1 ²
Landscape and horticulture technicians and specialists	2225	3,360	2,425	880	55	39% ³	1,190	0.8 ³
Public works maintenance equipment operators and related workers	7522	2,305	2,175	135	0	56% ⁴	970	0.9 ⁴
Contractors and supervisors, landscaping, grounds maintenance and horticulture services	8255	2,880	1,735	1,140	0	46% ⁵	880	0.7 ⁵
Landscaping and grounds maintenance labourers	8612	16,015	11,770	4,150	95	22% ⁶	4,140	0.7 ⁶

Canada ⁸	NOC ¹	Total Workers Employed 2011	Employee	Self-employed	Unpaid family worker
Managers in horticulture	0822	4,725	2,140	2,515	70
Landscape and horticulture technicians and specialists	2225	16,685	12,890	3,655	140
Public works maintenance equipment operators and related workers	7522	18,685	17,275	1,400	0
Contractors and supervisors, landscaping, grounds maintenance and horticulture services	8255	17,500	11,100	6,345	50
Landscaping and grounds maintenance labourers	8612	92,655	76,305	15,840	505

British Columbia	NOC ¹	% of job openings from replacement	% of job openings from expansion	Skill Level ¹	Hourly Wage Rate 2015 (\$) ¹		
					Low	Median	High
Managers in horticulture	0822	100% ²	0% ²	0	\$10.45	\$15.07	\$35.68
Landscape and horticulture technicians and specialists	2225	78% ³	22% ³	B	\$15.00	\$19.75	\$31.54
Public works maintenance equipment operators and related workers	7522	76% ⁴	24% ⁴	C	\$18.72	\$26.00	\$29.70
Contractors and supervisors, landscaping, grounds maintenance and horticulture services	8255	75% ⁵	25% ⁵	B	\$10.45	\$17.36	\$33.43
Landscaping and grounds maintenance labourers	8612	68% ⁶	32% ⁶	D	\$12.00	\$16.00	\$28.00

		Employment by gender		Labour force by age group			
		Male	Female	15-24	25-44	45-64	65+
British Columbia	NOC¹						
Managers in horticulture	0822	71% ²	29% ²	4% ²	29% ²	51% ²	15% ²
Landscape and horticulture technicians and specialists	2225	67% ³	33% ³	10% ³	40% ³	46% ³	3% ³
Public works maintenance equipment operators and related workers	7522	96% ⁴	4% ⁴	4% ⁴	45% ⁴	49% ⁴	2% ⁴
Contractors and supervisors, landscaping, grounds maintenance and horticulture services	8255	83% ⁵	17% ⁵	10% ⁵	45% ⁵	42% ⁵	2% ⁵
Landscaping and grounds maintenance labourers	8612	80% ⁶	20% ⁶	28% ⁶	36% ⁶	32% ⁶	3% ⁶

NOTES¹:

- Data source for wage: ESDC Job Bank hourly wage updated in 2015, unless otherwise noted.
- The low wage rate refers to the 10th percentile, which indicates 90% of the workers in this occupation make the low wage or more;
- The high wage rate refers to the 90th percentile, which indicates 90% of the workers in the occupation make the high wage or less.

SKILLS LEVEL DEFINITIONS¹:

SKILL LEVEL 0: Usually requiring a combination of education and experience

SKILL LEVEL A: Usually requiring a Bachelor's, Graduate or First Professional Degree

SKILL LEVEL B: Usually requiring diploma, certificate or apprenticeship training

SKILL LEVEL C: Usually requiring secondary school and/or occupation-specific training

SKILL LEVEL D: Usually requiring on-the-job training

Employment by gender statistics for trades in British Columbia⁹**Percentage of female employees Horticulture Trades**

67% NOC 8432 Nursery and Greenhouse Workers

33% NOC 2225 Landscape and Horticulture Technicians and Specialists (includes Arborist Technician)

17% NOC 8255 Contractors and Supervisors, Landscaping, Grounds Maintenance and Horticulture Services

20% NOC 8612 Landscaping and Grounds Maintenance Labourers

Other Trades

2% NOC 7321 Automotive service technicians, truck and bus mechanics and mechanical repairers

4% NOC 7242 Industrial electricians

2% NOC 7241 Electricians (except industrial and power system)

2% NOC 7271 Carpenters

2% NOC 7251 Plumbers

4% NOC 7521 Heavy equipment operators (except crane)

12% NOC 7294 Painters and decorators (except interior decorators)

9% NOC 9536 Industrial painters, coaters and metal finishing process operators

3% NOC 7237 Welders and related machine operators

1% NOC 7252 Steamfitters, pipefitters and sprinkler system installers

5% NOC 2244 Aircraft instrument, electrical and avionics mechanics, technicians and inspectors

CITATIONS

- 1 Canada. British Columbia. Ministry of Jobs, Tourism and Skills Training. Work BC Division. British Columbia 2025 Labour Market Outlook. 5th Edition. Victoria, B.C., 2016. <https://www.workbc.ca/getmedia/00de3b15-0551-4f70-9e6b-23ffb6c9cb86/LabourMarketOutlook.pdf.aspx>
- 2 "Managers in horticulture (NOC 0822)." WorkBC Official Website - Explore Career Profiles. Accessed December 23, 2016. <https://www.workbc.ca/Jobs-Careers/Explore-Careers/Browse-Career-Profile/0822>.
- 3 "Landscape and horticulture technicians and specialists (NOC 2225)." WorkBC Official Website - Explore Career Profiles. Accessed December 23, 2016. <https://www.workbc.ca/Jobs-Careers/Explore-Careers/Browse-Career-Profile/2225>.
- 4 "Public works maintenance equipment operators and related workers (NOC 7522)." WorkBC Official Website - Explore Career Profiles. Accessed December 23, 2016. <https://www.workbc.ca/Jobs-Careers/Explore-Careers/Browse-Career-Profile/7522>.
- 5 "Contractors and supervisors, landscaping, grounds maintenance and horticulture services (NOC 8255)." WorkBC Official Website - Explore Career Profiles. Accessed December 23, 2016. <https://www.workbc.ca/Jobs-Careers/Explore-Careers/Browse-Career-Profile/8255>.
- 6 "Landscaping and grounds maintenance labourers (NOC 8612)." WorkBC Official Website - Explore Career Profiles. Accessed December 23, 2016. <https://www.workbc.ca/Jobs-Careers/Explore-Careers/Browse-Career-Profile/8612>.
- 7 Statistics Canada. 2013. 2011 National Household Survey British Columbia. 99-012-X2011033 June 26, 2013. <http://www12.statcan.gc.ca/global/URLRedirect.cfm?lang=E&ips=99-012-X2011033>
- 8 Statistics Canada. 2013. 2011 National Household Survey Canada. 99-012-X2011033 June 26, 2013. <http://www12.statcan.gc.ca/global/URLRedirect.cfm?lang=E&ips=99-012-X2011033>
- 9 - Explore Career Profiles. WorkBC Official Website. Accessed December 23, 2016. <https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx>

Appendix 3 LMP Complete Survey Questionnaire

LMP Phase 1 Landscape

1. Contact Information

“As a business owner or manager, managing your Human Resources to handle the work that needs to be done is critical to your success. As part of this project we will be asking you questions about your HR challenges, which will be collated with other companies for one ‘overall’ anonymous report. We do however, require your contact information for survey administration. If you have questions about this survey, please contact Bill Hardy at bhardy@horteducationbc.com or, Lindsay Lindholm at lindsay@horteducationbc.com. Thank you very much for your time and effort.

1. Please provide your contact information (name, company, email address, and best phone to reach you)

Contact Name	<input type="text"/>
Company	<input type="text"/>
Email Address	<input type="text"/>
Phone Number	<input type="text"/>

1

LMP Phase 1 Landscape

2. Landscape Labour Market Phase one Survey

Description

2. How long has your organization been in business?

- 0-4 yrs
- 5-9 yrs
- 10-19 yrs
- 20-29yrs
- 30-49yrs
- 50+

3. How many people do you currently employ?

4. Assuming labour shortage would not be a barrier, do you expect to expand your business in the next 2-5 years?

- Staffing levels will remain the same
- The number of positions will be expanded
- Unsure

LMP Phase 1 Landscape

3. Expansion Reasons

5. What are the reasons for your expectation of expansion? *(Select all that apply)*

- Temporary Projects
- Changing consumer needs
- Longer growing season
- Increased demand
- Expand service/product range
- Perceived gap in market
- Other (please specify)

3

LMP Phase 1 Landscape

4. Labour Operating Challenges

6. What are your organizations labour operating challenges? *(Select all that apply)*

- Unskilled labour shortage
- Skilled labour shortage
- Training options
- Training availability
- Training quality
- None
- Other (please specify)

4

LMP Phase 1 Landscape

5. National Occupational Classification

Jobs are classified into categories using the National Occupational Classification system. The categories of this system are often broad including unrelated job titles. It is important that we get an accurate scope of job titles related to the Landscape, Ornamental and Turf Industries. Please select the occupational titles you employ directly related to the service or product of your organization. Based on these selections, you will then be asked about the number of positions, type of positions, and average hours for the position.

7. Please select all occupational titles you employ for NOC 2225 Landscape and horticulture technicians and specialists.

This unit group includes those who survey and assess landscapes; draw sketches and build models of landscape designs; construct and maintain gardens, parks, golf courses and other landscaped environments; advise clients on issues related to horticulture such as irrigation; breed, cultivate and study plants; and treat injured and diseased trees and plants. They are employed by landscape designers and contractors, lawn service and tree care establishments, golf courses, nurseries and greenhouses, and municipal, provincial and national parks, or they may be self-employed. (Select all that apply)

- arboriculturist
- arborist
- floriculturist
- gardener
- golf course superintendent
- greens superintendent
- greenskeeper
- horticultural technician
- horticultural technologist
- horticulture specialist
- horticulture technician
- horticulture technologist
- horticulturist
- hydroponics technician
- interior plantscape specialist
- irrigation technician (except agriculture)
- landscape architectural technician

5

<input type="checkbox"/> landscape architectural technologist <input type="checkbox"/> landscape designer <input type="checkbox"/> landscape gardener <input type="checkbox"/> landscape horticulturist <input type="checkbox"/> landscape technician <input type="checkbox"/> landscaper <input type="checkbox"/> lawn care specialist <input type="checkbox"/> lawn care superintendent <input type="checkbox"/> plant doctor <input type="checkbox"/> plantscape technician <input type="checkbox"/> tree and shrub specialist <input type="checkbox"/> tree service technician <input type="checkbox"/> turfgrass management specialist <input type="checkbox"/> None of these <input type="checkbox"/> Other (please specify) <div style="border: 1px solid black; height: 20px; width: 600px; margin-top: 5px;"></div>

8. Please select all occupational titles you employ for **NOC 7522 Public works maintenance equipment operators and related workers.**

This unit group includes workers who operate vehicles and equipment to maintain streets, highways and sewer systems and operate trucks to collect garbage and recyclable materials. This group also includes workers who clear vegetation close to power lines, workers who inspect the condition of utility poles and workers who locate underground utility lines and pipes. They are employed by municipal, provincial and federal public works departments, private contractors under contract with government public works departments and private companies involved in the collection of refuse and recyclable materials. (Select all that apply)

<input type="checkbox"/> collection truck driver – public works <input type="checkbox"/> drain roto servicer – public works <input type="checkbox"/> electrical forester <input type="checkbox"/> equipment operator – municipal public work <input type="checkbox"/> garbage collector – driver <input type="checkbox"/> garbage truck driver <input type="checkbox"/> garbage truck driver – public works <input type="checkbox"/> highway snow removal equipment operator

<input type="checkbox"/>	highway snowplough operator
<input type="checkbox"/>	maintenance equipment operator – public works
<input type="checkbox"/>	mechanical sweeper operator – public works
<input type="checkbox"/>	municipal maintenance equipment operator
<input type="checkbox"/>	municipal servicer drain roto
<input type="checkbox"/>	power pole inspector
<input type="checkbox"/>	power sweeper operator – public works
<input type="checkbox"/>	public works maintenance equipment operator
<input type="checkbox"/>	recycling truck driver
<input type="checkbox"/>	recycling truck driver – public works
<input type="checkbox"/>	refuse truck driver – public works
<input type="checkbox"/>	road snowplough operator – public works
<input type="checkbox"/>	salt truck operator
<input type="checkbox"/>	salt truck operator – public works
<input type="checkbox"/>	sand spreader operator
<input type="checkbox"/>	sand spreader operator – public works
<input type="checkbox"/>	sanding truck operator – public works
<input type="checkbox"/>	sanitation truck driver
<input type="checkbox"/>	sewer flusher operator-driver – public works
<input type="checkbox"/>	sewer jet cleaner operator – public works
<input type="checkbox"/>	sewer jet machine operator – public works
<input type="checkbox"/>	sewer-flushing truck operator
<input type="checkbox"/>	sewer-flushing truck operator – public works
<input type="checkbox"/>	sewer-pipe-cleaning machine operator – public works
<input type="checkbox"/>	snow removal equipment operator – public works
<input type="checkbox"/>	sprinkling truck driver – public works
<input type="checkbox"/>	street flusher operator
<input type="checkbox"/>	street flusher operator – public works
<input type="checkbox"/>	street sprinkler operator – public works
<input type="checkbox"/>	street sweeper operator
<input type="checkbox"/>	street sweeper operator – public works

7

- urban snow removal equipment operator – public works
- utility arborist
- utility forester
- utility locator
- utility pole inspector
- utility pole tester
- utility tree trimmer
- utility tree worker
- None of these
- Other (please specify)

9. Please select all occupational titles you employ for **NOC 8255 Contractors and supervisors, landscaping, grounds maintenance and horticulture services.**

This unit group includes landscaping and grounds maintenance contractors, who own and operate their own businesses. This group also includes supervisors who supervise and co-ordinate the activities of workers in the following unit groups: Nursery and Greenhouse Workers (8432) and Landscaping and Grounds Maintenance Labourers (8612). They are employed by landscaping companies, cemeteries, lawn care and tree service companies, nurseries and greenhouses and by landscaping operations of public works departments and private establishments. (Select all that apply)

- cemetery foreman/woman
- country club grounds supervisor
- greenhouse foreman/woman
- greenhouse supervisor
- greenhouse worker crew chief
- grounds maintenance contractor
- grounds maintenance park supervisor
- grounds maintenance supervisor
- groundskeeper supervisor
- groundskeeping foreman/woman
- groundskeeping supervisor
- groundskeeping supervisor – cemetery
- groundsman/woman supervisor

<input type="checkbox"/>	groundsperson supervisor – campground
<input type="checkbox"/>	horticultural contractor
<input type="checkbox"/>	horticulture workers supervisor
<input type="checkbox"/>	interior plantscaping contractor
<input type="checkbox"/>	landscape design contractor
<input type="checkbox"/>	landscape maintenance contractor
<input type="checkbox"/>	landscape service contractor
<input type="checkbox"/>	landscaping contractor
<input type="checkbox"/>	landscaping foreman/woman
<input type="checkbox"/>	landscaping supervisor
<input type="checkbox"/>	lawn care contractor
<input type="checkbox"/>	lawn care service contractor
<input type="checkbox"/>	lawn care supervisor
<input type="checkbox"/>	lawn maintenance contractor
<input type="checkbox"/>	maintenance worker supervisor – campground
<input type="checkbox"/>	nursery foreman/woman
<input type="checkbox"/>	nursery supervisor
<input type="checkbox"/>	nursery worker crew chief
<input type="checkbox"/>	nursery worker foreman/woman
<input type="checkbox"/>	nursery workers supervisor
<input type="checkbox"/>	park caretaker
<input type="checkbox"/>	park labourers supervisor
<input type="checkbox"/>	park maintenance head
<input type="checkbox"/>	park maintenance supervisor
<input type="checkbox"/>	park section head – arboriculture
<input type="checkbox"/>	plantscape maintenance contractor
<input type="checkbox"/>	public works grounds maintenance labourer supervisor
<input type="checkbox"/>	public works grounds maintenance worker supervisor

"types" do you have for each title? (Select all that apply)

Seasonal" work is defined as, steady hours "for some but not all months of the year".

	Full-time Permanent 30 hrs or more per week	Full-time Seasonal 30 hrs or more per week	Part-time Permanent Less than 30 hrs per week	Part-time Seasonal Less than 30 hrs per week	Other	position Note*, "
ter –	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	bulb plan landscar

	Full-time Permanent <i>30 hrs or more per week</i>	Full-time Seasonal <i>30 hrs or more per week</i>	Part-time Permanent <i>Less than 30 hrs per week</i>	Part-time Seasonal <i>Less than 30 hrs per week</i>	Other
grounds maintenance labourer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
grounds maintenance worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
groundskeeper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
groundsman/woman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
groundsperson – campground	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
landscape gardener helper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
landscape gardening helper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
landscape labourer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
landscape worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
lawn care labourer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
lawn care worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
lawn mower	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
lawn-mowing worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
park maintenance labourer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
park maintenance worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
plant care worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
plant doctor helper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
snow shoveller – grounds maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
sod layer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
sod laying labourer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
stadium groundskeeper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
transplanter – landscape maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tree pruner – landscaping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tree sprayer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tree surgeon helper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Full-time Permanent <i>30 hrs or more per week</i>	Full-time Seasonal <i>30 hrs or more per week</i>	Part-time Permanent <i>Less than 30 hrs per week</i>	Part-time Seasonal <i>Less than 30 hrs per week</i>	Other
tree trimmer – landscaping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None of these	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Insert text from Other]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="text"/>				

23. What percentage of those you have identified as Seasonal workers(*Part-time and Full-time combined*), return year to year?

0 Percentage 100

LMP Phase 1 Landscape

7. Seasonal Workers

24. What percentage of those you have identified as Seasonal Workers (Part-time and Full-time combined), return year to year? Enter numerical percentage from **0-100** or **N/A** if you do not employ Seasonal Workers

25. Do you provide incentives for seasonal workers to return?

- Yes
- No
- Not Applicable (Do not employ Seasonal workers)

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8. Seasonal Workers Incentives Secondary

26. What incentives do you offer seasonal employees to encourage them to return each year?

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9. Work Shortage Stats

27. How do you perceive the ability of companies to attract and retain workers to the Landscape Industry?
In the past 5 years labour market conditions have

- Worsened
- Improved
- No change
- Not Sure

28. How many job vacancies were you unable to fill last year (2016 Landscape Season) due to shortage of workers?

29. Do you currently have job vacancies your organization is having difficulty filling for the 2017 Landscape spring season?

- Yes
- No
- Too early in hiring season to know

30. If you answered "Yes" to Question 4; How many open positions do you have currently that you are having difficulty finding workers to hire?

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10. Barriers to Attracting Labour - Select

31. What are the dominant barriers you have encountered in trying to attract applicants? *(Select all that apply)*

- Industry perception
- Industry competition
- Competition from other sectors (i.e. Construction)
- Gender stereotype perception
- Lack of entrants to industry
- Skill level
- Unrealistic wage expectations
- Physical limitations
- Other (please specify)

LMP Phase 1 Landscape

11. Barriers to Attracting Labour - Rank

32. Please rank the reasons you gave for difficulty in attracting applicants from most challenging to, least challenging

<input type="checkbox"/>	<input type="text"/>	Industry perception
<input type="checkbox"/>	<input type="text"/>	Industry competition
<input type="checkbox"/>	<input type="text"/>	Competition from other sectors (i.e. Construction)
<input type="checkbox"/>	<input type="text"/>	Gender stereotype perception
<input type="checkbox"/>	<input type="text"/>	Lack of entrants to industry
<input type="checkbox"/>	<input type="text"/>	Skill level
<input type="checkbox"/>	<input type="text"/>	Unrealistic wage expectations
<input type="checkbox"/>	<input type="text"/>	Physical limitations
<input type="checkbox"/>	<input type="text"/>	[Insert text from Other]

LMP Phase 1 Landscape

12. Barriers to Filling Vacancies - Select

33. What are the barriers to your organization successfully filling its job vacancies? *(Select all that apply)*

- Not enough applications
- Applicants lack adequate experience
- Applicants lack necessary skills and training
- Applicants lack necessary certifications
- Applicants are too unreliable
- Applicants cannot meet minimum physical requirements of the job
- Applicants do not have reliable mode of transportation
- Applicants cannot fulfill hours required (start/end time)
- Applicants are unwilling to participate in training sessions offered by the organization
- Applicants are looking for training opportunities the organization cannot provide
- Applicants are over qualified
- Other (please specify)

LMP Phase 1 Landscape

13. Barriers to Filling Vacancies - Rank

34. Please rank the reasons you gave for difficulty in finding labor from most challenging to, least challenging.

☐	☐	Not enough applications
☐	☐	Applicants lack adequate experience
☐	☐	Applicants lack necessary skills and training
☐	☐	Applicants lack necessary certifications
☐	☐	Applicants are too unreliable
☐	☐	Applicants cannot meet minimum physical requirements of the job
☐	☐	Applicants do not have reliable mode of transportation
☐	☐	Applicants cannot fulfill hours required (start/end time)
☐	☐	Applicants are unwilling to participate in training sessions offered by the organization
☐	☐	Applicants are looking for training opportunities the organization cannot provide
☐	☐	Applicants are over qualified
☐	☐	[Insert text from Other]

LMP Phase 1 Landscape

14. Labour Acquisition Challenges Part A

35. What methods have you used to try to fill job vacancies? *Select all that apply*

- Free advertising (internet Job boards)
- Paid advertising
- Company website job postings
- Company social media job postings
- Job Fairs
- Contact training institutions
- Industry organization
- Other (please specify)

LMP Phase 1 Landscape

15. Labour Acquisition Challenges Part B

36. Please rank the methods you have used to find new employees in order of effectiveness with "1" being most effective.

::	▾	Free advertising (internet Job boards)
::	▾	Paid advertising
::	▾	Company website job postings
::	▾	Company social media job postings
::	▾	Job Fairs
::	▾	Contact training institutions
::	▾	Industry organization
::	▾	[Insert text from Other]

37. What incentives do you use in hiring? *(Select all that apply)*

- Wage
- Benefits
- Bonus payment
- Stability
- Training certification
- Tuition for training certification
- Promotion of tax credits and Grants available to apprentices who complete certification
- Other (please specify)

LMP Phase 1 Landscape

16. Employee Retention

38. What issues present challenges for employee retention? *(Select all that apply)*

- Transportation
- Poaching
- Language
- Cultural
- Seasonal nature of industry
- Working conditions: outdoor weather
- Working conditions: physical component/nature of work
- Lack of training availability for progression
- Wages are low in comparison to other sectors (i.e.Construction)
- Other (please specify)

39. Creating a competitive labour market is challenging due to many factors. Choose the level of challenge for the following factors that can present a challenge as an employer for attracting and retaining employees in the Landscape Industry.

	Not a challenge at all	Slightly Challenging	Not a Factor (Neither challenging or unchallenging)	Moderate Challenge	Extremely Challenging
Labour cost - providing a competitive wage with other industry sectors (i.e. Construction)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Labour cost – competing wages with organizations within the Landscape, Ornamental, Turf industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pension and benefits costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Payroll taxes cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Labour shortage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aging workforce	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skills certification process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upgrading skills of current employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industry goals vision and strategy (Enough, not enough)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skills of students coming out of secondary school (eg. require too much training)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skills of students coming out of post secondary programs for horticulture and Landscape (eg. require too much training)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Immigration system (eg. too complicated to navigate)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

LMP Phase 1 Landscape

17. Labour Inclusivity

40. Do you have any workers with identified physical disabilities?

- Yes
- No
- Unsure

41. Do you have any workers who identify themselves as Aboriginal?

- Yes
- No
- Unsure

LMP Phase 1 Landscape

18. Indigenous Community

42. You indicated you have employees who identify themselves as 'Aboriginal', Please select which Indigenous communities they identify themselves.

First Nations

Inuit

Métis

Not Sure

Other (please specify)

LMP Phase 1 Landscape
19. Apprenticeship 1
43. Are you familiar with the Red Seal Landscape Horticulturalist Apprenticeship training program?
<input type="radio"/> Yes
<input type="radio"/> No
44. Have you sponsored employees to get the Red Seal Landscape Horticulturalist Apprenticeship certification?
<input type="radio"/> Yes
<input type="radio"/> No
45. Is your organization willing to sponsor employees to get the Red Seal Landscape Horticulturalist Apprenticeship certification?
<input type="radio"/> Yes
<input type="radio"/> No
46. Do you or any of your employees have Red Seal Certification?
<input type="radio"/> Yes
<input type="radio"/> No

LMP Phase 1 Landscape	
20. Apprenticeship 2	
47. How many of your employees (including yourself) have Landscape Horticulturist Red Seal Certification?	<input type="text"/>
48. How many of your employees with Red Seal Certification are women?	<input type="text"/>

LMP Phase 1 Landscape

21. Apprenticeship 3

49. Are you aware that there are tax credits and grants available for both the sponsor and employee?

Yes

No

50. Are you aware that there are "Enhanced" tax credits and grants available for both the sponsor and employee when sponsoring First Nations individuals and persons with disabilities?

Yes

No

51. Is there anything that would make you or your organization more willing to sponsor current or future employees for Red Seal Landscape Horticulturalist Apprenticeship certification?

52. Were you aware that HortEducationBC helps people who want to challenge certification; and, helps apprentices and sponsors with the certification process by providing information, assistance with forms, sponsoring apprentices through technical training and information on funding?

Yes

No

53. What other training options would you like to see made available or provided more often?

54. What challenges and barriers does your organization encounter with upgrading skills of current employees?

Employee time away from the company when working leaves the company short staffed

I/we prefer in house training options but are limited by time and resources to provide more training

Expectation of higher wage upon completion

Fear of loss of employee to competitor upon completion

The current skills certification process does not meet our needs

Availability of approved training for current certification process is too limited (Red Seal Landscape Horticulturalist, Turf Diploma)

LMP Phase 1 Landscape

22. Industry Participation

55. Are you aware that the British Columbia Landscape and Nursery Growers Association and HortEducationBC fund industry development by promoting the career of landscaping and recruiting potential apprentices?

Yes

No

56. Would you like to see more funding and resources to address labour shortages?

Yes

No

57. Would you be willing to support financially, an industry driven collective labour recruitment project?

Yes

No

Maybe

LMP Phase 1 Landscape

23.

58. Optional: What are the major constraints to labour development that you have not had a chance to address in this survey?

59. Optional: What do feel are the best strategies Industry can implement to address labour or skills shortages?

60. Optional: Do you have any comments on the Landscape, Ornamental, or Turf Industry you have not had a chance to address?

Appendix 4 Survey Participant Response Summary

LMP Phase 1 Landscape

Q1 Please provide your contact information (name, company, email address, and best phone to reach you)

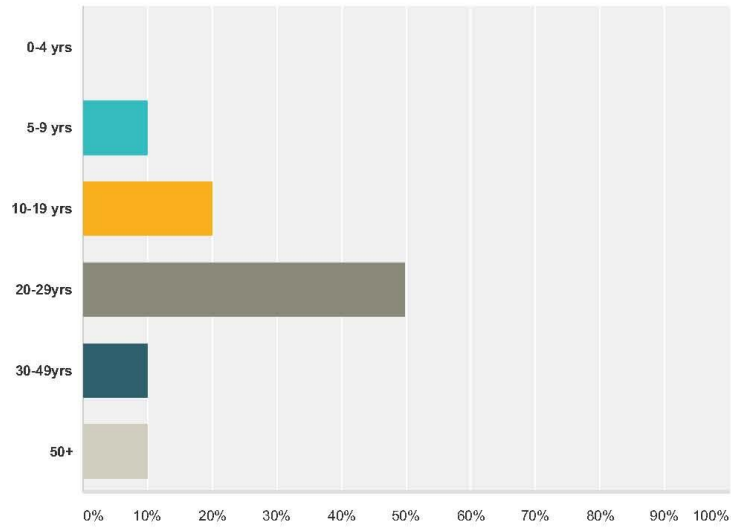
Answered: 11 Skipped: 0

Answer Choices	Responses	
Contact Name	100.00%	11
Company	90.91%	10
Address	0.00%	0
Address 2	0.00%	0
City/Town	0.00%	0
State/Province	0.00%	0
ZIP/Postal Code	0.00%	0
Country	0.00%	0
Email Address	100.00%	11
Phone Number	100.00%	11

LMP Phase 1 Landscape

Q2 How long has your organization been in business?

Answered: 10 Skipped: 1



Answer Choices	Responses
0-4 yrs	0.00% 0
5-9 yrs	10.00% 1
10-19 yrs	20.00% 2
20-29yrs	50.00% 5
30-49yrs	10.00% 1
50+	10.00% 1
Total	10

LMP Phase 1 Landscape

Q3 How many people do you currently employ?

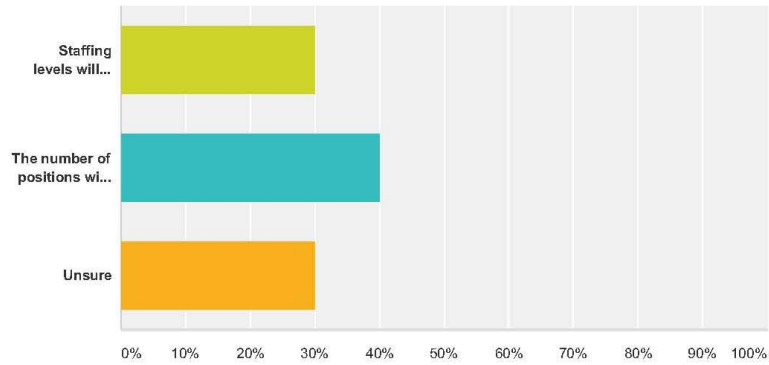
Answered: 10 Skipped: 1

#	Responses	Date
1	15	3/7/2017 8:01 AM
2	124	3/6/2017 5:04 PM
3	16 on course	3/4/2017 11:28 AM
4	15	2/28/2017 2:48 PM
5	90	2/28/2017 8:14 AM
6	one	2/24/2017 6:23 PM
7	Sub contract 5 people	2/24/2017 5:40 AM
8	65	2/24/2017 5:14 AM
9	19	2/23/2017 2:35 PM
10	60	2/23/2017 2:01 PM

LMP Phase 1 Landscape

Q4 Assuming labour shortage would not be a barrier, do you expect to expand your business in the next 2-5 years?

Answered: 10 Skipped: 1



Answer Choices	Responses
Staffing levels will remain the same	30.00% 3
The number of positions will be expanded	40.00% 4
Unsure	30.00% 3
Total	10

	2/24/2017 5:47 AM
	2/24/2017 5:21 AM
	Date
	Date
	Date
	3/6/2017 5:58 PM
	Date
	Date
	Date
	Date
	3/6/2017 5:58 PM

2	1
3	2
#	lawn care specialist
	There are no responses.
#	lawn care superintendent
	There are no responses.
#	plant doctor
1	1
#	plantscape technician
	There are no responses.
#	tree and shrub specialist
	There are no responses.
#	tree service technician
	There are no responses.
#	turfgrass management specialist
	There are no responses.
#	None of these
	There are no responses.
#	[Insert text from Other]
1	4

LMP Phase 1 Landscape

Q12 How many of the positions you listed for NOC 2225 Landscape and horticulture technicians and specialists, are held by women?

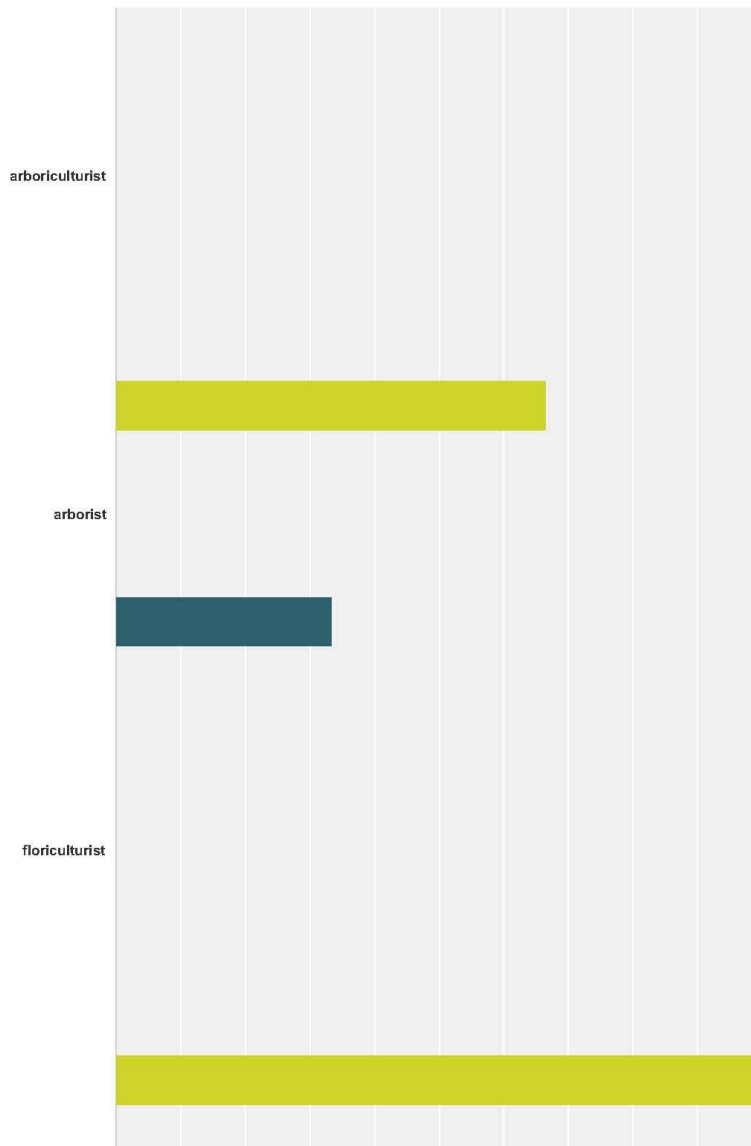
Answered: 5 Skipped: 6

#	Responses	Date
1	14	3/6/2017 5:58 PM
2	3	2/28/2017 3:09 PM
3	1	2/24/2017 5:47 AM
4	5	2/24/2017 5:21 AM
5	2	2/23/2017 2:08 PM

LMP Phase 1 Landscape

Q13 Based on your selections for NOC 2225 Landscape and horticulture technicians and specialists; what position "types" do you have for each title? (Select all that apply)
Note*, "Seasonal" work is defined as, steady hours "for some but not all months of the year".

Answered: 6 Skipped: 5



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horticultural
technologist

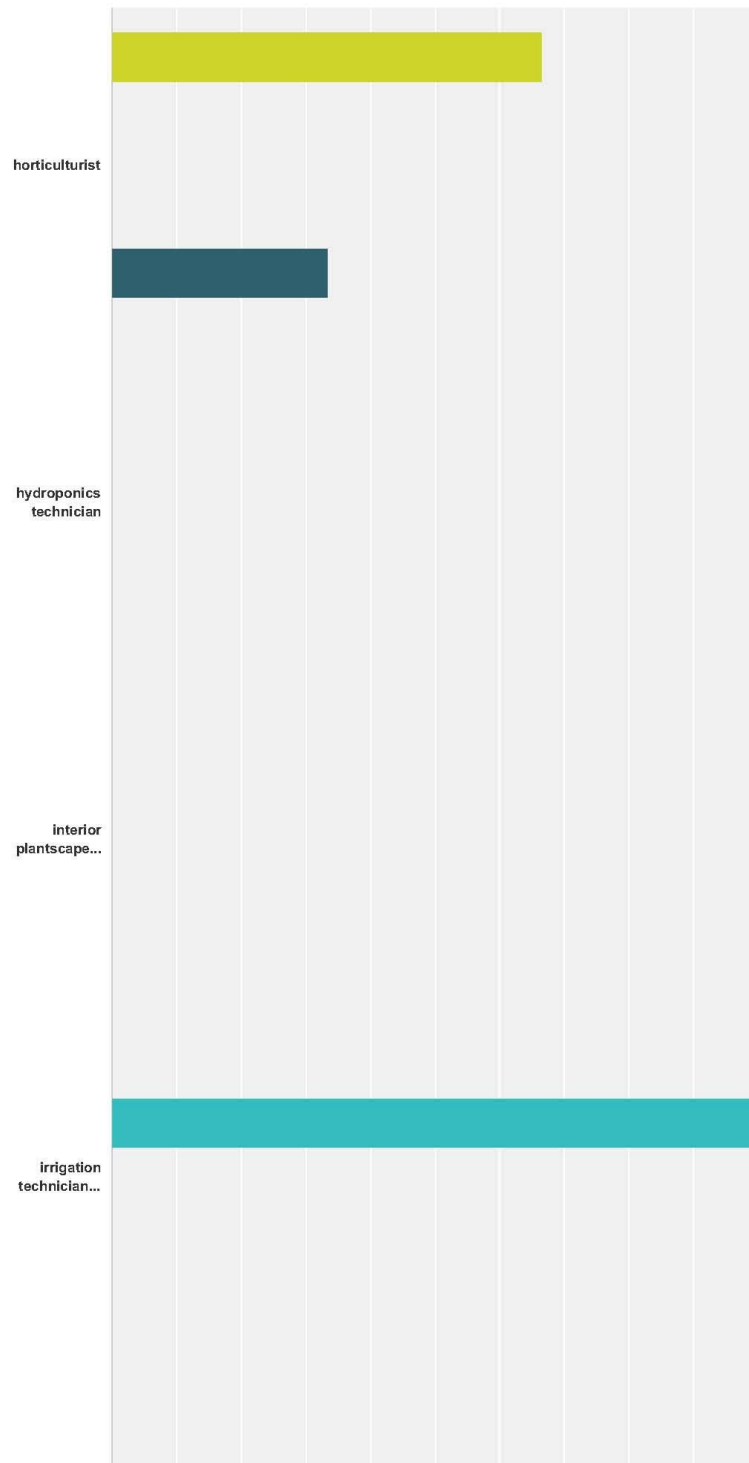
horticulture
specialist

horticulture
technician

horticulture
technologist

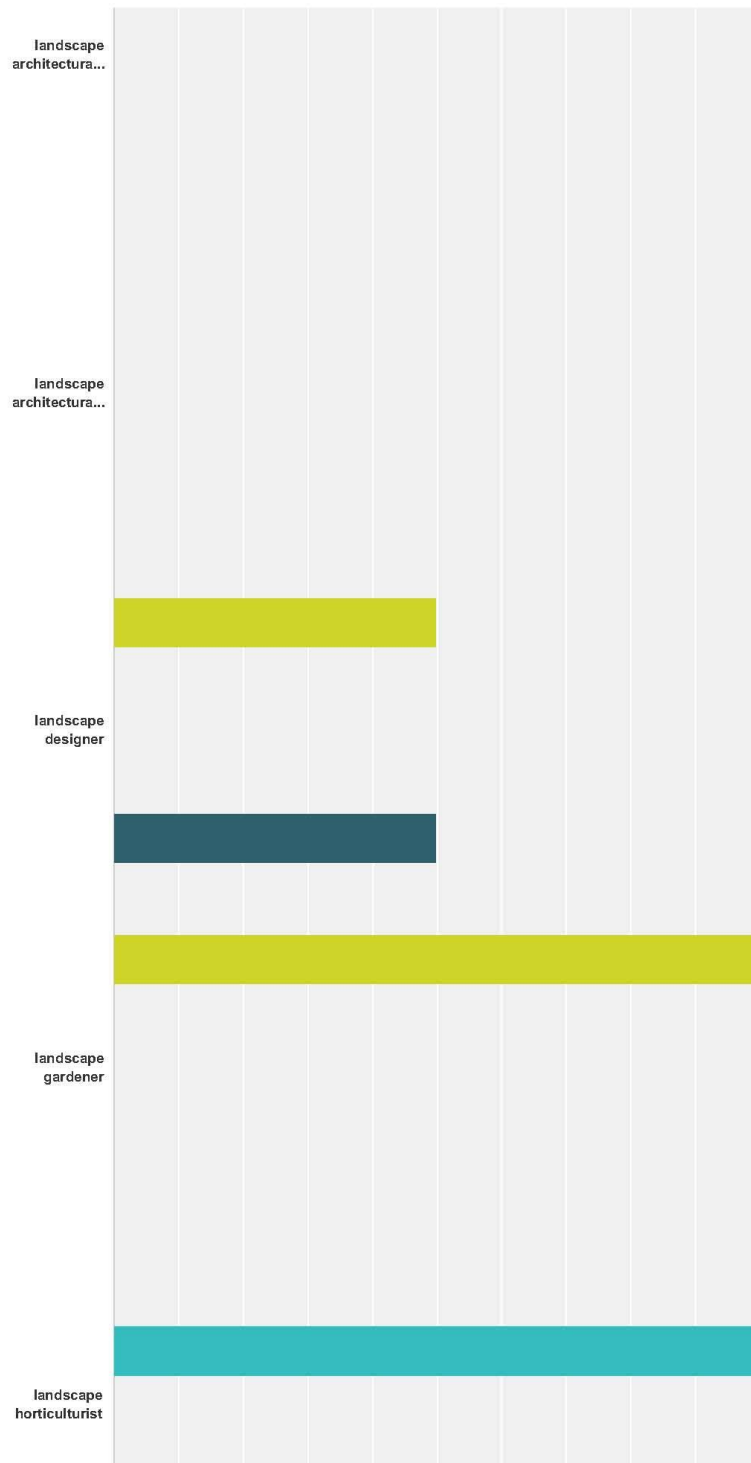
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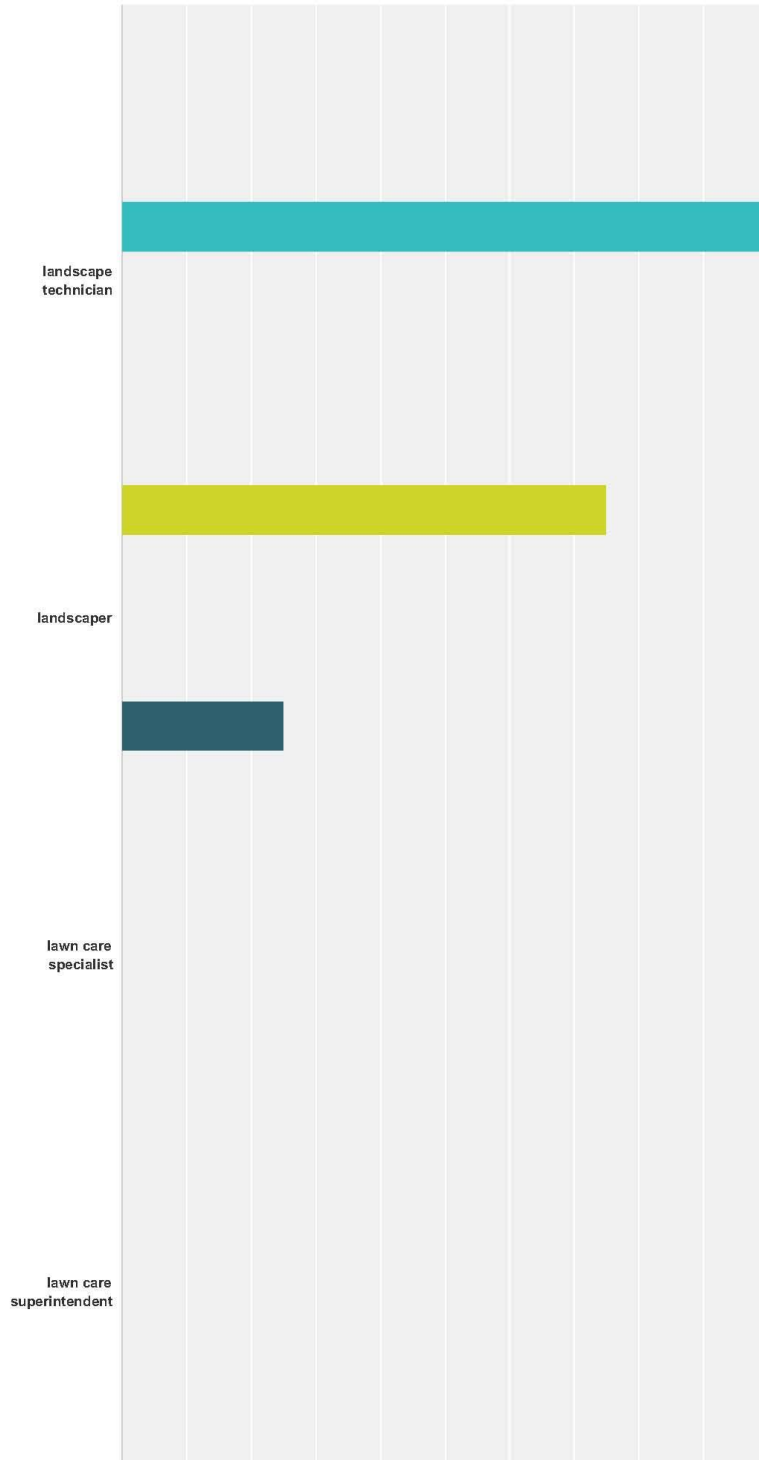
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LMP Phase 1 Landscape



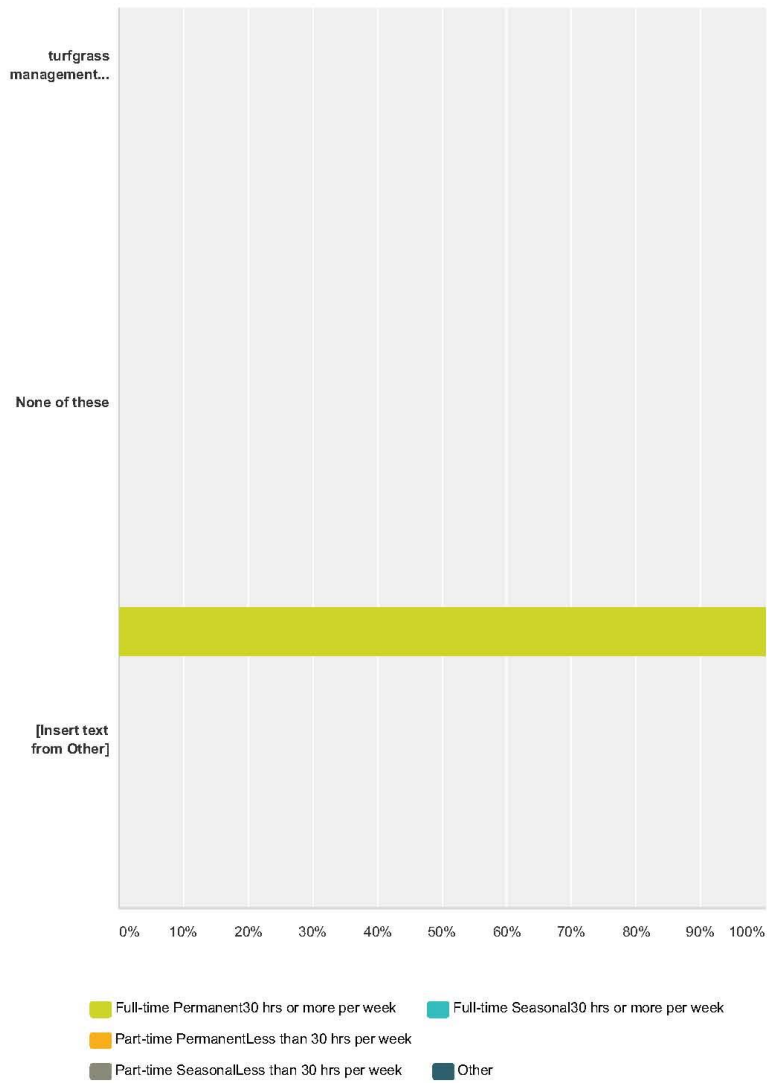
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	Full-time Permanent 30 hrs or more per week	Full-time Seasonal 30 hrs or more per week	Part-time Permanent Less than 30 hrs per week	Part-time Seasonal Less than 30 hrs per week	Other	Total Respondents
arboriculturist	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
arborist	66.67% 2	0.00% 0	0.00% 0	0.00% 0	33.33% 1	3
floriculturist	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
gardener	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1

LMP Phase 1 Landscape

golf course superintendent	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
greens superintendent	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
greenskeeper	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
horticultural technician	50.00% 1	50.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	2
horticultural technologist	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
horticulture specialist	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
horticulture technician	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
horticulture technologist	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
horticulturist	66.67% 2	0.00% 0	0.00% 0	0.00% 0	0.00% 0	33.33% 1	3
hydroponics technician	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
interior plantscape specialist	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
irrigation technician (except agriculture)	0.00% 0	100.00% 2	0.00% 0	0.00% 0	0.00% 0	0.00% 0	2
landscape architectural technician	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
landscape architectural technologist	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
landscape designer	50.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	50.00% 1	2
landscape gardener	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
landscape horticulturist	0.00% 0	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
landscape technician	0.00% 0	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
landscaper	75.00% 3	0.00% 0	0.00% 0	0.00% 0	0.00% 0	25.00% 1	4
lawn care specialist	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
lawn care superintendent	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
plant doctor	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
plantscape technician	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
tree and shrub specialist	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0

LMP Phase 1 Landscape

tree service technician	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
turfgrass management specialist	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
None of these	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
[Insert text from Other]	100.00% 3	0.00% 0	0.00% 0	0.00% 0	0.00% 0	3

#	Other (please specify)	Date
1	Sub contract per project. Minimum per year total 50 hours for all s/c	2/24/2017 5:47 AM
2	the descriptions for job titles above are not very good.	2/24/2017 5:21 AM

LMP Phase 1 Landscape

**Q14 Based on your selections for NOC 7522
Public works maintenance equipment
operators and related workers; how many
positions do you employ for each category?**

Answered: 1 Skipped: 10

Answer Choices	Responses
collection truck driver – public works	0.00% 0
drain roto servicer – public works	0.00% 0
electrical forester	0.00% 0
equipment operator – municipal public work	0.00% 0
garbage collector – driver	0.00% 0
garbage truck driver	0.00% 0
garbage truck driver – public works	0.00% 0
highway snow removal equipment operator	0.00% 0
highway snowplough operator	0.00% 0
maintenance equipment operator – public works	100.00% 1
mechanical sweeper operator – public works	0.00% 0
municipal maintenance equipment operator	0.00% 0
municipal servicer drain roto	0.00% 0
power pole inspector	0.00% 0
power sweeper operator – public works	0.00% 0
public works maintenance equipment operator	0.00% 0
recycling truck driver	0.00% 0
recycling truck driver – public works	0.00% 0
refuse truck driver – public works	0.00% 0
road snowplough operator – public works	0.00% 0
salt truck operator	0.00% 0
salt truck operator – public works	0.00% 0
sand spreader operator	0.00% 0
sand spreader operator – public works	0.00% 0
sanding truck operator – public works	0.00% 0
sanitation truck driver	0.00% 0
sewer flusher operator-driver – public works	0.00% 0
sewer jet cleaner operator – public works	0.00% 0
sewer jet machine operator – public works	0.00% 0

LMP Phase 1 Landscape

sewer-flushing truck operator	0.00%	0
sewer-flushing truck operator – public works	0.00%	0
sewer-pipe-cleaning machine operator – public works	0.00%	0
snow removal equipment operator – public works	0.00%	0
sprinkling truck driver – public works	0.00%	0
street flusher operator	0.00%	0
street flusher operator – public works	0.00%	0
street sprinkler operator – public works	0.00%	0
street sweeper operator	0.00%	0
street sweeper operator – public works	0.00%	0
urban snow removal equipment operator – public works	0.00%	0
utility arborist	0.00%	0
utility forester	0.00%	0
utility locator	0.00%	0
utility pole inspector	0.00%	0
utility pole tester	0.00%	0
utility tree trimmer	0.00%	0
utility tree worker	0.00%	0
None of these	0.00%	0
[Insert text from Other]	0.00%	0

#	collection truck driver – public works	Date
	There are no responses.	
#	drain roto servicer – public works	Date
	There are no responses.	
#	electrical forester	Date
	There are no responses.	
#	equipment operator – municipal public work	Date
	There are no responses.	
#	garbage collector – driver	Date
	There are no responses.	
#	garbage truck driver	Date
	There are no responses.	
#	garbage truck driver – public works	Date
	There are no responses.	
#	highway snow removal equipment operator	Date
	There are no responses.	
#	highway snowplough operator	Date
	There are no responses.	
#	maintenance equipment operator – public works	Date

LMP Phase 1 Landscape

1	1	2/28/2017 3:09 PM
#	mechanical sweeper operator – public works	Date
	There are no responses.	
#	municipal maintenance equipment operator	Date
	There are no responses.	
#	municipal servicer drain roto	Date
	There are no responses.	
#	power pole inspector	Date
	There are no responses.	
#	power sweeper operator – public works	Date
	There are no responses.	
#	public works maintenance equipment operator	Date
	There are no responses.	
#	recycling truck driver	Date
	There are no responses.	
#	recycling truck driver – public works	Date
	There are no responses.	
#	refuse truck driver – public works	Date
	There are no responses.	
#	road snowplough operator – public works	Date
	There are no responses.	
#	salt truck operator	Date
	There are no responses.	
#	salt truck operator – public works	Date
	There are no responses.	
#	sand spreader operator	Date
	There are no responses.	
#	sand spreader operator – public works	Date
	There are no responses.	
#	sanding truck operator – public works	Date
	There are no responses.	
#	sanitation truck driver	Date
	There are no responses.	
#	sewer flusher operator-driver – public works	Date
	There are no responses.	
#	sewer jet cleaner operator – public works	Date
	There are no responses.	
#	sewer jet machine operator – public works	Date
	There are no responses.	
#	sewer-flushing truck operator	Date
	There are no responses.	
#	sewer-flushing truck operator – public works	Date
	There are no responses.	
#	sewer-pipe-cleaning machine operator – public works	Date

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	There are no responses.	
#	snow removal equipment operator – public works	Date
	There are no responses.	
#	sprinkling truck driver – public works	Date
	There are no responses.	
#	street flusher operator	Date
	There are no responses.	
#	street flusher operator – public works	Date
	There are no responses.	
#	street sprinkler operator – public works	Date
	There are no responses.	
#	street sweeper operator	Date
	There are no responses.	
#	street sweeper operator – public works	Date
	There are no responses.	
#	urban snow removal equipment operator – public works	Date
	There are no responses.	
#	utility arborist	Date
	There are no responses.	
#	utility forester	Date
	There are no responses.	
#	utility locator	Date
	There are no responses.	
#	utility pole inspector	Date
	There are no responses.	
#	utility pole tester	Date
	There are no responses.	
#	utility tree trimmer	Date
	There are no responses.	
#	utility tree worker	Date
	There are no responses.	
#	None of these	Date
	There are no responses.	
#	[Insert text from Other]	Date
	There are no responses.	

LMP Phase 1 Landscape

Q15 How many of the positions you listed for NOC 7522 Public works maintenance equipment operators and related workers, are held by women?

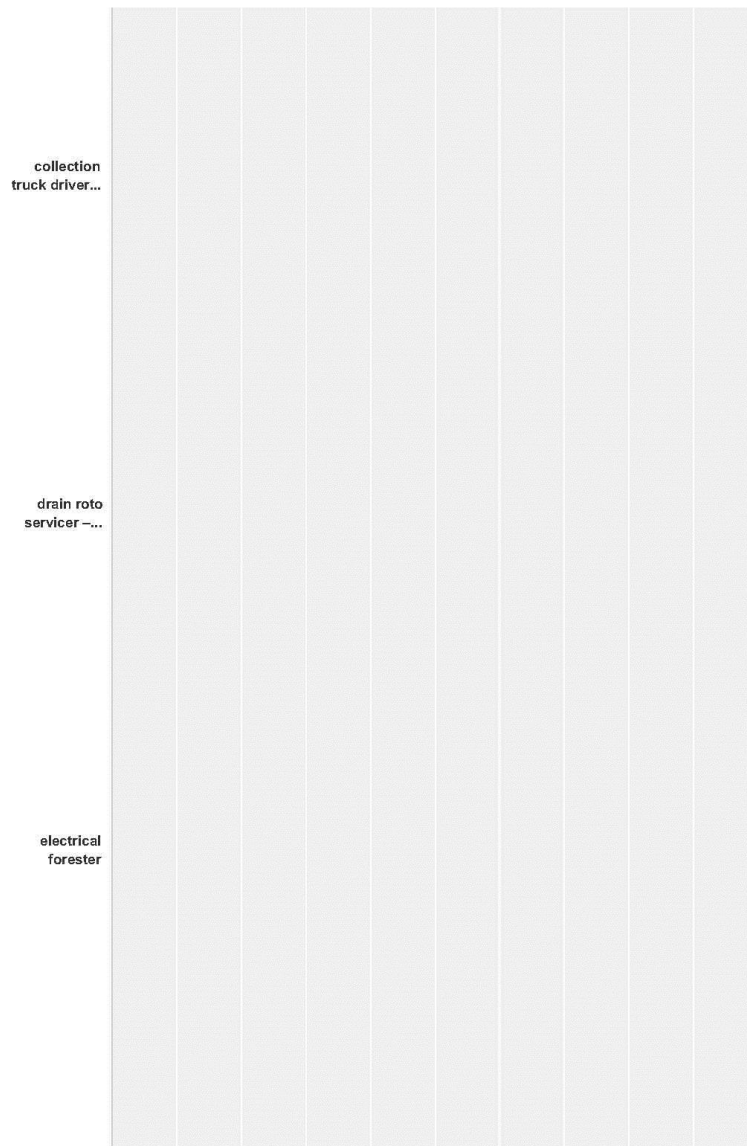
Answered: 2 Skipped: 9

#	Responses	Date
1	6	3/7/2017 8:08 AM
2	1	2/28/2017 3:09 PM

LMP Phase 1 Landscape

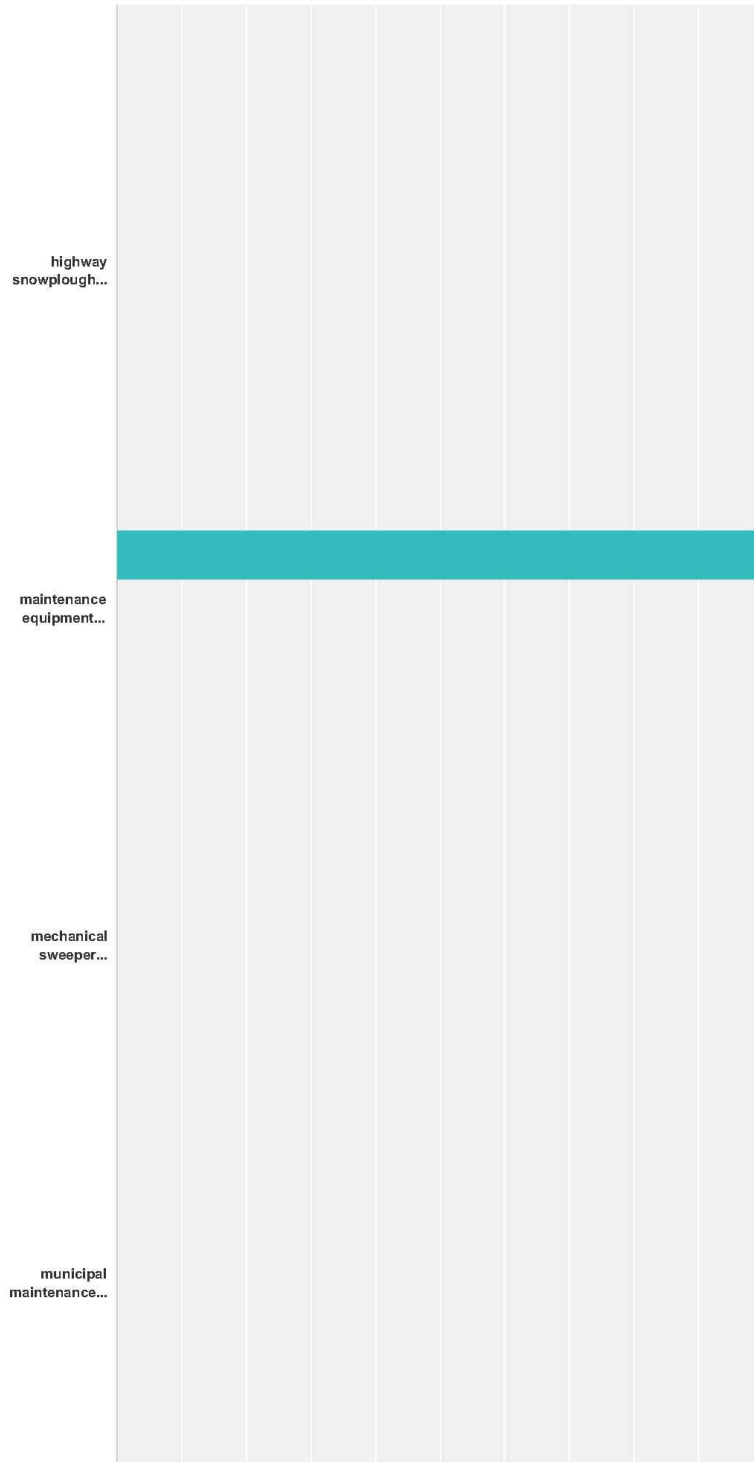
Q16 Based on your selections for NOC 7522 Public works maintenance equipment operators and related workers; what position "types" do you have for each title? (Select all that apply)Note*, "Seasonal" work is defined as, steady hours "for some but not all months of the year".

Answered: 1 Skipped: 10



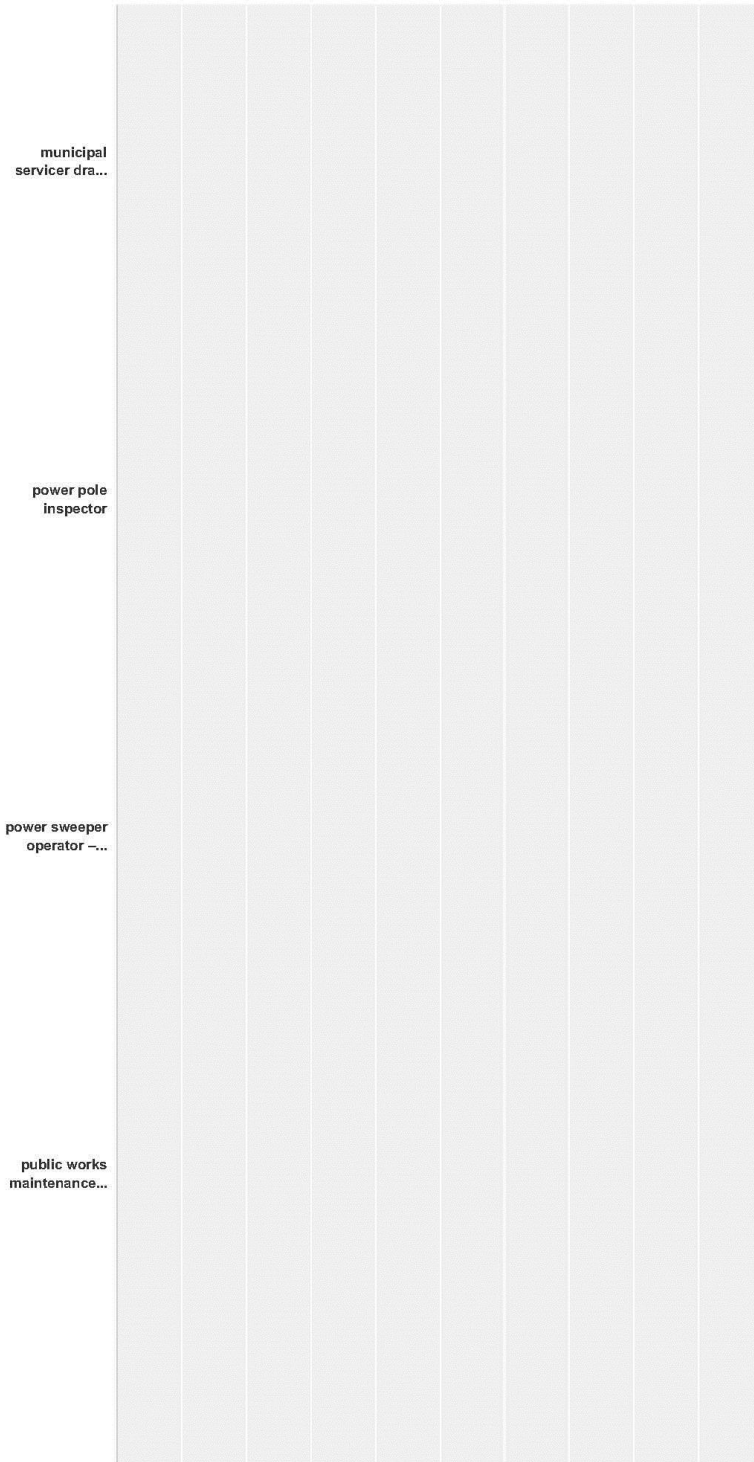
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recycling truck driver

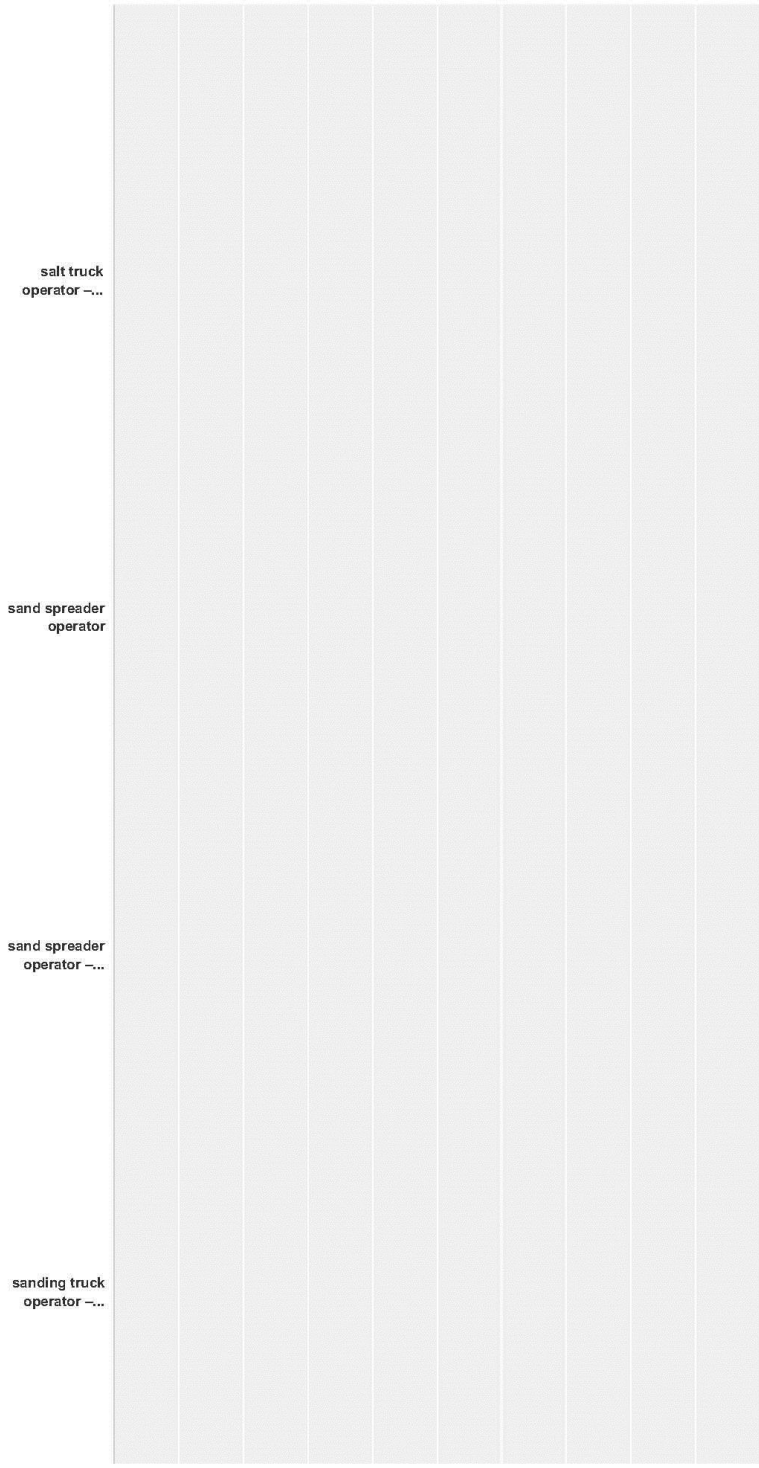
recycling truck driver...

refuse truck driver - pub...

road snowplough...

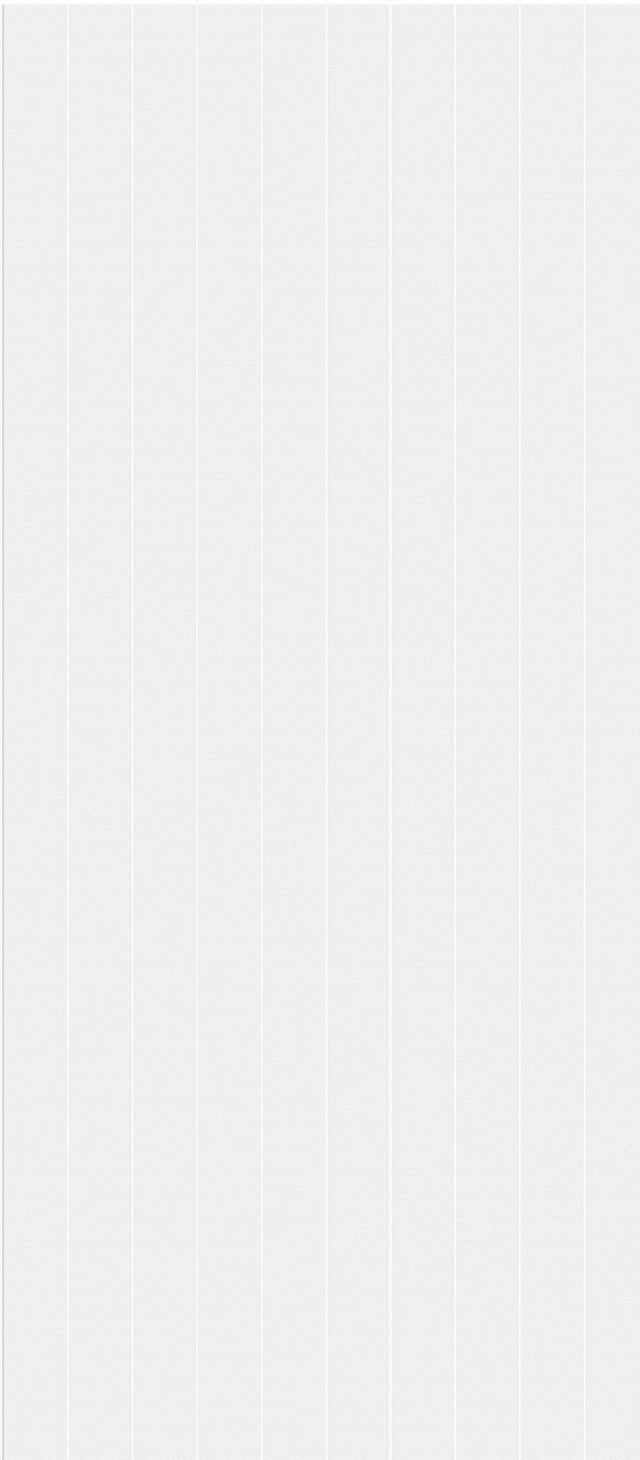
salt truck operator

LMP Phase 1 Landscape



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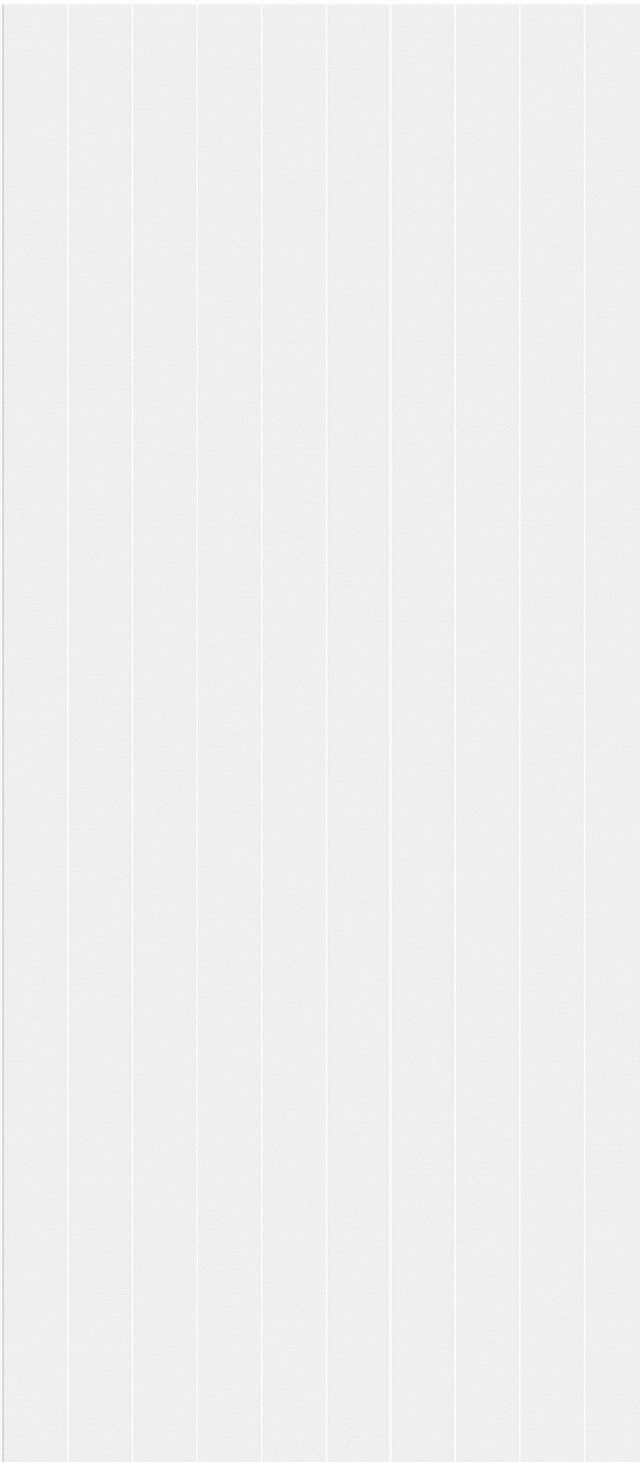
LMP Phase 1 Landscape



sanitation truck driver
sewer flusher operator-dri...
sewer jet cleaner...
sewer jet machine...

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LMP Phase 1 Landscape



sewer-flushing truck operator
sewer-flushing truck operat...
sewer-pipe-clea ning machine...
snow removal equipment...
sprinkling truck driver...

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LMP Phase 1 Landscape

landscape design contractor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
landscape maintenance contractor	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
landscape service contractor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
landscaping contractor	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
landscaping foreman/woman	100.00% 1	100.00% 1	0.00% 0	0.00% 0	0.00% 0	1
landscaping supervisor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
lawn care contractor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
lawn care service contractor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
lawn care supervisor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
lawn maintenance contractor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
maintenance worker supervisor – campground	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
nursery foreman/woman	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
nursery supervisor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
nursery worker crew chief	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
nursery worker foreman/woman	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
nursery workers supervisor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
park caretaker	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
park labourers supervisor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
park maintenance head	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
park maintenance supervisor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
park section head – arboriculture	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
plantscape maintenance contractor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
public works grounds maintenance labourer supervisor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
public works grounds maintenance worker supervisor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
tree removal contractor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0

LMP Phase 1 Landscape

tree service contractor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
tree service supervisor	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
weed control foreman/woman	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
None of these	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
[Insert text from Other]	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0

#	Other (please specify)	Date
	There are no responses.	

LMP Phase 1 Landscape

**Q20 Based on your selections for NOC 8612
Landscaping and grounds maintenance
labourers; how many positions do you
employ for each category?**

Answered: 3 Skipped: 8

Answer Choices	Responses
bulb planter – landscaping	33.33% 1
campground maintenance worker	0.00% 0
cemetery labourer	33.33% 1
cemetery worker	33.33% 1
chemical applicator – lawn care	33.33% 1
gardener helper	0.00% 0
gardening helper	0.00% 0
golf course labourer	0.00% 0
golf course worker	0.00% 0
grass cutter	0.00% 0
grave digger	0.00% 0
greens worker	0.00% 0
greenskeeper helper	0.00% 0
grounds maintainer	0.00% 0
grounds maintenance labourer	66.67% 2
grounds maintenance worker	0.00% 0
groundskeeper	0.00% 0
groundsmen/woman	0.00% 0
groundsperson – campground	0.00% 0
landscape gardener helper	0.00% 0
landscape gardening helper	0.00% 0
landscape labourer	66.67% 2
landscape worker	0.00% 0
lawn care labourer	0.00% 0
lawn care worker	0.00% 0
lawn mower	0.00% 0
lawn-mowing worker	0.00% 0
park maintenance labourer	0.00% 0
park maintenance worker	0.00% 0

LMP Phase 1 Landscape

plant care worker	33.33%	1
plant doctor helper	0.00%	0
snow shoveller – grounds maintenance	0.00%	0
sod layer	0.00%	0
sod laying labourer	0.00%	0
stadium groundskeeper	0.00%	0
transplanter – landscape maintenance	0.00%	0
tree pruner – landscaping	66.67%	2
tree sprayer	0.00%	0
tree surgeon helper	0.00%	0
tree trimmer – landscaping	0.00%	0
None of these	0.00%	0
[Insert text from Other]	0.00%	0

#	bulb planter – landscaping	Date
1	4	3/6/2017 5:58 PM
#	campground maintenance worker	Date
	There are no responses.	
#	cemetery labourer	Date
1	2	2/28/2017 3:09 PM
#	cemetery worker	Date
1	1	2/28/2017 3:09 PM
#	chemical applicator – lawn care	Date
1	3	3/6/2017 5:58 PM
#	gardener helper	Date
	There are no responses.	
#	gardening helper	Date
	There are no responses.	
#	golf course labourer	Date
	There are no responses.	
#	golf course worker	Date
	There are no responses.	
#	grass cutter	Date
	There are no responses.	
#	grave digger	Date
	There are no responses.	
#	greens worker	Date
	There are no responses.	
#	greenskeeper helper	Date
	There are no responses.	
#	grounds maintainer	Date

LMP Phase 1 Landscape

	There are no responses.	
#	grounds maintenance labourer	Date
1	80	3/6/2017 5:58 PM
2	3	2/28/2017 3:09 PM
#	grounds maintenance worker	Date
	There are no responses.	
#	groundskeeper	Date
	There are no responses.	
#	groundsman/woman	Date
	There are no responses.	
#	groundsperson – campground	Date
	There are no responses.	
#	landscape gardener helper	Date
	There are no responses.	
#	landscape gardening helper	Date
	There are no responses.	
#	landscape labourer	Date
1	12	3/6/2017 5:58 PM
2	12	2/28/2017 3:09 PM
#	landscape worker	Date
	There are no responses.	
#	lawn care labourer	Date
	There are no responses.	
#	lawn care worker	Date
	There are no responses.	
#	lawn mower	Date
	There are no responses.	
#	lawn-mowing worker	Date
	There are no responses.	
#	park maintenance labourer	Date
	There are no responses.	
#	park maintenance worker	Date
	There are no responses.	
#	plant care worker	Date
1	3	3/6/2017 5:58 PM
#	plant doctor helper	Date
	There are no responses.	
#	snow shoveller – grounds maintenance	Date
	There are no responses.	
#	sod layer	Date
	There are no responses.	
#	sod laying labourer	Date
	There are no responses.	
#	stadium groundskeeper	Date

LMP Phase 1 Landscape

	There are no responses.	
#	transplanter – landscape maintenance	Date
	There are no responses.	
#	tree pruner – landscaping	Date
1	10	3/6/2017 5:58 PM
2	1	2/24/2017 5:47 AM
#	tree sprayer	Date
	There are no responses.	
#	tree surgeon helper	Date
	There are no responses.	
#	tree trimmer – landscaping	Date
	There are no responses.	
#	None of these	Date
	There are no responses.	
#	[Insert text from Other]	Date
	There are no responses.	

LMP Phase 1 Landscape

Q21 How many of the positions you listed for NOC 8612 Landscaping and grounds maintenance labourers, are held by women?

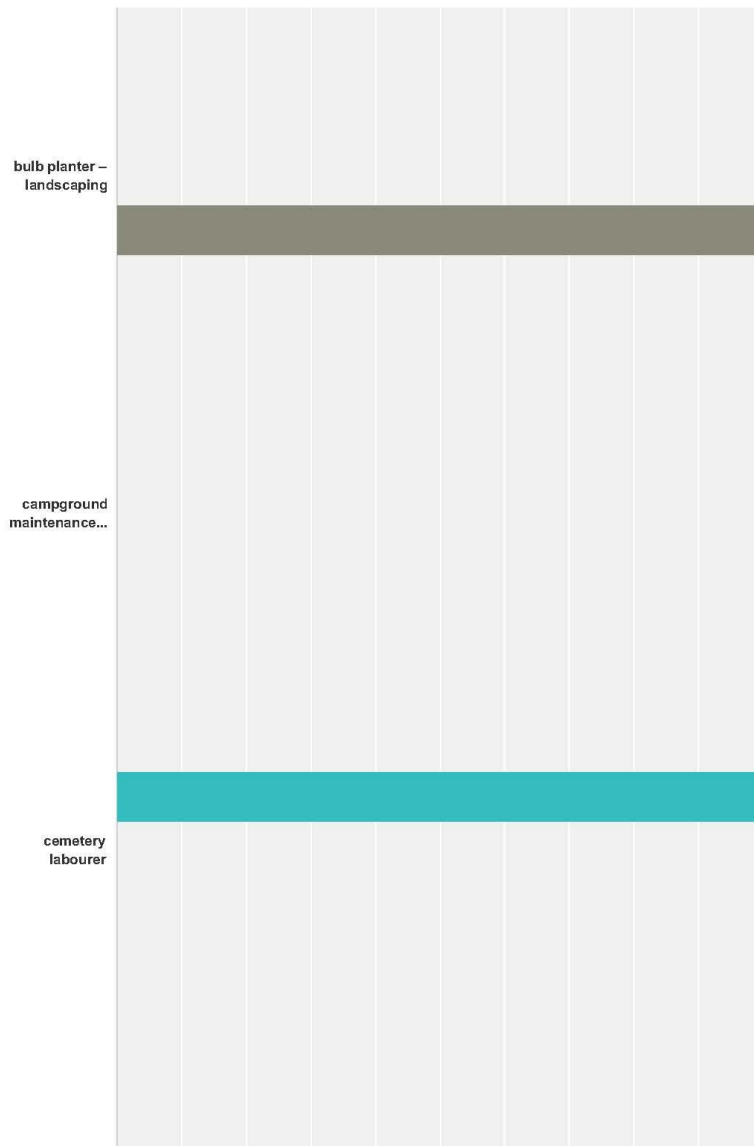
Answered: 3 Skipped: 8

#	Responses	Date
1	6	3/7/2017 8:08 AM
2	50	3/6/2017 5:58 PM
3	2	2/28/2017 3:09 PM

LMP Phase 1 Landscape

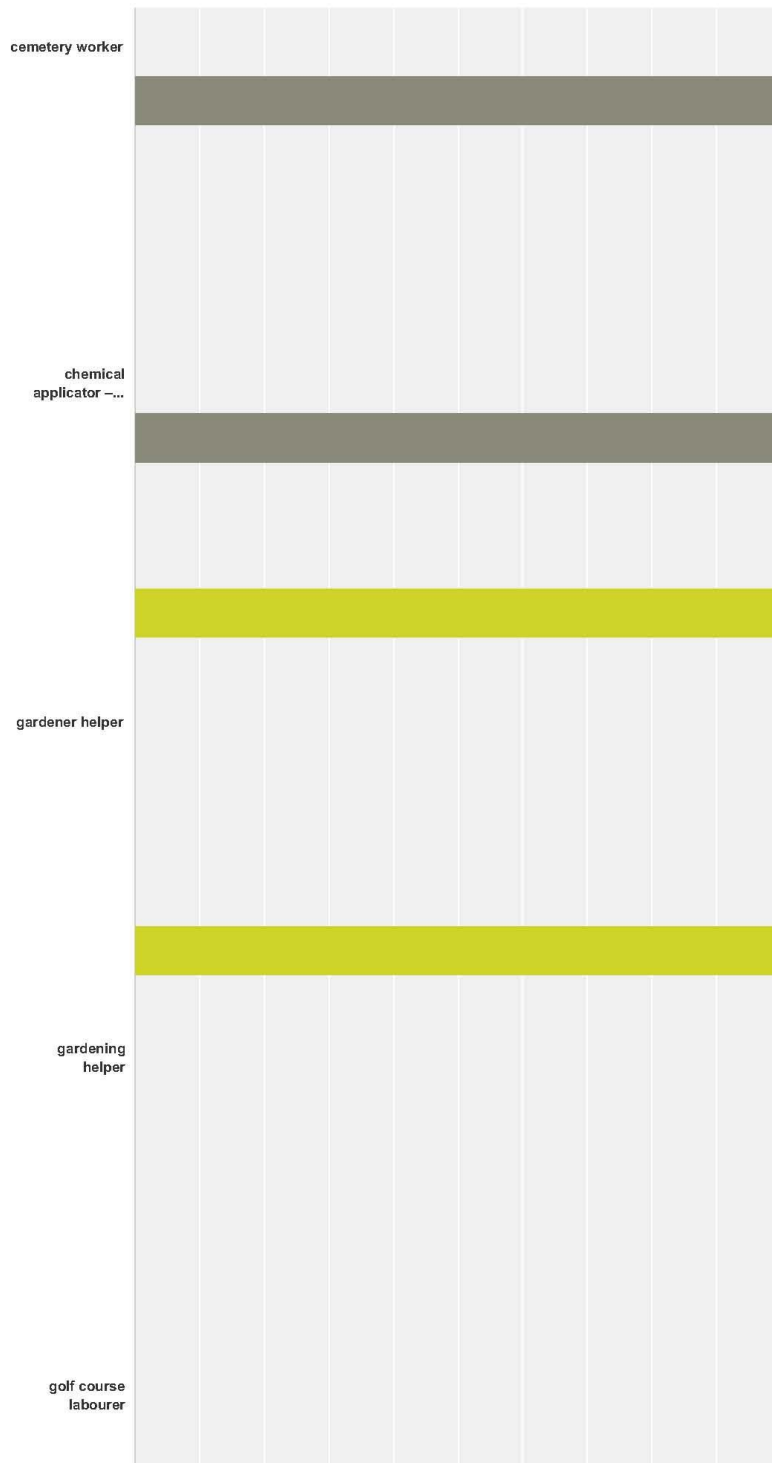
Q22 Based on your selections for NOC 8612 Landscaping and grounds maintenance labourers; what position "types" do you have for each title? (Select all that apply)Note*, "Seasonal" work is defined as, steady hours "for some but not all months of the year".

Answered: 4 Skipped: 7



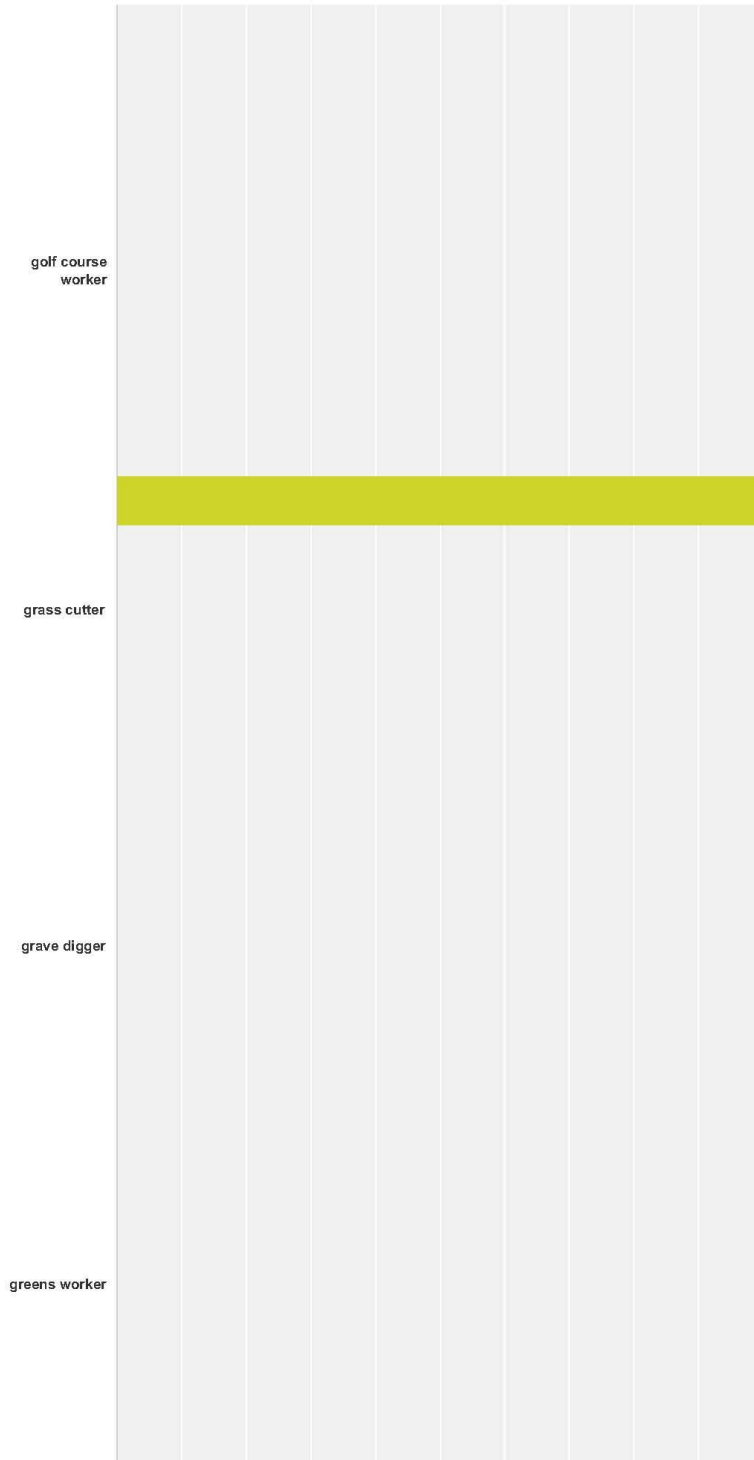
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LMP Phase 1 Landscape



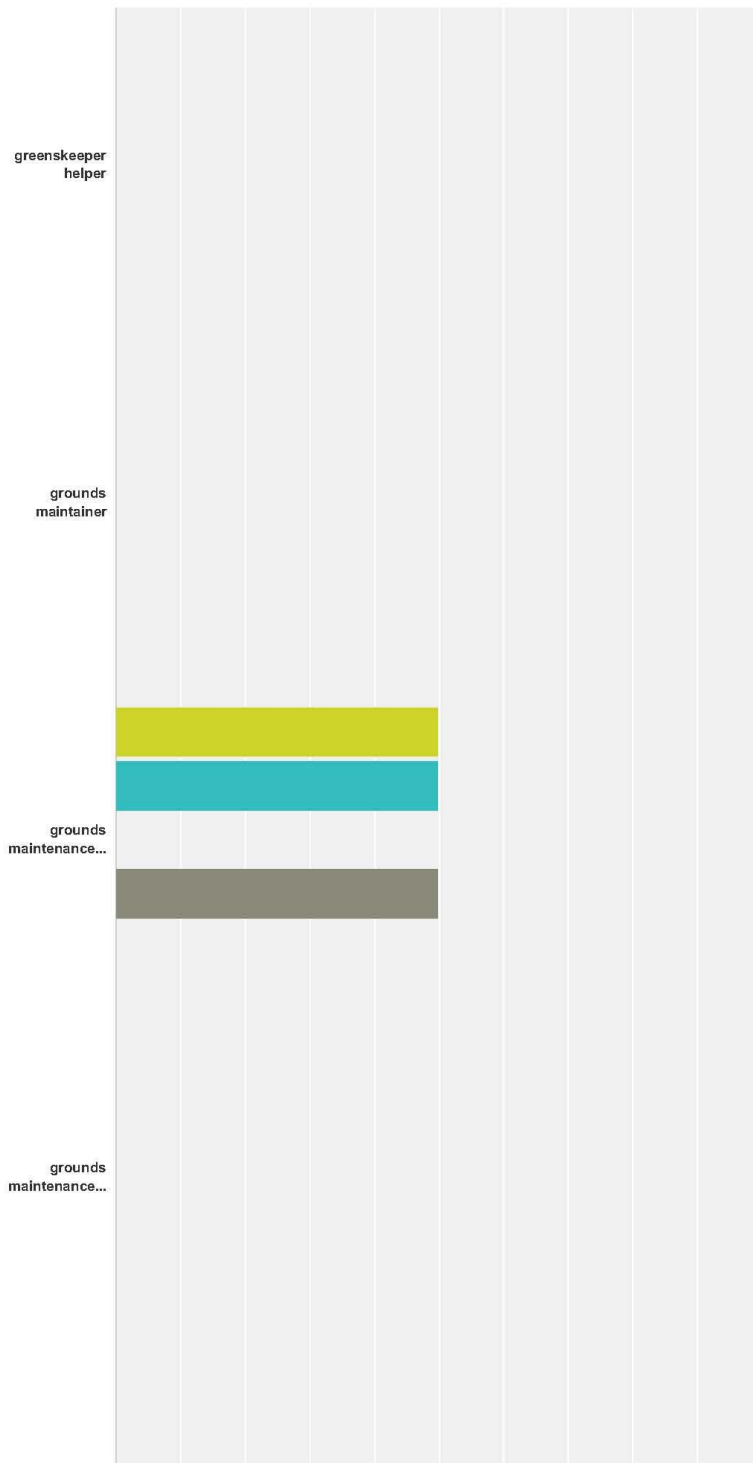
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LMP Phase 1 Landscape



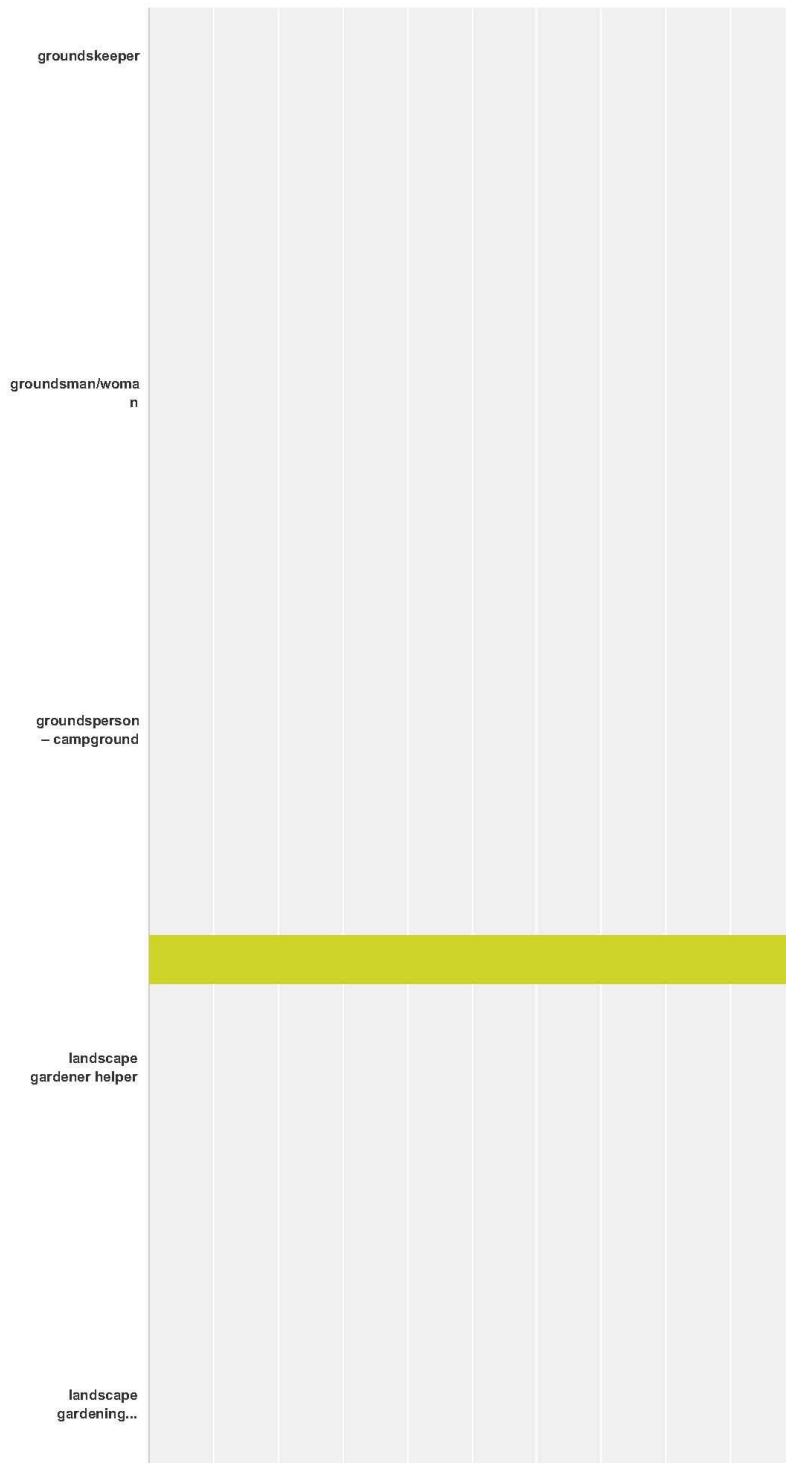
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LMP Phase 1 Landscape



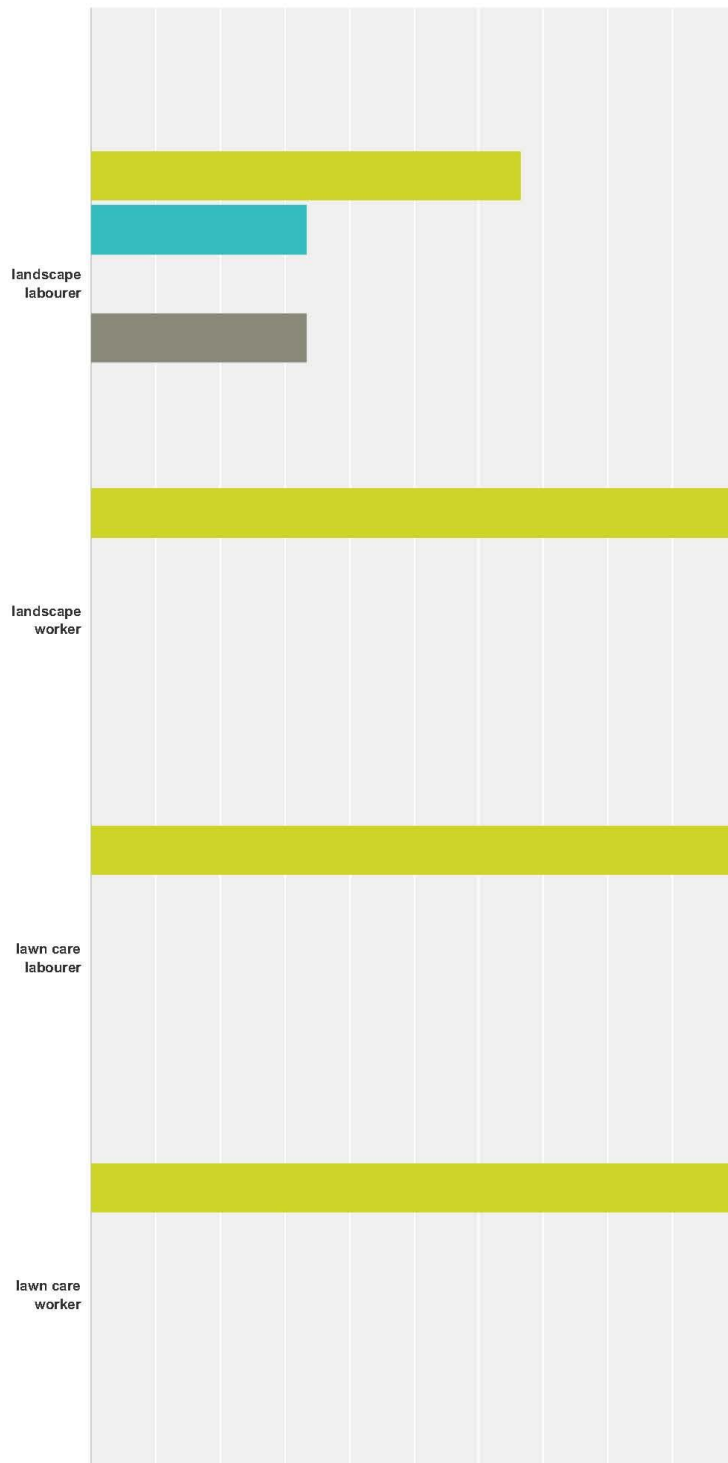
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LMP Phase 1 Landscape



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LMP Phase 1 Landscape



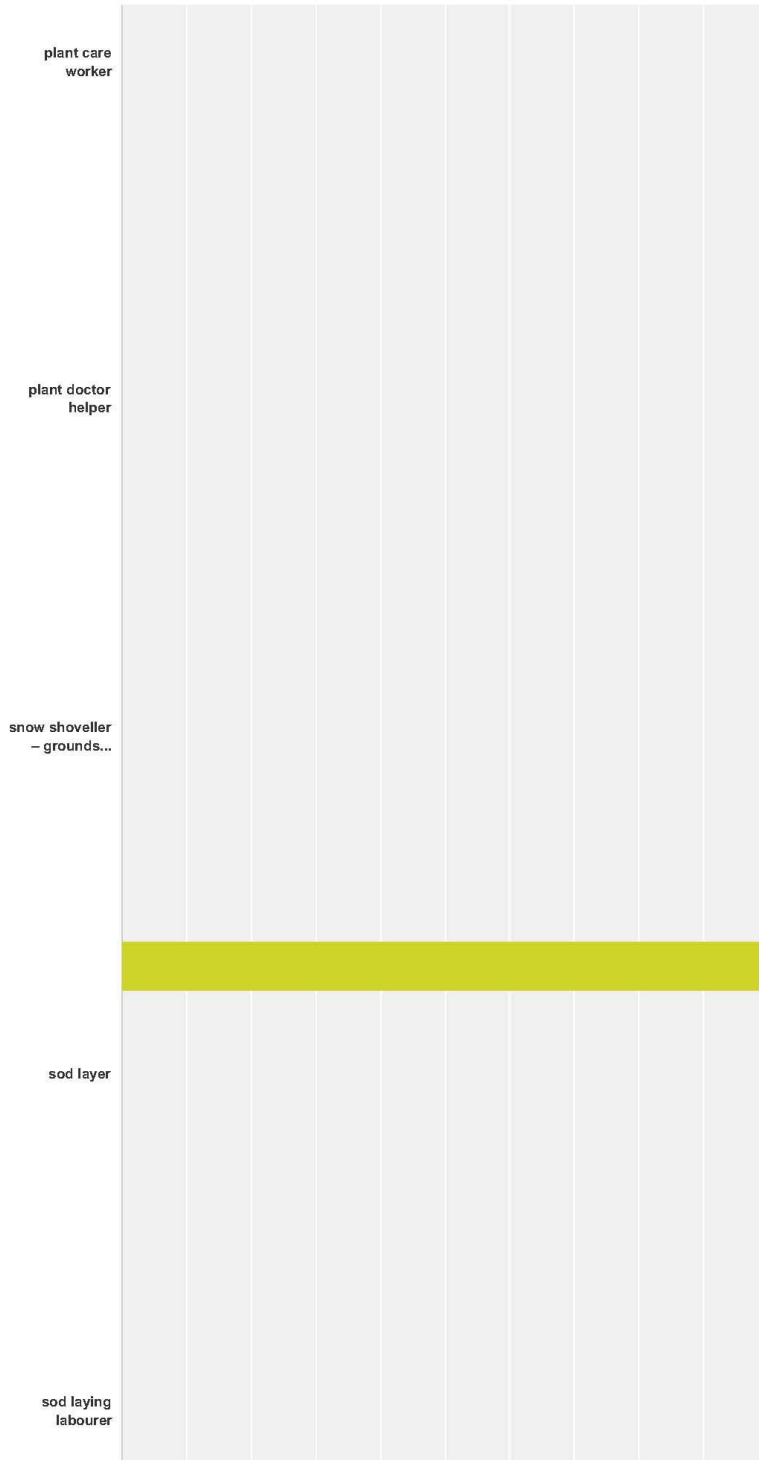
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LMP Phase 1 Landscape



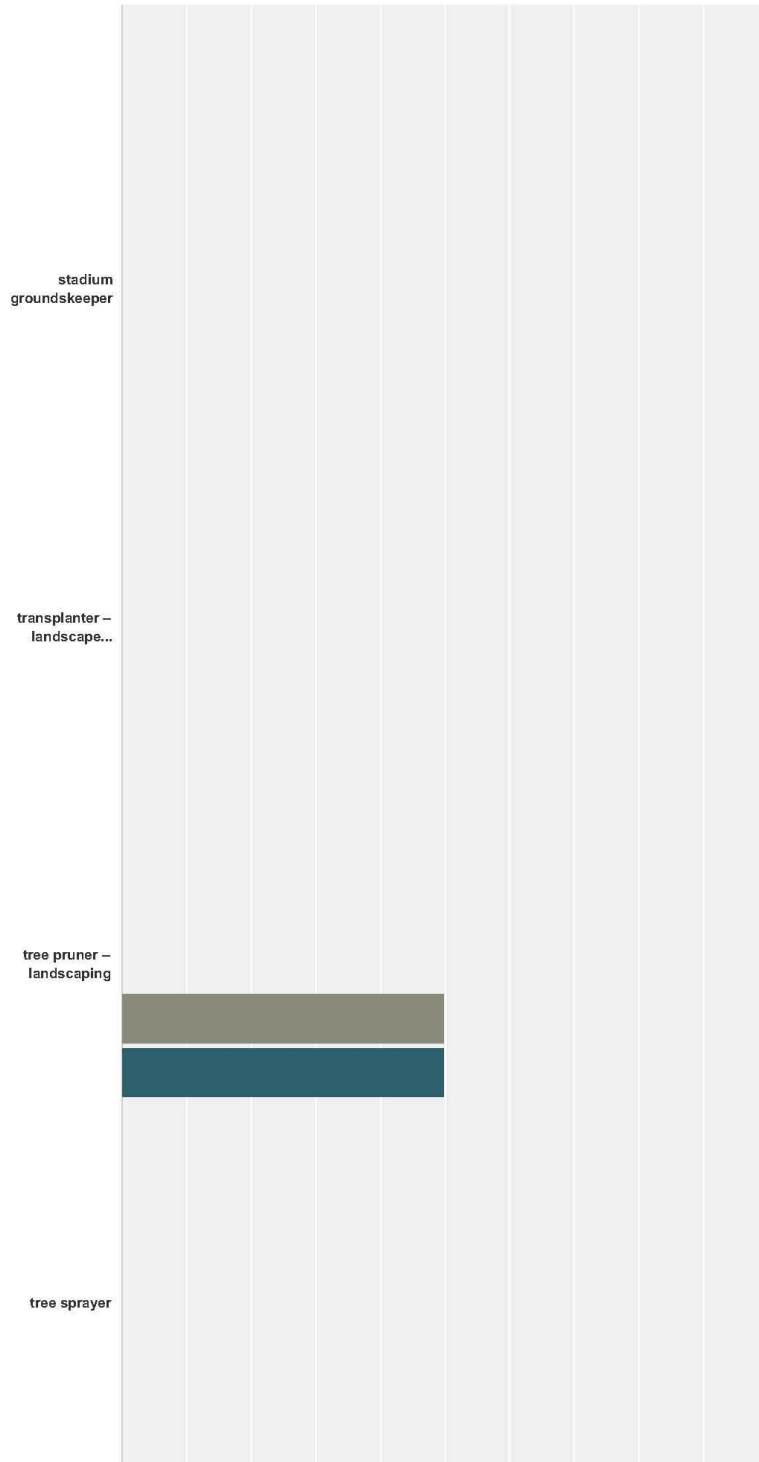
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LMP Phase 1 Landscape



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LMP Phase 1 Landscape



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LMP Phase 1 Landscape



LMP Phase 1 Landscape



	Full-time Permanent 30 hrs or more per week	Full-time Seasonal 30 hrs or more per week	Part-time Permanent Less than 30 hrs per week	Part-time Seasonal Less than 30 hrs per week	Other	Total Respondents
bulb planter – landscaping	0.00% 0	0.00% 0	0.00% 0	100.00% 1	0.00% 0	1
campground maintenance worker	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
cemetery labourer	0.00% 0	100.00% 1	0.00% 0	0.00% 0	0.00% 0	1
cemetery worker	0.00% 0	0.00% 0	0.00% 0	100.00% 1	0.00% 0	1
chemical applicator – lawn care	0.00% 0	0.00% 0	0.00% 0	100.00% 1	0.00% 0	1
gardener helper	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
gardening helper	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
golf course labourer	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
golf course worker	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
grass cutter	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
grave digger	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
greens worker	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
greenskeeper helper	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
grounds maintainer	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
grounds maintenance labourer	50.00% 1	50.00% 1	0.00% 0	50.00% 1	0.00% 0	2
grounds maintenance worker	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
groundskeeper	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
groundsmen/woman	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
groundsperson – campground	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
landscape gardener helper	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1
landscape gardening helper	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0
landscape labourer	66.67% 2	33.33% 1	0.00% 0	33.33% 1	0.00% 0	3

LMP Phase 1 Landscape

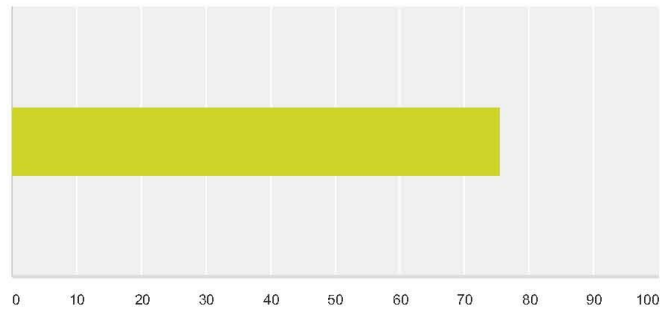
landscape worker	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1
	1	0	0	0	0	0	
lawn care labourer	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1
	1	0	0	0	0	0	
lawn care worker	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1
	1	0	0	0	0	0	
lawn mower	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
lawn-mowing worker	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
park maintenance labourer	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
park maintenance worker	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
plant care worker	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1
	1	0	0	0	0	0	
plant doctor helper	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
snow shoveller – grounds maintenance	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
sod layer	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1
	1	0	0	0	0	0	
sod laying labourer	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
stadium groundskeeper	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
transplanter – landscape maintenance	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
tree pruner – landscaping	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%	2
	0	0	0	0	1	1	
tree sprayer	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
tree surgeon helper	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
tree trimmer – landscaping	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
None of these	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	
[Insert text from Other]	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0
	0	0	0	0	0	0	

#	Other (please specify)	Date
1	the titles are not good - our employees do more than one thing	2/24/2017 5:21 AM

LMP Phase 1 Landscape

Q23 What percentage of those you have identified as Seasonal workers (Part-time and Full-time combined), return year to year?

Answered: 4 Skipped: 7



Answer Choices	Average Number	Total Number	Responses
	76	302	4
Total Respondents: 4			

#		Date
1	52	3/7/2017 8:08 AM
2	100	3/6/2017 5:58 PM
3	50	2/28/2017 3:09 PM
4	100	2/24/2017 5:21 AM

LMP Phase 1 Landscape

Q24 What percentage of those you have identified as Seasonal Workers (Part-time and Full-time combined), return year to year? Enter numerical percentage from 0-100 or N/A if you do not employ Seasonal Workers

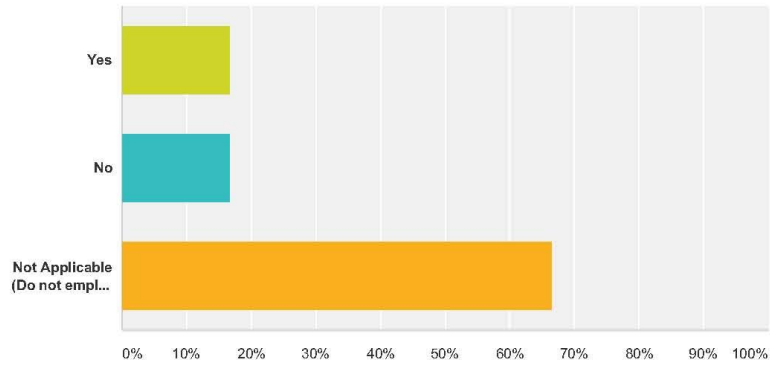
Answered: 5 Skipped: 6

#	Responses	Date
1	52	3/7/2017 8:08 AM
2	the workers that do those seasonal jobs do other jobs the rest of the year	3/6/2017 5:59 PM
3	50	2/28/2017 3:10 PM
4	na	2/24/2017 5:21 AM
5	100	2/23/2017 2:08 PM

LMP Phase 1 Landscape

Q25 Do you provide incentives for seasonal workers to return?

Answered: 6 Skipped: 5



Answer Choices	Responses
Yes	16.67% 1
No	16.67% 1
Not Applicable (Do not employ Seasonal workers)	66.67% 4
Total	6

LMP Phase 1 Landscape

Q26 What incentives do you offer seasonal employees to encourage them to return each year?

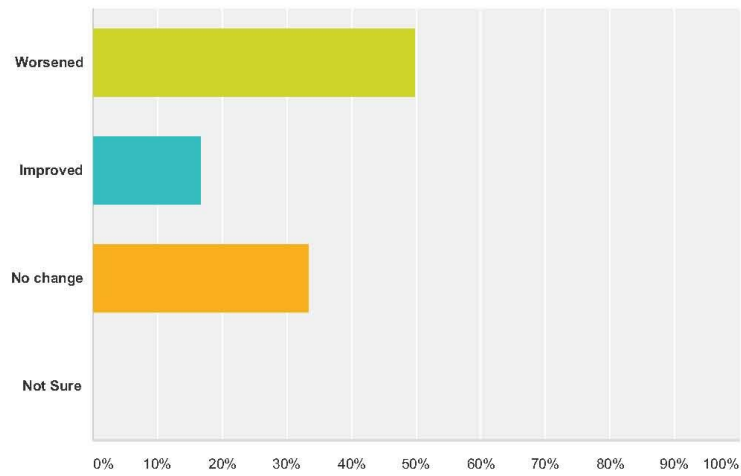
Answered: 1 Skipped: 10

#	Responses	Date
1	training and pay increase	3/7/2017 8:09 AM

LMP Phase 1 Landscape

Q27 How do you perceive the ability of companies to attract and retain workers to the Landscape Industry? In the past 5 years labour market conditions have

Answered: 6 Skipped: 5



Answer Choices	Responses	Count
Worsened	50.00%	3
Improved	16.67%	1
No change	33.33%	2
Not Sure	0.00%	0
Total		6

LMP Phase 1 Landscape

Q28 How many job vacancies were you unable to fill last year (2016 Landscape Season) due to shortage of workers?

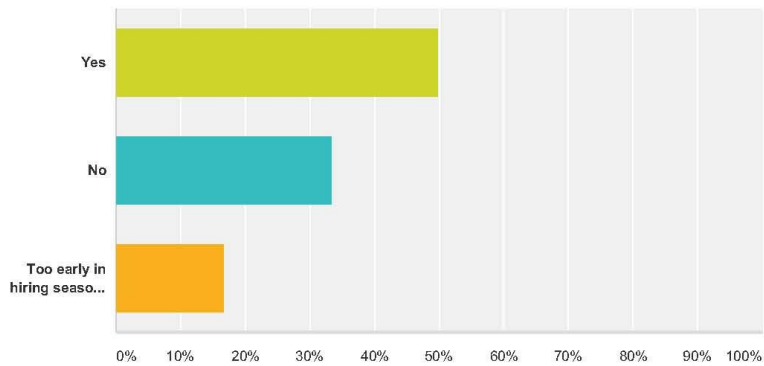
Answered: 5 Skipped: 6

#	Responses	Date
1	0	3/7/2017 8:09 AM
2	12	3/6/2017 6:00 PM
3	6	2/28/2017 3:15 PM
4	0	2/24/2017 5:22 AM
5	18	2/23/2017 2:09 PM

LMP Phase 1 Landscape

Q29 Do you currently have job vacancies your organization is having difficulty filling for the 2017 Landscape spring season?

Answered: 6 Skipped: 5



Answer Choices	Responses
Yes	50.00% 3
No	33.33% 2
Too early in hiring season to know	16.67% 1
Total	6

LMP Phase 1 Landscape

**Q30 If you answered "Yes" to Question 4;
How many open positions do you have
currently that you are having difficulty
finding workers to hire?**

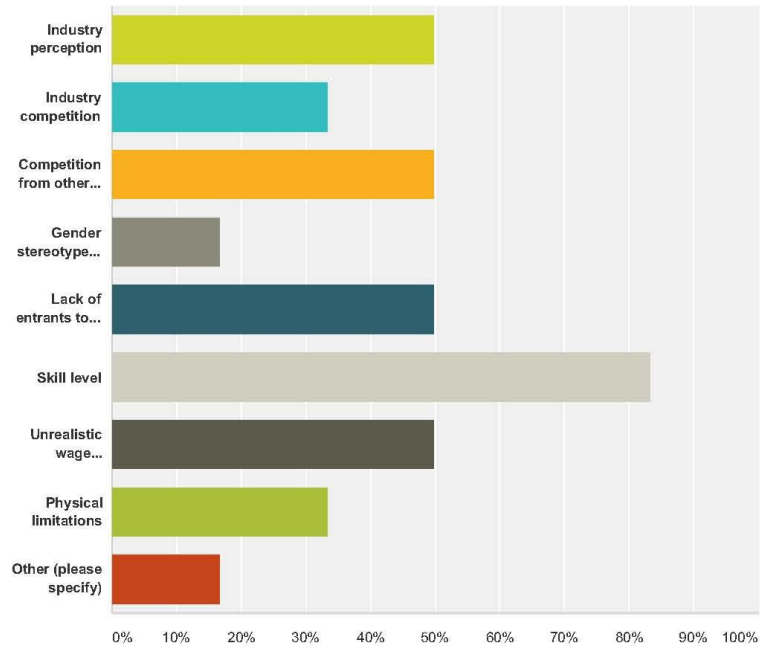
Answered: 3 Skipped: 8

#	Responses	Date
1	25	3/6/2017 6:00 PM
2	10	2/24/2017 5:22 AM
3	18	2/23/2017 2:09 PM

LMP Phase 1 Landscape

Q31 What are the dominant barriers you have encountered in trying to attract applicants? (Select all that apply)

Answered: 6 Skipped: 5



Answer Choices	Responses
Industry perception	50.00% 3
Industry competition	33.33% 2
Competition from other sectors (i.e. Construction)	50.00% 3
Gender stereotype perception	16.67% 1
Lack of entrants to industry	50.00% 3
Skill level	83.33% 5
Unrealistic wage expectations	50.00% 3
Physical limitations	33.33% 2
Other (please specify)	16.67% 1
Total Respondents: 6	

#	Other (please specify)	Date
1	Reliability	3/6/2017 6:01 PM

LMP Phase 1 Landscape

...an apprentice gaining their Certificate of Qualification

Enhanced Tax Credit Amounts*		Enhanced Tax Credit		Enhanced Tax Credit		Enhanced Tax Credit
Basic Tax Credit	Enhanced Tax Credit	Basic Tax Credit	Enhanced Tax Credit	Basic Tax Credit	Enhanced Tax Credit	TOTAL MAX
up to \$6000	up to \$6000	Basic Tax Credit	50% of basic tax credit up to \$2000	Basic Tax Credit	50% of basic tax credit up to \$2000	up to \$8000
Completion Tax Credit Level 2 up to 50% of completion tax credit for level 2 up to \$1250	Completion Tax Credit Level 3 up to 50% of completion tax credit for level 3 up to \$3750	Completion Tax Credit Level 2 up to 50% of completion tax credit for level 2 up to \$1250	Completion Tax Credit Level 3 up to 50% of completion tax credit for level 3 up to \$3750	Completion Tax Credit Level 2 up to 50% of completion tax credit for level 2 up to \$1250	Completion Tax Credit Level 3 up to 50% of completion tax credit for level 3 up to \$3750	Completion Tax Credit Level 2 up to 50% of completion tax credit for level 2 up to \$1250 Completion Tax Credit Level 3 up to 50% of completion tax credit for level 3 up to \$3750

Enhanced credits are for first nations multi-industry employers, or for First Nations individuals and persons with disabilities

For more information and links to the available tax credits, go to <http://www.horteducationbc.com>, click on "Employers Info", click the "Tax Credit thru" link on the left menu. Or visit <http://www.gov.bc.ca/gov/content/industry/industry/employment/corporate/credits/training/landscape>





lindsay@horteducationbc.com
604-430-0422
www.horteducationbc.com

Utility Arborist Apprenticeship

Utility Arborist Apprenticeship Overview

- Technical Training
 1. Block release
 - 6 weeks for Level 1
 - 2 weeks for Level 2
- 2,378 Hours of work experience (including 1,200 in proximity)
- Tax Credits for Apprentices – minimum of \$2000
- Tax Credits for Sponsors – up to \$4000
- Certificate of Qualification as a Utility Arborist

A Certified Utility Arborist is a formal apprenticeship and upon completion provides the individual with a Certificate of Qualifications and a Certificate of Apprenticeship as provided by the Industry Training Authority [ITA]. The program is structured to provide both in-school and work-based training with two correspondence courses also being required.

A Certified Utility Arborist is a person who undertakes any work required to prune or clear vegetation in proximity [defined as a distance of three meters or less from a primary conductor with a voltage of 750 volts or higher] to energized electrical equipment, structures and conductors; or, who in the course of utility line clearing operations, prunes, falls, or removes trees which, could come into contact with energized power lines.

What is apprenticeship?

- The Certified Utility Arborist Apprenticeship process can take up to 2 years to complete
- Requires In-school technical training - Level 1 (6 weeks) and Level 2 (2 weeks) and two correspondence courses.
 - During and at the conclusion of each Level an apprentice will be required to challenge both written and competency based outcomes. (Year One: Level Exam; Year Two:CofQ Exam).
- Requires 2,378 workplace hours with confirmation of hours by your employer
 - With 1,200 hours must be in proximity to energized power lines (Proximity is defined as a distance of three meters or less from a primary conductor with a voltage of 750 volts or greater)
- Upon completion of all schooling and hours, you are awarded a Certificate of Qualification and a certificate of Apprenticeship as a Utility Arborist.



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Steps to become a Utility Arborist Apprentice

- You must have a Sponsor who is either a Certified Tradesperson or has Sign-Off Authority and has registered with the ITA.
 - HEBC can be your sponsor for the school duration if required. If you need HEBC to act as your sponsor, contact HortEducationBC at 604-430-0422.
 - For information on becoming a Sponsor, visit the 'Employer Info' tab on the HEBC website (<http://www.horteducationbc.com/employers>).
- Register for your Direct Access account with the ITA
 - Go to the ITA Direct Access webpage; <https://www.itadirectaccess.ca/Login.aspx>. Follow the instructions videos on 'creating your account' and 'registering with a sponsor'; <http://www.itabc.ca/registration-checklist/how-guides>.
- Complete the Apprenticeship and Sponsor Registration using direct access, by registering with your sponsor using their "Sponsor ID".
- Register with Electrical Industry Training Institute (EITI) for in-school training (<http://www.eiti.ca/>)
- Track your hours along with your employer by filling out the "Work-Based Training Report" using ITA Direct Access or complete by form and submit to the ITA (<http://www.itabc.ca/apply-apprenticeship/forms>)
- Complete your log book and "Work-Based Training Proximity Verification Declaration Report" (<http://www.itabc.ca/apply-apprenticeship/forms>)
- Read the Apprentice/Trainee Guide provided by ITA
- Remember that you may be eligible for tax credits starting at \$1000 per completed level.
- After completing Level 2 your 'Recommend for Certification' form must be signed by your sponsor. This form is provided by ITA upon completion of all training and work based hours.



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Utility Arborist Apprentice Tax Credits

Tax Credit	Completion Requirements	Regular	*Enhanced
Basic Tax Credit	Level 1	\$1000	\$1500
Basic Tax Credit	CofQ as Utility Arborist (Level 2, 2378 hours logged & RFC signed)	\$1000	\$1500

*Enhanced credits for First Nations individuals and persons with disabilities

Basic Training Tax Credit for Apprentice

- Apply in the tax year, once you have met requirements
- ITA transcript is used as proof of meeting requirements
- Complete the British Columbia Training Tax Credit (T1014) form and submit it with your T1 Income Tax Return
- Must be claimed no later than 36 months after the end of the tax year
- For more information: <http://www2.gov.bc.ca/gov/content/taxes/income-taxes/corporate/credits/training/apprentice>

Utility Arborist Sponsor Tax Credit

Tax Credit	Completion Requirements	Amount
Basic Training Tax Credit	First 24 months	20% of eligible salary and wages up to \$4000

Documentation

- ITA transcript of your apprentice will provide proof of completion requirements

Basic Training Tax Credit for Employer/Sponsor

- Based on a 24-month period, starting when an apprentice enters into the Industry Training Agreement with ITA
- You can claim more than one credit in a year for an employee, as long as the employee meets the requirements.
- The training tax credit is refundable, but must first be applied against total income tax payable.
- Must be claimed no later than 36 months after the end of the tax year for which the eligible salaries and wages are paid.

Appendix 6 Landscape Sector Backgrounder

C17LMP019 Landscape Project

Appendix 6: Landscape Backgrounder.

Labour Market Partnership Project

For the Landscape Horticulture Sector including; landscape maintenance and construction, arboriculture, as well as the turf industry including golf courses.

Project Background

The BC Landscape & Nursery Association has entered into a **Phase 1 Sector Labour Market Partnership Agreement** with The Ministry of Jobs, Tourism and Skills Training (JTST), to establish sector engagement and analyze labour market challenges in the landscape horticulture sector.

In this sector we identified the following sub-sector associations and their members as potential participants; the Western Canada Turfgrass Association, the Pacific Northwest Chapter of the ISA, BC Golf Superintendents Association, the BC Recreation and Parks Association and the BC Landscape & Nursery Association.

Project funding is available in 5 Phases, each phase independent of the others, the following visual provides the objective of each phase in the 5 Phase process:



The full details of the program are available at: www.workbc.ca/sectorlabourmarketpartnerships.

The BCLNA, with its Project Manager, is ready to embark on Phase 1 of this 5 Phase project.

Phase 1: Sector Engagement provides support for Sector LMP Program partners to more fully engage a sector and key partners on relevant labour force issues. Engagement projects support sectors to develop broad-based partnerships, establish a leadership and governance structure for potential subsequent program phases and build clear consensus and direction on labour market issues to be addressed.

The primary deliverables of Phase 1 are:

- Determine the scope and breadth of the industry,
- Establish a governance structure,
- Recruit industry associations and / or individuals to form a Partnership Committee per the governance structure established,
- Determine gaps in labour market availability and training,

C17LMP019 Landscape Project

- Develop a comprehensive final report for the Ministry,
- Develop a workplan / proposal for Phase 2.

The key component of Phase 1 is 'Sector Engagement'. Consequently, recruiting key associations and individuals to participate throughout the entire project is key. As such, a Partnership Committee Terms of Reference has been developed to act as a guideline for the committee (Appendix 1).

Partnership Committee Terms of Reference:

Key elements are:

- Have a broad knowledge of labour issues in the landscape horticulture sector,
- Understand labour market challenges and the importance of recruitment and training,
- Be able to function well in a team with good communication skills and good work ethics,
- Be able to attend at least one face-to-face meeting in Phase 1, with the remainder of Phase 1 work to be done via conference call and email,
- Be able to review statistics, information and reports as required.

Phase 1 Workplan:

The Phase 1 workplan has been established and will include the following:

- Background research to define the size and breadth of the landscape horticulture sectors,
- Survey / canvas approximately 6 key individuals / organizations to identify key issues, relevant job occupations and identify other stakeholders within each sub-sector (6 interviews),
- Analyze and summarize collected data,
- Development of a Discussion Paper to serve as a primer for subsequent engagement sessions,
- Plan and recruit participants and facilitate approximately four engagement meetings in the major horticultural regions (Vancouver Island, Fraser Valley, Okanagan / Interior),
- Prepare an Interim report, circulate for comment and approval. Include revisions and re-approval if necessary,
- Partnership Committee meets to validate final report and develop consensus on moving forward with Phase 2 Application.

There is no cost to participate in this project. All volunteer hours will be documented as in-kind hours for the Ministry. Participant hard costs such as travel, parking, etc. may be reimbursed through the project funding.

This project is key in helping the sector determine labour market gaps and recruitment and training challenges. The BC Landscape & Nursery Association and its Project Manager HortEducationBC looks forward to working with you on this very important undertaking.

Please direct any questions to:

Bill Hardy
Business Manager
HortEducationBC

C17LMP019 Landscape Project

P: 604 430-0422 C: 604 841-8077 E: bhardy@telus.net

Appendix 1

Landscape Labour Market Partnership Project Partnership Committee Terms of Reference

Date: October 15, 2016

1. General Purpose

This Committee is established for the purposes of supporting and guiding the Landscape Labour Market Partnership Project to effectively complete Phase 1 of this Ministry of Jobs, Tourism and Skills Development project # C17LMP019.

This committee is assisting the BC Landscape & Nursery Association and HortEducationBC in its function of governance by:

- Holding meetings as required by the program to provide input for the sector represented and to influence the project to benefit all members.
- Work together with the organizations to provide the information and produce the required outcome to complete Phase 1.

2. Duties & Assignments:

- To review the statistics, information and reports as requested by the Project Manager.
- To communicate and cooperate with all member associations.
- To hold conference calls and/or meetings to provide input.
- To consider options for continuance of the program to develop Phase 2 based on information gathered in Phase 1.

3. Appointments and Composition

The Landscape Partnership Committee will be comprised of one or two representatives from each of the landscape, turf and arborist sector groups (List following) if they choose to participate. Representation will be the senior staff and/or a representative appointed by the respective association.

4. Duration of Appointment

The term of appointment will be for the duration of Phase 1. Should the association agree to participate in subsequent project phases, the appointment may extend to future phases.

5. Resources:

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The Landscape Partnership Committee is provided with funding for meeting expenses and conference calls as per the project workplan and budget. HortEducationBC will be the staff support for this project, with overall administration of the project by BCLNA.

Organization	Staff	Email
Western Canada Turfgrass Association PNW Chapter – Int’l Society of Arboriculture	Jerry Rousseau	exec.director@wctaturf.com
BC Golf Superintendents Association	Patty Williams	pwilliams@pnwisa.org
BC Parks & Recreation Association	Ginny Tromp	admin@bcgsa.com
BC Landscape & Nursery Association	Rebecca Tunnacliffe	rtunnacliffe@bcrpa.bc.ca
	Hedy Dyck	hdyck@bclna.com
Ex-officio Members		
Ministry of Jobs, Tourism & Skills Training	Philip Evans	philip.evans@gov.bc.ca
HortEducationBC	Bill Hardy	bhardy@horteducationbc.com