



# TORQ Analysis of Landscaping and Groundskeeping Workers to Shoe and Leather Workers and Repairers

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Landscaping and Groundskeeping Workers	37-3011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Shoe and Leather Workers and Repairers	51-6041.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS							
Grand TORQ:					85		
Ability TORQ		Skills TORQ		Knowledge TORQ			
Level	88	Level	86	Level	80		
Gaps To Narrow if Possible			Upgrade These Skills		Knowledge to Add		
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt
Arm-Hand Steadiness	53	11	53	No Skills Upgrade Required!		No Knowledge Upgrades Required!	
Near Vision	46	4	56				
Finger Dexterity	42	3	56				
LEVEL and IMPT (IMPORTANCE) refer to the Target Shoe and Leather Workers and Repairers. GAP refers to level difference between Landscaping and Groundskeeping Workers and Shoe and Leather Workers and Repairers.							

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Landscaping and Groundskeeping Workers	Shoe and Leather Workers and Repairers	Importance
Manual Dexterity	42	42	56
Finger Dexterity	39	42	56
Near Vision	42	46	56
Arm-Hand Steadiness	42	53	53
Control Precision	48	35	50
Multilimb Coordination	50	32	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	Landscaping and Groundskeeping Workers	Shoe and Leather Workers and Repairers	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			



Description	Landscaping and Groundskeeping Workers	Shoe and Leather Workers and Repairers	Importance
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### Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Landscaping and Groundskeeping Workers	Shoe and Leather Workers and Repairers	Description	Landscaping and Groundskeeping Workers	Shoe and Leather Workers and Repairers
10+ years	0%	0%	Doctoral	0%	1%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	4%	0%	Post-Masters Cert	0%	0%
4-6 years	4%	8%	Master's Degree	0%	0%
2-4 years	2%	3%	Post-Bachelor Cert	0%	0%
1-2 years	21%	15%	Bachelors	4%	0%
6-12 months	16%	4%	AA or Equiv	1%	2%
3-6 months	2%	10%	Some College	0%	21%
1-3 months	8%	11%	Post-Secondary Certificate	15%	0%
0-1 month	2%	2%	High School Diploma or GED	25%	56%
None	37%	43%	No HSD or GED	52%	17%

Landscaping and Groundskeeping Workers	Shoe and Leather Workers and Repairers
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Most Common Educational/Training Requirement:	
Short-term on-the-job training	Long-term on-the-job training

Job Zone Comparison	
<p><b>1 - Job Zone One: Little or No Preparation Needed</b></p> <p>No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.</p> <p>These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.</p> <p>Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.</p>	<p><b>2 - Job Zone Two: Some Preparation Needed</b></p> <p>Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.</p> <p>These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.</p> <p>Employees in these occupations need anywhere from a few months to one year of working with experienced employees.</p>

### Tasks

Landscaping and Groundskeeping Workers	Shoe and Leather Workers and Repairers
Core Tasks	Core Tasks
<p>Generalized Work Activities:</p> <ul style="list-style-type: none"> <li>Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.</li> <li>Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes.</li> </ul>	<p>Generalized Work Activities:</p> <ul style="list-style-type: none"> <li>Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.</li> <li>Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).</li> </ul>



activity to operate machines or processes (not including computers or vehicles).

- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Operating Vehicles, Mechanized Devices, or Equipment - Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

#### Specific Tasks

##### Occupation Specific Tasks:

- Advise customers on plant selection and care.
- Attach wires from planted trees to support stakes.
- Build forms, and mix and pour cement to form garden borders.
- Care for artificial turf fields, periodically removing the turf and replacing cushioning pads, and vacuuming and disinfecting the turf after use to prevent the growth of harmful bacteria.
- Care for established lawns by mulching, aerating, weeding, grubbing and removing thatch, and trimming and edging around flower beds, walks, and walls.
- Care for natural turf fields, making sure the underlying soil has the required composition to allow proper drainage and to support the grasses used on the fields.
- Decorate gardens with stones and plants.
- Follow planned landscaping designs to determine where to lay sod, sow grass, or plant flowers and foliage.
- Gather and remove litter.
- Haul or spread topsoil, and spread straw over seeded soil to hold soil in place.
- Install rock gardens, ponds, decks, drainage systems, irrigation systems, retaining walls, fences, planters, and/or playground equipment.
- Maintain and repair tools, equipment, and structures such as buildings, greenhouses, fences, and benches, using hand and power tools.
- Maintain irrigation systems, including winterizing the systems and starting them up in spring.
- Mark design boundaries, and paint natural and artificial turf fields with team logos and names before events.
- Mix and spray or spread fertilizers, herbicides, or insecticides onto grass, shrubs, and trees, using hand or automatic sprayers or spreaders.
- Mow and edge lawns, using power mowers

- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

#### Specific Tasks

##### Occupation Specific Tasks:

- Align and stitch or glue materials such as fabric, fleece, leather, or wood, in order to join parts.
- Attach accessories or ornamentation to decorate or protect products.
- Attach insoles to shoe lasts, affix shoe uppers, and apply heels and outsoles.
- Cement, nail, or sew soles and heels to shoes.
- Check the texture, color, and strength of leather to ensure that it is adequate for a particular purpose.
- Clean and polish shoes.
- Construct, decorate, or repair leather products according to specifications, using sewing machines, needles and thread, leather lacing, glue, clamps, hand tools, and/or rivets.
- Cut out parts following patterns or outlines, using knives, shears, scissors, or machine presses.
- Cut, insert, position, and secure paddings, cushioning, and/or linings, using stitches or glue.
- Draw patterns, using measurements, designs, plaster casts, or customer specifications, and position or outline patterns on work pieces.
- Dress and otherwise finish boots or shoes, as by trimming the edges of new soles and heels to the shoe shape.
- Drill or punch holes; then insert or attach metal rings, handles, and fastening hardware such as buckles.
- Dye, soak, polish, paint, stamp, stitch, stain, buff, or engrave leather or other materials to obtain desired effects, decorations, or shapes.
- Estimate the costs of requested products or services such as custom footwear or footwear repair, and receive payment from customers.
- Inspect articles for defects, and remove damaged or worn parts, using hand tools.



and edgers.

- Operate powered equipment such as mowers, tractors, twin-axle vehicles, snow blowers, chain-saws, electric clippers, sod cutters, and pruning saws.
- Plan and cultivate lawns and gardens.
- Plant seeds, bulbs, foliage, flowering plants, grass, ground covers, trees, and shrubs, and apply mulch for protection, using gardening tools.
- Provide proper upkeep of sidewalks, driveways, parking lots, fountains, planters, burial sites, and other grounds features.
- Prune and trim trees, shrubs, and hedges, using shears, pruners, or chain saws.
- Rake, mulch, and compost leaves.
- Shovel snow from walks, driveways, and parking lots, and spread salt in those areas.
- Trim and pick flowers, and clean flower beds.
- Use hand tools such as shovels, rakes, pruning saws, saws, hedge and brush trimmers, and axes.
- Use irrigation methods to adjust the amount of water consumption and to prevent waste.
- Water lawns, trees, and plants, using portable sprinkler systems, hoses, or watering cans.

#### Detailed Tasks

##### Detailed Work Activities:

- advise clients or customers
- construct, erect, or repair wooden frameworks or structures
- drive truck with capacity greater than 3 tons
- finish concrete surfaces
- follow horticulture irrigation techniques
- maintain physical building or grounds of property
- mix paint, ingredients, or chemicals, according to specifications
- move or fit heavy objects
- operate tractor with accessories or attachments
- plant, cultivate, or harvest crops, including aquaculture
- prepare site or surfaces for concrete or masonry work
- repair and maintain grounds keeping equipment and tools
- resolve landscaping problems
- use chain saws
- use hand or power tools
- use herbicides, fertilizers, pesticides or related products
- use plant disease control techniques
- use plant or crop transplant techniques
- use portable hand spray equipment
- use power mower

- Make, modify, and repair orthopedic or therapeutic footwear according to doctors' prescriptions, or modify existing footwear for people with foot problems and special needs.
- Measure customers for fit, and discuss with them the type of footwear to be made, recommending details such as leather quality.
- Nail heel and toe cleats onto shoes.
- Place shoes on lasts to remove soles and heels, using knives and/or pliers.
- Prepare inserts, heel pads, and lifts from casts of customers' feet.
- Re-sew seams, and replace handles and linings of suitcases or handbags.
- Read prescriptions or specifications, and take measurements to establish the type of product to be made, using calipers, tape measures, or rules.
- Repair and recondition leather products such as trunks, luggage, shoes, saddles, belts, purses, and baseball gloves.
- Repair or replace soles, heels, and other parts of footwear, using sewing, buffing and other shoe repair machines, materials, and equipment.
- Select materials and patterns, and trace patterns onto materials to be cut out.
- Shape shoe heels with a knife, and sand them on a buffing wheel for smoothness.
- Stretch shoes, first dampening parts; then inserting and twisting parts, using an adjustable stretcher.

#### Detailed Tasks

##### Detailed Work Activities:

- apply adhesives, caulking, sealants, or coatings
- calculate dimensions or specifications of fabric or leather pattern
- cut or trim fabric or leather
- draw master pattern for fabric or leather goods
- dye fabric or leather articles
- engrave variety of materials and products
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- measure and mark reference points or cutting lines on workpieces
- measure, weigh, or count products or materials
- operate sewing machine
- read specifications
- read tape measure
- read work order, instructions, formulas, or processing charts
- repair tears or defects in fabrics, garments, or leather products



- use truck-mounted hydraulic lifts or other accessories

- sew by hand
- understand technical operating, service or repair manuals
- use hand or power tools
- use leather fabrication or repair equipment
- use portable electric fabric cutter
- use shoe repair materials

### Labor Market Comparison

Maine Department of Labor.

Description	Landscaping and Groundskeeping Workers	Shoe and Leather Workers and Repairers	Difference
Median Wage	\$ 24,450	\$ 25,030	\$ 580
10th Percentile Wage	\$ 15,870	\$ 18,110	\$ 2,240
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,940	\$ 29,300	\$( 640)
90th Percentile Wage	\$ 35,600	\$ 35,580	\$( 20)
Mean Wage	\$ 25,000	\$ 25,870	\$ 870
Total Employment - 2346	4,040	90	-3,950
Employment Base - 2006	5,237	151	-5,086
Projected Employment - 2355	5,850	122	-5,728
Projected Job Growth - 2006-2355	11.7 %	-19.2 %	-30.9 %
Projected Annual Openings - 2006-2355	130	3	-127
Special			

Special Occupations:

### National Job Posting Trends

Trend for Landscaping and Groundskeeping Workers and Shoe and Leather Workers and Repairers



### Programs

#### Related Programs

Leatherworkers and Upholsterers, Other

Leatherworking and Upholstery, Other. Any instructional program in leatherworking and upholstering not listed above.

No information on schools for the program

Shoe, Boot and Leather Repairer

Shoe, Boot and Leather Repair. A program that prepares individuals to apply technical knowledge and skills to repair all types of footwear, including replacement and mending of worn parts; repairing orthopedic footwear, refinishing and dyeing leather; and repairing other leather goods such as handbags, belts, and luggage.

No information on schools for the program

### Maine Statewide Promotion Opportunities for Landscaping and Groundskeeping Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
37-3011.00	Landscaping and Groundskeeping Workers	100	1	4,040	\$24,450.00	\$0.00	12%	130	
51-6041.00	Shoe and Leather Workers and Repairers	85	2	90	\$25,030.00	\$580.00	-19%	3	
51-4121.06	Welders, Cutters, and Welder Fitters	84	2	1,610	\$38,030.00	\$13,580.00	7%	49	★



51-7021.00	Furniture Finishers	81	2	70	\$28,550.00	\$4,100.00	-31%	2
47-5021.00	Earth Drillers, Except Oil and Gas	81	3	140	\$37,470.00	\$13,020.00	2%	4
51-7041.00	Sawing Machine Setters, Operators, and Tenders, Wood	81	2	700	\$24,790.00	\$340.00	-8%	15
47-2151.00	Pipelayers	80	2	60	\$33,170.00	\$8,720.00	8%	3
51-2031.00	Engine and Other Machine Assemblers	80	3	20	\$29,010.00	\$4,560.00	-45%	1
51-4071.00	Foundry Mld and Coremakers	80	2	20	\$25,420.00	\$970.00	0%	1
45-4022.00	Logging Equipment Operators	80	1	1,390	\$29,280.00	\$4,830.00	4%	46
47-2071.00	Paving, Surfacing, and Tamping Equipment Operators	80	2	320	\$25,520.00	\$1,070.00	1%	7
51-2021.00	Coil Winders, Tapers, and Finishers	80	2	90	\$31,910.00	\$7,460.00	-53%	1
47-2061.00	Construction Laborers	79	2	3,020	\$26,660.00	\$2,210.00	5%	46
51-9122.00	Painters, Transportation Equipment	78	2	320	\$32,230.00	\$7,780.00	2%	8
51-9022.00	Grinding and Polishing Workers, Hand	77	1	270	\$31,060.00	\$6,610.00	4%	5

Special Occupations:

### Top Industries for Shoe and Leather Workers and Repairers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Self-employed workers, primary job	000601	49.81%	7,758	8,265	6.54%
Footwear manufacturing	316200	12.71%	1,980	927	-53.16%
Personal and household goods repair and maintenance	811400	12.44%	1,937	1,798	-7.19%
Self-employed workers, secondary job	000602	2.57%	401	399	-0.45%
Shoe stores	448200	2.48%	386	322	-16.58%
Apparel accessories and other apparel manufacturing	315900	0.90%	140	98	-30.10%



Clothing stores	448100	0.61%	95	99	4.97%
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### Top Industries for Landscaping and Groundskeeping Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Landscaping services	561730	36.82%	449,188	575,491	28.12%
Self-employed workers, primary job	000601	17.30%	211,079	226,203	7.17%
Local government, excluding education and hospitals	939300	6.79%	82,877	86,862	4.81%
Self-employed workers, secondary job	000602	3.24%	39,476	39,530	0.14%
Employment services	561300	2.29%	27,944	31,057	11.14%
Elementary and secondary schools, public and private	611100	1.89%	23,031	24,414	6.00%
Lessors of real estate	531100	1.77%	21,582	23,919	10.83%
Colleges, universities, and professional schools, public and private	611300	1.62%	19,754	22,230	12.53%
Fitness and recreational sports centers	713940	1.61%	19,680	26,376	34.03%
Religious organizations	813100	1.52%	18,555	22,398	20.71%
Death care services	812200	1.37%	16,677	19,176	14.98%
Activities related to real estate	531300	1.16%	14,139	18,125	28.19%
Lawn and garden equipment and supplies stores	444200	0.84%	10,300	9,322	-9.49%
State government, excluding education and hospitals	929200	0.66%	8,034	7,930	-1.29%
Private households, primary jobs	814100	0.66%	8,015	8,384	4.60%



# TORQ Analysis of Landscaping and Groundskeeping Workers to Janitors and Cleaners, Except Maids and Housekeeping Cleaners

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Landscaping and Groundskeeping Workers	37-3011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	37-2011.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS							
Grand TORQ:					84		
Ability TORQ		Skills TORQ		Knowledge TORQ			
Level	93	Level	88	Level	73		
Gaps To Narrow if Possible				Upgrade These Skills		Knowledge to Add	
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt
Extent Flexibility	48	6	53	Reading Comprehension	51	4	69
No Knowledge Upgrades Required!							
<p>LEVEL and IMPT (IMPORTANCE) refer to the Target Janitors and Cleaners, Except Maids and Housekeeping Cleaners. GAP refers to level difference between Landscaping and Groundskeeping Workers and Janitors and Cleaners, Except Maids and Housekeeping Cleaners.</p>							

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Landscaping and Groundskeeping Workers	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Importance
Trunk Strength	44	44	56
Oral Comprehension	44	41	53
Manual Dexterity	42	34	53
Static Strength	48	42	53
Extent Flexibility	42	48	53
Oral Expression	41	39	50
Near Vision	42	41	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	Landscaping and Groundskeeping Workers	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Importance
Reading Comprehension	47	51	69



Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Landscaping and Groundskeeping Workers	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Importance
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**Experience & Education Comparison**

Related Work Experience Comparison			Required Education Level Comparison		
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Landscaping and Groundskeeping Workers

Janitors and Cleaners, Except Maids and Housekeeping Cleaners

Most Common Educational/Training Requirement:

Short-term on-the-job training

Short-term on-the-job training

Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

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No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.

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**Tasks**

Landscaping and Groundskeeping Workers

Janitors and Cleaners, Except Maids and Housekeeping Cleaners

Core Tasks

Core Tasks

Generalized Work Activities:

Generalized Work Activities:

- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Controlling Machines and Processes - Using

- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and



either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).

- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Operating Vehicles, Mechanized Devices, or Equipment - Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.
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#### Specific Tasks

##### Occupation Specific Tasks:

- Advise customers on plant selection and care.
- Attach wires from planted trees to support stakes.
- Build forms, and mix and pour cement to form garden borders.
- Care for artificial turf fields, periodically removing the turf and replacing cushioning pads, and vacuuming and disinfecting the turf after use to prevent the growth of harmful bacteria.
- Care for established lawns by mulching, aerating, weeding, grubbing and removing thatch, and trimming and edging around flower beds, walks, and walls.
- Care for natural turf fields, making sure the underlying soil has the required composition to allow proper drainage and to support the grasses used on the fields.
- Decorate gardens with stones and plants.
- Follow planned landscaping designs to determine where to lay sod, sow grass, or plant flowers and foliage.
- Gather and remove litter.
- Haul or spread topsoil, and spread straw over seeded soil to hold soil in place.
- Install rock gardens, ponds, decks, drainage systems, irrigation systems, retaining walls, fences, planters, and/or playground equipment.
- Maintain and repair tools, equipment, and structures such as buildings, greenhouses, fences, and benches, using hand and power tools.
- Maintain irrigation systems, including winterizing the systems and starting them up in spring.
- Mark design boundaries, and paint natural and artificial turf fields with team logos and names before events.
- Mix and spray or spread fertilizers, herbicides, or insecticides onto grass, shrubs, and trees, using hand or automatic sprayers or spreaders.

moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.

#### Specific Tasks

##### Occupation Specific Tasks:

- Clean and polish furniture and fixtures.
- Clean and restore building interiors damaged by fire, smoke, or water, using commercial cleaning equipment.
- Clean building floors by sweeping, mopping, scrubbing, or vacuuming them.
- Clean chimneys, flues, and connecting pipes, using power and hand tools.
- Clean laboratory equipment, such as glassware and metal instruments, using solvents, brushes, rags, and power cleaning equipment.
- Clean windows, glass partitions, and mirrors, using soapy water or other cleaners, sponges, and squeegees.
- Drive vehicles required to perform or travel to cleaning work, including vans, industrial trucks, or industrial vacuum cleaners.
- Dust furniture, walls, machines, and equipment.
- Follow procedures for the use of chemical cleaners and power equipment, in order to prevent damage to floors and fixtures.
- Gather and empty trash.
- Make adjustments and minor repairs to heating, cooling, ventilating, plumbing, and electrical systems.
- Mix water and detergents or acids in containers to prepare cleaning solutions, according to specifications.
- Monitor building security and safety by performing such tasks as locking doors after operating hours and checking electrical appliance use to ensure that hazards are not created.
- Move heavy furniture, equipment, and supplies, either manually or by using hand trucks.
- Mow and trim lawns and shrubbery, using mowers and hand and power trimmers, and clear debris from grounds.
- Notify managers concerning the need for major repairs or additions to building operating systems.



- Mow and edge lawns, using power mowers and edgers.
- Operate powered equipment such as mowers, tractors, twin-axle vehicles, snow blowers, chain-saws, electric clippers, sod cutters, and pruning saws.
- Plan and cultivate lawns and gardens.
- Plant seeds, bulbs, foliage, flowering plants, grass, ground covers, trees, and shrubs, and apply mulch for protection, using gardening tools.
- Provide proper upkeep of sidewalks, driveways, parking lots, fountains, planters, burial sites, and other grounds features.
- Prune and trim trees, shrubs, and hedges, using shears, pruners, or chain saws.
- Rake, mulch, and compost leaves.
- Shovel snow from walks, driveways, and parking lots, and spread salt in those areas.
- Trim and pick flowers, and clean flower beds.
- Use hand tools such as shovels, rakes, pruning saws, saws, hedge and brush trimmers, and axes.
- Use irrigation methods to adjust the amount of water consumption and to prevent waste.
- Water lawns, trees, and plants, using portable sprinkler systems, hoses, or watering cans.

#### Detailed Tasks

##### Detailed Work Activities:

- advise clients or customers
- construct, erect, or repair wooden frameworks or structures
- drive truck with capacity greater than 3 tons
- finish concrete surfaces
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- mix paint, ingredients, or chemicals, according to specifications
- move or fit heavy objects
- operate tractor with accessories or attachments
- plant, cultivate, or harvest crops, including aquaculture
- prepare site or surfaces for concrete or masonry work
- repair and maintain grounds keeping equipment and tools
- resolve landscaping problems
- use chain saws
- use hand or power tools
- use herbicides, fertilizers, pesticides or related products
- use plant disease control techniques
- use plant or crop transplant techniques
- use portable hand spray equipment

- Remove snow from sidewalks, driveways, and parking areas, using snowplows, snow blowers, and snow shovels, and spread snow melting chemicals.
- Requisition supplies and equipment needed for cleaning and maintenance duties.
- Service, clean, and supply restrooms.
- Set up, arrange, and remove decorations, tables, chairs, ladders, and scaffolding to prepare facilities for events such as banquets and meetings.
- Spray insecticides and fumigants to prevent insect and rodent infestation.
- Steam-clean or shampoo carpets.
- Strip, seal, finish, and polish floors.

#### Detailed Tasks

##### Detailed Work Activities:

- apply cleaning solvents
- arrange decorations or furniture for banquets or social functions
- clean equipment or machinery
- clean or wax floors
- clean rooms or work areas
- control HVAC equipment
- drive automobile, van, or light truck
- maintain physical building or grounds of property
- make minor repairs to mechanical equipment
- mix paint, ingredients, or chemicals, according to specifications
- move or fit heavy objects
- operate cleaning equipment
- operate forklift
- operate tractor with accessories or attachments
- paint walls or other structural surfaces
- remove stains from fabric or carpet
- requisition stock, materials, supplies or equipment
- sterilize or clean laboratory or healthcare equipment
- tend boilers or related equipment
- use basic plumbing techniques
- use building materials for routine building maintenance
- use hand or power tools
- use herbicides, fertilizers, pesticides or related products
- use portable hand spray equipment
- use power mower



- use power mower
- use truck-mounted hydraulic lifts or other accessories

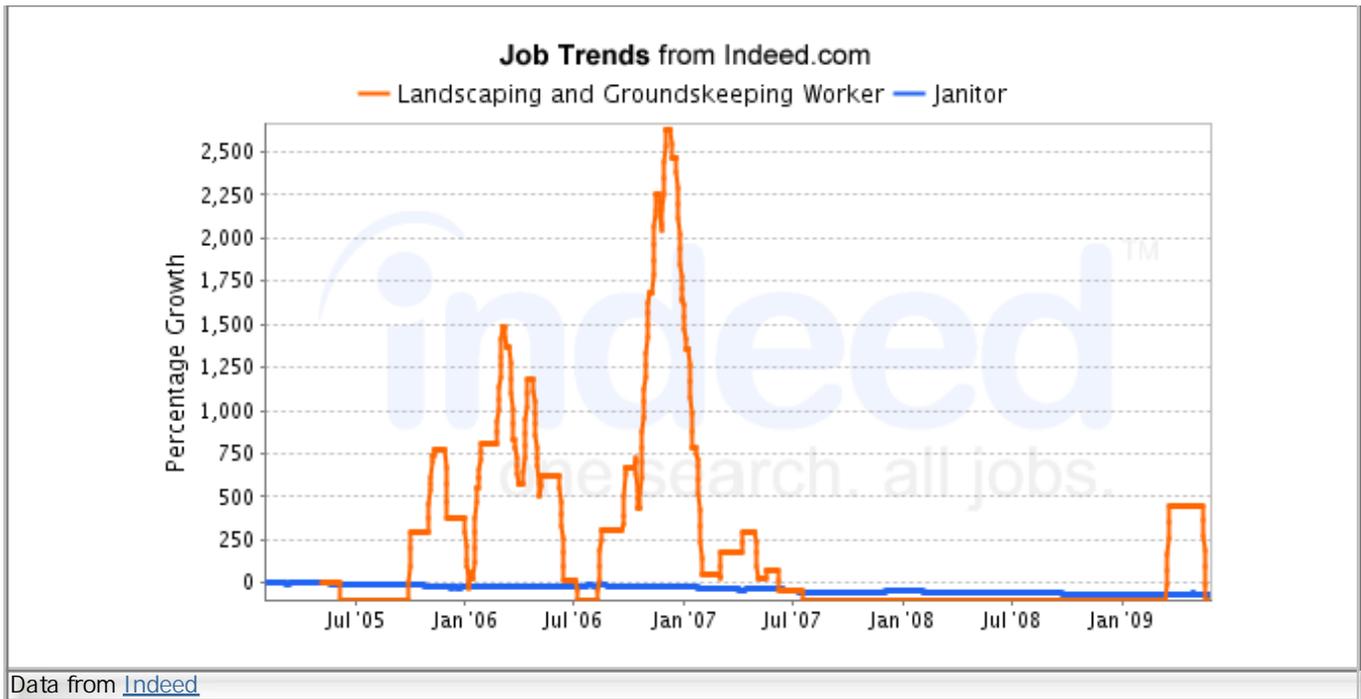
### Labor Market Comparison

Maine Department of Labor.

Description	Landscaping and Groundskeeping Workers	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Difference
Median Wage	\$ 24,450	\$ 23,520	\$( 930)
10th Percentile Wage	\$ 15,870	\$ 16,750	\$ 880
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,940	\$ 28,440	\$( 1,500)
90th Percentile Wage	\$ 35,600	\$ 33,210	\$( 2,390)
Mean Wage	\$ 25,000	\$ 24,380	\$( 620)
Total Employment - 2346	4,040	9,170	5,130
Employment Base - 2006	5,237	9,828	4,591
Projected Employment - 2355	5,850	10,361	4,511
Projected Job Growth - 2006-2355	11.7 %	5.4 %	-6.3 %
Projected Annual Openings - 2006-2355	130	241	111
Special			
Special Occupations:			

### National Job Posting Trends

Trend for Landscaping and Groundskeeping Workers and Janitors and Cleaners, Except Maids and Housekeeping Cleaners



### Programs

No information on programs or the occupation.

### Maine Statewide Promotion Opportunities for Landscaping and Groundskeeping Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
37-3011.00	Landscaping and Groundskeeping Workers	100	1	4,040	\$24,450.00	\$0.00	12%	130	
51-6041.00	Shoe and Leather Workers and Repairers	85	2	90	\$25,030.00	\$580.00	-19%	3	
51-4121.06	Welders, Cutters, and Welder Fitters	84	2	1,610	\$38,030.00	\$13,580.00	7%	49	★
51-7021.00	Furniture Finishers	81	2	70	\$28,550.00	\$4,100.00	-31%	2	
47-5021.00	Earth Drillers, Except Oil and Gas	81	3	140	\$37,470.00	\$13,020.00	2%	4	
51-7041.00	Sawing Machine Setters, Operators, and Tenders, Wood	81	2	700	\$24,790.00	\$340.00	-8%	15	
47-2151.00	Pipelayers	80	2	60	\$33,170.00	\$8,720.00	8%	3	



51-2031.00	Engine and Other Machine Assemblers	80	3	20	\$29,010.00	\$4,560.00	-45%	1
45-4022.00	Logging Equipment Operators	80	1	1,390	\$29,280.00	\$4,830.00	4%	46
47-2071.00	Paving, Surfacing, and Tamping Equipment Operators	80	2	320	\$25,520.00	\$1,070.00	1%	7
51-2021.00	Coil Winders, Tapers, and Finishers	80	2	90	\$31,910.00	\$7,460.00	-53%	1
51-4071.00	Foundry Mold and Coremakers	80	2	20	\$25,420.00	\$970.00	0%	1
47-2061.00	Construction Laborers	79	2	3,020	\$26,660.00	\$2,210.00	5%	46
51-9122.00	Painters, Transportation Equipment	78	2	320	\$32,230.00	\$7,780.00	2%	8
47-2051.00	Cement Masons and Concrete Finishers	77	3	640	\$29,060.00	\$4,610.00	7%	25

Special Occupations:

### Top Industries for Janitors and Cleaners, Except Maids and Housekeeping Cleaners

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Elementary and secondary schools, public and private	611100	14.55%	347,246	374,001	7.70%
Religious organizations	813100	4.05%	96,572	118,449	22.65%
Colleges, universities, and professional schools, public and private	611300	4.03%	96,176	98,971	2.91%
Local government, excluding education and hospitals	939300	3.57%	85,133	87,972	3.33%
Self-employed workers, primary job	000601	3.56%	84,919	92,466	8.89%
General medical and surgical hospitals, public and private	622100	2.22%	52,897	59,854	13.15%
Employment services	561300	2.06%	49,213	63,659	29.35%
Lessors of real estate	531100	2.03%	48,373	49,024	1.35%
Self-employed workers, secondary job	000602	1.37%	32,617	33,187	1.75%
Activities related to real estate	531300	1.22%	29,145	37,961	30.25%
Vocational rehabilitation services	624300	0.83%	19,789	24,637	24.50%
Junior colleges, public and private	611200	0.82%	19,534	22,060	12.93%



Nursing care facilities	623100	0.74%	17,567	19,513	11.08%
Grocery stores	445100	0.69%	16,394	18,281	11.51%
Full-service restaurants	722100	0.67%	15,916	17,893	12.42%

### Top Industries for Landscaping and Groundskeeping Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Landscaping services	561730	36.82%	449,188	575,491	28.12%
Self-employed workers, primary job	000601	17.30%	211,079	226,203	7.17%
Local government, excluding education and hospitals	939300	6.79%	82,877	86,862	4.81%
Self-employed workers, secondary job	000602	3.24%	39,476	39,530	0.14%
Employment services	561300	2.29%	27,944	31,057	11.14%
Elementary and secondary schools, public and private	611100	1.89%	23,031	24,414	6.00%
Lessors of real estate	531100	1.77%	21,582	23,919	10.83%
Colleges, universities, and professional schools, public and private	611300	1.62%	19,754	22,230	12.53%
Fitness and recreational sports centers	713940	1.61%	19,680	26,376	34.03%
Religious organizations	813100	1.52%	18,555	22,398	20.71%
Death care services	812200	1.37%	16,677	19,176	14.98%
Activities related to real estate	531300	1.16%	14,139	18,125	28.19%
Lawn and garden equipment and supplies stores	444200	0.84%	10,300	9,322	-9.49%
State government, excluding education and hospitals	929200	0.66%	8,034	7,930	-1.29%
Private households, primary jobs	814100	0.66%	8,015	8,384	4.60%



# TORO Analysis of Landscaping and Groundskeeping Workers to Welders, Cutters, and Welder Fitters

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Landscaping and Groundskeeping Workers	37-3011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Welders, Cutters, and Welder Fitters	51-4121.06	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:								<b>84</b>			
Ability TORQ			Skills TORQ				Knowledge TORQ				
Level	92		Level	81		Level	78				
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Arm-Hand Steadiness	51	9	75	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Near Vision	50	8	65								
Oral Expression	50	9	56								
Visualization	51	10	50								
Manual Dexterity	46	4	62								
Finger Dexterity	42	3	56								
Problem Sensitivity	39	2	56								
Oral Comprehension	46	2	53								
Selective Attention	44	2	50								
LEVEL and IMPT (IMPORTANCE) refer to the Target Welders, Cutters, and Welder Fitters. GAP refers to level difference between Landscaping and Groundskeeping Workers and Welders, Cutters, and Welder Fitters.											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Landscaping and Groundskeeping Workers	Welders, Cutters, and Welder Fitters	Importance
Arm-Hand Steadiness	42	51	75
Near Vision	42	50	65
Manual Dexterity	42	46	62



Control Precision	48	44	62
Oral Expression	41	50	56
Problem Sensitivity	37	39	56
Finger Dexterity	39	42	56
Multilimb Coordination	50	44	56
Oral Comprehension	44	46	53
Visualization	41	51	50
Selective Attention	42	44	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Landscaping and Groundskeeping Workers	Welders, Cutters, and Welder Fitters	Importance
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Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Landscaping and Groundskeeping Workers	Welders, Cutters, and Welder Fitters	Importance
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**Experience & Education Comparison**

Related Work Experience Comparison			Required Education Level Comparison		
Description	Landscaping and Groundskeeping Workers	Welders, Cutters, and Welder Fitters	Description	Landscaping and Groundskeeping Workers	Welders, Cutters, and Welder Fitters
10+ years	0%	1%	Doctoral	0%	0%
8-10 years	0%	1%	Professional Degree	0%	0%
6-8 years	4%	0%	Post-Masters Cert	0%	0%
4-6 years	4%	0%	Master's Degree	0%	0%
2-4 years	2%	17%	Post-Bachelor Cert	0%	0%
1-2 years	21%	23%	Bachelors	4%	0%
6-12 months	16%	28%	AA or Equiv	1%	0%
3-6 months	2%	6%	Some College	0%	8%
1-3 months	8%	1%	Post-Secondary Certificate	15%	26%
0-1 month	2%	6%	High School Diploma or GED	25%	26%
None	37%	11%	No HSD or GED	52%	38%

Landscaping and Groundskeeping Workers

Welders, Cutters, and Welder Fitters

Most Common Educational/Training Requirement:

Short-term on-the-job training

Long-term on-the-job training

Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.

These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.

2 - Job Zone Two: Some Preparation Needed

Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.

These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.



Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.

Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

## Tasks

### Landscaping and Groundskeeping Workers

#### Core Tasks

##### Generalized Work Activities:

- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Operating Vehicles, Mechanized Devices, or Equipment - Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

#### Specific Tasks

##### Occupation Specific Tasks:

- Advise customers on plant selection and care.
- Attach wires from planted trees to support stakes.
- Build forms, and mix and pour cement to form garden borders.
- Care for artificial turf fields, periodically removing the turf and replacing cushioning pads, and vacuuming and disinfecting the turf after use to prevent the growth of harmful bacteria.
- Care for established lawns by mulching, aerating, weeding, grubbing and removing thatch, and trimming and edging around flower beds, walks, and walls.
- Care for natural turf fields, making sure the underlying soil has the required composition to allow proper drainage and to support the grasses used on the fields.
- Decorate gardens with stones and plants.
- Follow planned landscaping designs to determine where to lay sod, sow grass, or plant flowers and foliage.
- Gather and remove litter.
- Haul or spread topsoil, and spread straw

### Welders, Cutters, and Welder Fitters

#### Core Tasks

##### Generalized Work Activities:

- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.

#### Specific Tasks

##### Occupation Specific Tasks:

- Adjust electric current and timing cycles of resistance welding machines to heat metals to bonding temperature.
- Align and clamp workpieces together, using rules, squares, or hand tools, or position items in fixtures, jigs, or vises.
- Brush flux onto joints of workpieces or dip braze rods into flux, to prevent oxidation of metal.
- Clean equipment parts, such as tips of soldering irons, using chemical solutions or cleaning compounds.
- Clean joints of workpieces with wire brushes or by dipping them into cleaning solutions.
- Clean workpieces to remove dirt and excess acid, using chemical solutions, files, wire brushes, or grinders.
- Connect hoses from torches to regulator valves and cylinders of oxygen and specified gas fuels.
- Cut carbon electrodes to specified sizes and shapes, using cutoff saws.
- Dip workpieces into molten solder, or place solder strips between seams and heat seams with irons, to bond items together.
- Examine seams for defects, and rework



over seeded soil to hold soil in place.

- Install rock gardens, ponds, decks, drainage systems, irrigation systems, retaining walls, fences, planters, and/or playground equipment.
- Maintain and repair tools, equipment, and structures such as buildings, greenhouses, fences, and benches, using hand and power tools.
- Maintain irrigation systems, including winterizing the systems and starting them up in spring.
- Mark design boundaries, and paint natural and artificial turf fields with team logos and names before events.
- Mix and spray or spread fertilizers, herbicides, or insecticides onto grass, shrubs, and trees, using hand or automatic sprayers or spreaders.
- Mow and edge lawns, using power mowers and edgers.
- Operate powered equipment such as mowers, tractors, twin-axle vehicles, snow blowers, chain-saws, electric clippers, sod cutters, and pruning saws.
- Plan and cultivate lawns and gardens.
- Plant seeds, bulbs, foliage, flowering plants, grass, ground covers, trees, and shrubs, and apply mulch for protection, using gardening tools.
- Provide proper upkeep of sidewalks, driveways, parking lots, fountains, planters, burial sites, and other grounds features.
- Prune and trim trees, shrubs, and hedges, using shears, pruners, or chain saws.
- Rake, mulch, and compost leaves.
- Shovel snow from walks, driveways, and parking lots, and spread salt in those areas.
- Trim and pick flowers, and clean flower beds.
- Use hand tools such as shovels, rakes, pruning saws, saws, hedge and brush trimmers, and axes.
- Use irrigation methods to adjust the amount of water consumption and to prevent waste.
- Water lawns, trees, and plants, using portable sprinkler systems, hoses, or watering cans.

#### Detailed Tasks

##### Detailed Work Activities:

- advise clients or customers
- construct, erect, or repair wooden frameworks or structures
- drive truck with capacity greater than 3 tons
- finish concrete surfaces
- follow horticulture irrigation techniques
- maintain physical building or grounds of property
- mix paint, ingredients, or chemicals, according to specifications

defective joints or broken parts.

- Grind, cut, buff, or bend edges of workpieces to be joined to ensure snug fit, using power grinders and hand tools.
- Guide torches and rods along joints of workpieces to heat them to brazing temperature, melt braze alloys, and bond workpieces together.
- Heat soldering irons or workpieces to specified temperatures for soldering, using gas flames or electric current.
- Melt and apply solder along adjoining edges of workpieces to solder joints, using soldering irons, gas torches, or electric-ultrasonic equipment.
- Melt and apply solder to fill holes, indentations, and seams of fabricated metal products, using soldering equipment.
- Melt and separate brazed or soldered joints to remove and straighten damaged or misaligned components, using hand torches, irons or furnaces.
- Place solder bars into containers, and turn knobs to specified positions to melt solder and regulate its temperature.
- Remove workpieces from fixtures, using tongs, and cool workpieces, using air or water.
- Remove workpieces from molten solder and hold parts together until color indicates that solder has set.
- Select torch tips, flux, and brazing alloys from data charts or work orders.
- Smooth soldered areas with alternate strokes of paddles and torches, leaving soldered sections slightly higher than surrounding areas for later filing.
- Sweat together workpieces coated with solder.
- Turn dials to set intensity and duration of ultrasonic impulses, according to work order specifications.
- Turn valves to start flow of gases, and light flames and adjust valves to obtain desired colors and sizes of flames.

#### Detailed Tasks

##### Detailed Work Activities:

- adjust welding equipment
- apply cleaning solvents
- apply flux to workpiece before soldering or brazing
- braze metal parts or components together
- clean or degrease weld, or parts to be welded or soldered
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- file, sand, grind, or polish metal or plastic objects



- move or fit heavy objects
- operate tractor with accessories or attachments
- plant, cultivate, or harvest crops, including aquaculture
- prepare site or surfaces for concrete or masonry work
- repair and maintain grounds keeping equipment and tools
- resolve landscaping problems
- use chain saws
- use hand or power tools
- use herbicides, fertilizers, pesticides or related products
- use plant disease control techniques
- use plant or crop transplant techniques
- use portable hand spray equipment
- use power mower
- use truck-mounted hydraulic lifts or other accessories

- identify properties of metals for repair or fabrication activities
- load or unload material or workpiece into machinery
- monitor the quantity of assembly output
- move or fit heavy objects
- perform safety inspections in industrial, manufacturing or repair setting
- position, clamp or assemble workpiece prior to welding
- preheat metal before welding, brazing, or soldering
- read blueprints
- read production layouts
- read technical drawings
- read work order, instructions, formulas, or processing charts
- sharpen metal objects
- solder metal parts or components together
- understand technical operating, service or repair manuals
- use acetylene welding/cutting torch
- use braze-welding equipment
- use hand or power tools
- use soldering equipment

#### Tools - Examples

- Wrenches
- Anvils
- Bandsaws
- Slitters
- Motorized cutting torches
- Calipers
- Desktop computers
- Underwater electrode holders
- Files
- Gas flow measurement instruments
- Forklifts
- Current converters
- Brazing equipment
- Goggles
- Grinding machinery
- Hand chipping hammers
- Clamps



- Temperature measurement instruments
- Electric overhead hoists
- Hydraulic presses
- Impact wrenches
- Hydraulic jacks
- Ladders
- Laser printers
- Laser welders
- Lathes
- Levels
- Light trucks
- Hydraulic truck lifts
- Metal inert gas MIG welders
- Metal markers
- Punches
- Computerized numerical control CNC programmable welding robot controllers
- Micrometers
- Milling machines
- Nibblers
- Personal computers
- Pipe cutters
- Plasma welders
- Air drills
- Air chisels
- Air scalers
- Buffers
- Power chippers
- Power drills
- Power grinders
- Cutoff saws
- Steamers
- Waterproof gloves



- Angle finders
- Pinchbars
- Comealongs
- Ratchets
- Self-contained breathing equipment
- Respirator hose masks
- Welding lenses
- Scaffolding
- Scribes
- Shears
- Socket sets
- Soldering irons
- Wire feed rate measurement instruments
- Squares
- Straightedges
- Metal benders
- Dies
- Fillet weld gauges
- Electric pipe threaders
- Hand pipe threaders
- Tungsten inert gas TIG welding equipment
- Two way radios
- Ultrasonic welding equipment
- Arc voltage measurement instruments
- Arc welders
- Underwater electrodes
- Direct current DC sources
- Face shields
- Welding tips
- Welding robots
- Rod ovens
- Electrode wires



- Dive suits
- Winches
- Power wire brushes
- Wire cutters
- Overhead cranes
- Brakes

### Labor Market Comparison

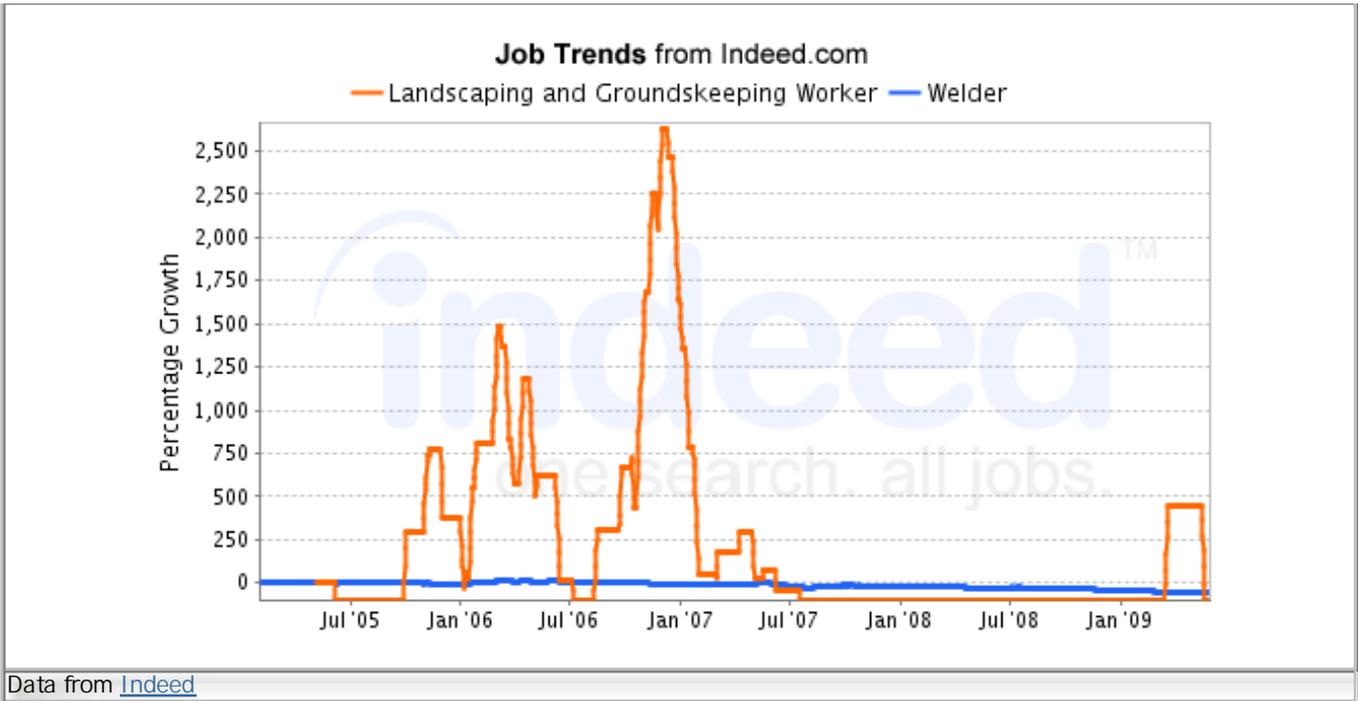
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Special		★	

Special Occupations:

### National Job Posting Trends

Trend for Landscaping and Groundskeeping Workers and Welders, Cutters, and Welder Fitters



Programs			
Related Programs			
Welder/Welding Technologist			
Welding Technology/Welder. A program that prepares individuals to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation-reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards.			
Institution	Address	City	URL
Eastern Maine Community College	354 Hogan Rd	Bangor	<a href="http://www.emcc.edu">www.emcc.edu</a>
Eastern Maine Community College	354 Hogan Rd	Bangor	<a href="http://www.emcc.edu">www.emcc.edu</a>
Eastern Maine Community College	354 Hogan Rd	Bangor	<a href="http://www.emcc.edu">www.emcc.edu</a>
Wasington County Community College	One College Drive	Calais	<a href="http://www.wccc.me.edu">www.wccc.me.edu</a>

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47-2061.00	Construction Laborers	79	2	3,020	\$26,660.00	\$2,210.00	5%	46	
51-9122.00	Painters, Transportation Equipment	78	2	320	\$32,230.00	\$7,780.00	2%	8	
47-2051.00	Cement Masons and Concrete Finishers	77	3	640	\$29,060.00	\$4,610.00	7%	25	

Special Occupations:

### Top Industries for Welders, Cutters, and Welder Fitters

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Architectural and structural metals manufacturing	332300	11.33%	46,347	52,658	13.62%



Agriculture, construction, and mining machinery manufacturing	333100	6.36%	26,009	25,834	-0.67%
Self-employed workers, primary job	000601	5.26%	21,505	24,372	13.33%
Motor vehicle body and trailer manufacturing	336200	5.12%	20,924	21,779	4.09%
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance	811300	4.38%	17,916	20,168	12.57%
Other general purpose machinery manufacturing	333900	3.83%	15,672	15,050	-3.97%
Boiler, tank, and shipping container manufacturing	332400	3.10%	12,686	12,161	-4.14%
Motor vehicle parts manufacturing	336300	3.03%	12,410	10,511	-15.31%
Machine shops	332710	3.03%	12,381	10,895	-12.00%
Other fabricated metal product manufacturing	332900	2.73%	11,163	10,522	-5.74%
Employment services	561300	2.58%	10,544	14,196	34.64%
Ship and boat building	336600	2.51%	10,285	12,246	19.07%
Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	333400	2.39%	9,762	9,553	-2.14%
Nonresidential building construction	236200	2.03%	8,323	9,921	19.20%
Industrial machinery manufacturing	333200	1.31%	5,341	4,655	-12.85%

### Top Industries for Landscaping and Groundskeeping Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Landscaping services	561730	36.82%	449,188	575,491	28.12%
Self-employed workers, primary job	000601	17.30%	211,079	226,203	7.17%
Local government, excluding education and hospitals	939300	6.79%	82,877	86,862	4.81%
Self-employed workers, secondary job	000602	3.24%	39,476	39,530	0.14%
Employment services	561300	2.29%	27,944	31,057	11.14%
Elementary and secondary schools, public and private	611100	1.89%	23,031	24,414	6.00%
Lessors of real estate	531100	1.77%	21,582	23,919	10.83%
Colleges, universities, and professional schools, public and private	611300	1.62%	19,754	22,230	12.53%
Fitness and recreational sports centers	713940	1.61%	19,680	26,376	34.03%
Religious organizations	813100	1.52%	18,555	22,398	20.71%
Death care services	812200	1.37%	16,677	19,176	14.98%
Activities related to real estate	531300	1.16%	14,139	18,125	28.19%
Lawn and garden equipment and supplies stores	444200	0.84%	10,300	9,322	-9.49%

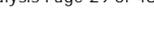
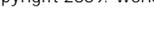
State government, excluding education and hospitals	929200	0.66%	8,034	7,930	-1.29%
Private households, primary jobs	814100	0.66%	8,015	8,384	4.60%



# TORQ Analysis of Landscaping and Groundskeeping Workers to Helpers--Production Workers

ANALYSIS INPUT					
Transfer	Title	O* NET	Filters		
From Title:	Landscaping and Groundskeeping Workers	37-3011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Helpers--Production Workers	51-9198.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:					82						
Ability TORQ		Skills TORQ		Knowledge TORQ							
Level	 94	Level	 77	Level	 75						
Gaps To Narrow if Possible			Upgrade These Skills		Knowledge to Add						
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Near Vision	48	6	62	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Arm-Hand Steadiness	48	6	56								
Trunk Strength	48	4	59								
Problem Sensitivity	39	2	53								
Control Precision	50	2	53								
<p>LEVEL and IMPT (IMPORTANCE) refer to the Target Helpers--Production Workers. GAP refers to level difference between Landscaping and Groundskeeping Workers and Helpers--Production Workers.</p>											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Landscaping and Groundskeeping Workers	Helpers--Production Workers	Importance
Near Vision	42 	48 	62 
Trunk Strength	44 	48 	59 
Arm-Hand Steadiness	42 	48 	56 
Problem Sensitivity	37 	39 	53 
Control Precision	48 	50 	53 
Oral Comprehension	44 	44 	50 
Oral Expression	41 	37 	50 
Deductive Reasoning	39 	37 	50 
Manual Dexterity	42 	42 	50 



Multilimb Coordination	50	44	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	Landscaping and Groundskeeping Workers	Helpers--Production Workers	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Landscaping and Groundskeeping Workers	Helpers--Production Workers	Importance

Experience & Education Comparison					
Related Work Experience Comparison			Required Education Level Comparison		
Description	Landscaping and Groundskeeping Workers	Helpers--Production Workers	Description	Landscaping and Groundskeeping Workers	Helpers--Production Workers
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	4%	0%	Post-Masters Cert	0%	0%
4-6 years	4%	0%	Master's Degree	0%	0%
2-4 years	2%	0%	Post-Bachelor Cert	0%	0%
1-2 years	21%	13%	Bachelors	4%	0%
6-12 months	16%	39%	AA or Equiv	1%	0%
3-6 months	2%	7%	Some College	0%	0%
1-3 months	8%	1%	Post-Secondary Certificate	15%	11%
0-1 month	2%	10%	High School Diploma or GED	25%	51%
None	37%	27%	No HSD or GED	52%	36%
Landscaping and Groundskeeping Workers			Helpers--Production Workers		
Most Common Educational/Training Requirement:					
Short-term on-the-job training			Short-term on-the-job training		
Job Zone Comparison					
1 - Job Zone One: Little or No Preparation Needed			1 - Job Zone One: Little or No Preparation Needed		
No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.			No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.		
These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.			These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.		
Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.			Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.		

Tasks	
Landscaping and Groundskeeping Workers	Helpers--Production Workers
Core Tasks	Core Tasks



## Generalized Work Activities:

- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Operating Vehicles, Mechanized Devices, or Equipment - Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

## Specific Tasks

## Occupation Specific Tasks:

- Advise customers on plant selection and care.
- Attach wires from planted trees to support stakes.
- Build forms, and mix and pour cement to form garden borders.
- Care for artificial turf fields, periodically removing the turf and replacing cushioning pads, and vacuuming and disinfecting the turf after use to prevent the growth of harmful bacteria.
- Care for established lawns by mulching, aerating, weeding, grubbing and removing thatch, and trimming and edging around flower beds, walks, and walls.
- Care for natural turf fields, making sure the underlying soil has the required composition to allow proper drainage and to support the grasses used on the fields.
- Decorate gardens with stones and plants.
- Follow planned landscaping designs to determine where to lay sod, sow grass, or plant flowers and foliage.
- Gather and remove litter.
- Haul or spread topsoil, and spread straw over seeded soil to hold soil in place.
- Install rock gardens, ponds, decks, drainage systems, irrigation systems, retaining walls, fences, planters, and/or playground equipment.
- Maintain and repair tools, equipment, and structures such as buildings, greenhouses, fences, and benches, using hand and power tools.
- Maintain irrigation systems, including

## Generalized Work Activities:

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

## Specific Tasks

## Occupation Specific Tasks:

- Attach slings, ropes, and cables to objects such as pipes, hoses, and bundles.
- Break up defective products for reprocessing.
- Change machine gears, using wrenches.
- Clean and lubricate equipment.
- Count finished products to determine if product orders are complete.
- Cut or break flashing from materials or products.
- Dump materials such as prepared ingredients into machine hoppers prior to mixing.
- Examine products to verify conformance to quality standards.
- Fold products and product parts during processing.
- Help production workers by performing duties of lesser skill, such as supplying or holding materials or tools, and cleaning work areas and equipment.
- Lift raw materials, finished products, and packed items, manually or using hoists.
- Load and unload items from machines, conveyors, and conveyances.
- Mark or tag identification on parts.
- Measure amounts of products, lengths of extruded articles, or weights of filled containers to ensure conformance to specifications.
- Mix ingredients according to specified procedures and formulas.
- Observe equipment operations so that malfunctions can be detected, and notify operators of any malfunctions.
- Operate machinery used in the production



winterizing the systems and starting them up in spring.

- Mark design boundaries, and paint natural and artificial turf fields with team logos and names before events.
- Mix and spray or spread fertilizers, herbicides, or insecticides onto grass, shrubs, and trees, using hand or automatic sprayers or spreaders.
- Mow and edge lawns, using power mowers and edgers.
- Operate powered equipment such as mowers, tractors, twin-axle vehicles, snow blowers, chain-saws, electric clippers, sod cutters, and pruning saws.
- Plan and cultivate lawns and gardens.
- Plant seeds, bulbs, foliage, flowering plants, grass, ground covers, trees, and shrubs, and apply mulch for protection, using gardening tools.
- Provide proper upkeep of sidewalks, driveways, parking lots, fountains, planters, burial sites, and other grounds features.
- Prune and trim trees, shrubs, and hedges, using shears, pruners, or chain saws.
- Rake, mulch, and compost leaves.
- Shovel snow from walks, driveways, and parking lots, and spread salt in those areas.
- Trim and pick flowers, and clean flower beds.
- Use hand tools such as shovels, rakes, pruning saws, saws, hedge and brush trimmers, and axes.
- Use irrigation methods to adjust the amount of water consumption and to prevent waste.
- Water lawns, trees, and plants, using portable sprinkler systems, hoses, or watering cans.

#### Detailed Tasks

##### Detailed Work Activities:

- advise clients or customers
- construct, erect, or repair wooden frameworks or structures
- drive truck with capacity greater than 3 tons
- finish concrete surfaces
- follow horticulture irrigation techniques
- maintain physical building or grounds of property
- mix paint, ingredients, or chemicals, according to specifications
- move or fit heavy objects
- operate tractor with accessories or attachments
- plant, cultivate, or harvest crops, including aquaculture
- prepare site or surfaces for concrete or masonry work
- repair and maintain grounds keeping equipment and tools

- Operate machinery used in the production process, or assist machine operators.
- Pack and store materials and products.
- Pack food products in paper bags and boxes, and stack them in warehouses and coolers.
- Perform minor repairs to machines, such as replacing damaged or worn parts.
- Place products in equipment or on work surfaces for further processing, inspecting, or wrapping.
- Position spouts or chutes of storage bins so that containers can be filled.
- Prepare raw materials for processing.
- Read gauges and charts, and record data obtained.
- Record information such as the number of products tested, meter readings, and dates and times of product production.
- Remove products, machine attachments, and waste material from machines.
- Separate products according to weight, grade, size, and composition of materials used to produce them.
- Signal coworkers to direct them to move products during the production process.
- Start machines or equipment in order to begin production processes.
- Thread ends of items such as thread, cloth, and lace through needles and rollers, and around take-up tubes.
- Tie products in bundles for further processing or shipment, following prescribed procedures.
- Transfer finished products, raw materials, tools, or equipment between storage and work areas of plants and warehouses, by hand or using hand trucks or powered lift trucks.
- Turn valves to regulate flow of liquids or air, to reverse machines, to start pumps, or to regulate equipment.
- Unclamp and hoist full reels from braiding, winding, and other fabricating machines, using power hoists.
- Wash work areas, machines, equipment, vehicles, and products.

#### Detailed Tasks

##### Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- clean rooms or work areas
- examine products or work to verify conformance to specifications
- load or unload material or workpiece into machinery



- resolve landscaping problems
- use chain saws
- use hand or power tools
- use herbicides, fertilizers, pesticides or related products
- use plant disease control techniques
- use plant or crop transplant techniques
- use portable hand spray equipment
- use power mower
- use truck-mounted hydraulic lifts or other accessories

- load, unload, or stack containers, materials, or products
- lubricate machinery, equipment, or parts
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate food processing production equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate ore refining/foundry equipment/machinery
- operate packaging or banding machine or equipment
- operate pulp or paper making equipment
- operate textile production equipment/machinery
- operate woodworking equipment/machinery
- package goods for shipment or storage
- perform repetitive tasks in assembly setting
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- signal directions or warnings to coworkers
- sort manufacturing materials or products
- wrap products

#### Tools - Examples

- Adjustable wrenches
- Hand files
- Industrial platform scales
- Forklifts
- Grease guns
- Claw hammers
- Handtrucks
- Power hoists
- Hydraulic booms
- Hand jacks
- Label-making machines



- Platform ladders
- Locking pliers
- Personal computers
- Planing tools
- Jackhammers
- Power drills
- Power grinders
- Power nail guns
- Power sanders
- Power saws
- Pressure wands
- Hand saws
- Phillips head screwdrivers
- Skid steer loaders
- Material-hoisting slings
- Power staple guns
- Measuring tapes
- Utility knives
- Industrial vacuum cleaners
- Hydraulic winches

### Labor Market Comparison

Maine Department of Labor.

Description	Landscaping and Groundskeeping Workers	Helpers--Production Workers	Difference
Median Wage	\$ 24,450	\$ 22,260	\$(2,190)
10th Percentile Wage	\$ 15,870	\$ 17,160	\$ 1,290
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,940	\$ 25,210	\$(4,730)
90th Percentile Wage	\$ 35,600	\$ 30,870	\$(4,730)
Mean Wage	\$ 25,000	\$ 23,130	\$(1,870)
Total Employment - 2346	4,040	1,490	-2,550



Employment Base - 2006	5,237	1,522	-3,715
Projected Employment - 2355	5,850	1,365	-4,485
Projected Job Growth - 2006-2355	11.7 %	-10.3 %	-22.0 %
Projected Annual Openings - 2006-2355	130	37	-93
Special			
Special Occupations:			

### National Job Posting Trends

Trend for Landscaping and Groundskeeping Workers and Helpers--Production Workers



### Programs

No information on programs or the occupation.

### Maine Statewide Promotion Opportunities for Landscaping and Groundskeeping Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
37-3011.00	Landscaping and Groundskeeping Workers	100	1	4,040	\$24,450.00	\$0.00	12%	130	



51-6041.00	Shoe and Leather Workers and Repairers	85	2	90	\$25,030.00	\$580.00	-19%	3	
51-4121.06	Welders, Cutters, and Welder Fitters	84	2	1,610	\$38,030.00	\$13,580.00	7%	49	★
51-7021.00	Furniture Finishers	81	2	70	\$28,550.00	\$4,100.00	-31%	2	
47-5021.00	Earth Drillers, Except Oil and Gas	81	3	140	\$37,470.00	\$13,020.00	2%	4	
51-7041.00	Sawing Machine Setters, Operators, and Tenders, Wood	81	2	700	\$24,790.00	\$340.00	-8%	15	
47-2151.00	Pipelayers	80	2	60	\$33,170.00	\$8,720.00	8%	3	
51-2031.00	Engine and Other Machine Assemblers	80	3	20	\$29,010.00	\$4,560.00	-45%	1	
45-4022.00	Logging Equipment Operators	80	1	1,390	\$29,280.00	\$4,830.00	4%	46	
47-2071.00	Paving, Surfacing, and Tamping Equipment Operators	80	2	320	\$25,520.00	\$1,070.00	1%	7	
51-2021.00	Coil Winders, Tapers, and Finishers	80	2	90	\$31,910.00	\$7,460.00	-53%	1	
51-4071.00	Foundry Mold and Coremakers	80	2	20	\$25,420.00	\$970.00	0%	1	
47-2061.00	Construction Laborers	79	2	3,020	\$26,660.00	\$2,210.00	5%	46	
51-9122.00	Painters, Transportation Equipment	78	2	320	\$32,230.00	\$7,780.00	2%	8	
47-2051.00	Cement Masons and Concrete Finishers	77	3	640	\$29,060.00	\$4,610.00	7%	25	

Special Occupations:

### Top Industries for Helpers--Production Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	22.19%	120,164	142,842	18.87%
Animal slaughtering and processing	311600	5.61%	30,385	36,112	18.85%



Printing and related support activities	323100	4.49%	24,300	19,253	-20.77%
Converted paper product manufacturing	322200	3.76%	20,372	17,096	-16.08%
Plastics product manufacturing	326100	3.35%	18,157	19,247	6.00%
Bakeries and tortilla manufacturing	311800	2.61%	14,121	14,424	2.15%
Architectural and structural metals manufacturing	332300	2.49%	13,499	14,418	6.80%
Other wood product manufacturing	321900	2.45%	13,261	12,496	-5.77%
Fruit and vegetable preserving and specialty food manufacturing	311400	1.83%	9,936	9,009	-9.33%
Motor vehicle parts manufacturing	336300	1.77%	9,606	7,648	-20.39%
Coating, engraving, heat treating, and allied activities	332800	1.68%	9,101	7,459	-18.03%
Household and institutional furniture manufacturing	337120	1.32%	7,166	5,452	-23.91%
Machine shops	332710	1.30%	7,021	5,808	-17.28%
Cement and concrete product manufacturing	327300	1.17%	6,321	6,861	8.55%
Other fabricated metal product manufacturing	332900	1.15%	6,215	5,507	-11.39%

### Top Industries for Landscaping and Groundskeeping Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Landscaping services	561730	36.82%	449,188	575,491	28.12%
Self-employed workers, primary job	000601	17.30%	211,079	226,203	7.17%
Local government, excluding education and hospitals	939300	6.79%	82,877	86,862	4.81%
Self-employed workers, secondary job	000602	3.24%	39,476	39,530	0.14%
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Elementary and secondary schools, public and private	611100	1.89%	23,031	24,414	6.00%
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Colleges, universities, and professional schools, public and private	611300	1.62%	19,754	22,230	12.53%
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Private households, primary jobs	814100	0.66%	8,015	8,384	4.60%
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# TORQ Analysis of Landscaping and Groundskeeping Workers to Tire Repairers and Changers

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Landscaping and Groundskeeping Workers	37-3011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Tire Repairers and Changers	49-3093.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:								82			
Ability TORQ			Skills TORQ				Knowledge TORQ				
Level			88	Level			77	Level			82
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Extent Flexibility	51	9	62	Installation	59	25	70	No Knowledge Upgrades Required!			
Trunk Strength	51	7	65	Active Listening	71	4	69				
Static Strength	53	5	62								
Manual Dexterity	46	4	65								
Finger Dexterity	44	5	50								
Near Vision	46	4	59								
Problem Sensitivity	39	2	56								
Information Ordering	41	2	53								
Far Vision	35	1	50								
LEVEL and IMPT (IMPORTANCE) refer to the Target Tire Repairers and Changers. GAP refers to level difference between Landscaping and Groundskeeping Workers and Tire Repairers and Changers.											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Landscaping and Groundskeeping Workers	Tire Repairers and Changers	Importance
Multilimb Coordination	50 	46 	68 
Manual Dexterity	42 	46 	65 
Trunk Strength	44 	51 	65 



Static Strength	48	53	62
Extent Flexibility	42	51	62
Near Vision	42	46	59
Problem Sensitivity	37	39	56
Control Precision	48	41	56
Deductive Reasoning	39	37	53
Information Ordering	39	41	53
Selective Attention	42	37	50
Arm-Hand Steadiness	42	30	50
Finger Dexterity	39	44	50
Stamina	34	32	50
Far Vision	34	35	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Landscaping and Groundskeeping Workers	Tire Repairers and Changers	Importance
Installation	34	59	70
Active Listening	67	71	69

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Landscaping and Groundskeeping Workers	Tire Repairers and Changers	Importance
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**Experience & Education Comparison**

Related Work Experience Comparison				Required Education Level Comparison		
Description	Landscaping and Groundskeeping Workers	Tire Repairers and Changers		Description	Landscaping and Groundskeeping Workers	Tire Repairers and Changers
10+ years	0%	0%		Doctoral	0%	0%
8-10 years	0%	0%		Professional Degree	0%	0%
6-8 years	4%	0%		Post-Masters Cert	0%	0%
4-6 years	4%	0%		Master's Degree	0%	0%
2-4 years	2%	0%		Post-Bachelor Cert	0%	0%
1-2 years	21%	14%		Bachelors	4%	0%
6-12 months	16%	42%		AA or Equiv	1%	0%
3-6 months	2%	0%		Some College	0%	37%
1-3 months	8%	3%		Post-Secondary Certificate	15%	0%
0-1 month	2%	6%		High School Diploma or GED	25%	30%
None	37%	32%		No HSD or GED	52%	32%

Landscaping and Groundskeeping Workers

Tire Repairers and Changers

Most Common Educational/Training Requirement:

Short-term on-the-job training

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Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

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## Tasks

### Landscaping and Groundskeeping Workers

#### Core Tasks

##### Generalized Work Activities:

- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Operating Vehicles, Mechanized Devices, or Equipment - Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

#### Specific Tasks

##### Occupation Specific Tasks:

- Advise customers on plant selection and care.
- Attach wires from planted trees to support stakes.
- Build forms, and mix and pour cement to form garden borders.
- Care for artificial turf fields, periodically removing the turf and replacing cushioning pads, and vacuuming and disinfecting the turf after use to prevent the growth of harmful bacteria.
- Care for established lawns by mulching, aerating, weeding, grubbing and removing thatch, and trimming and edging around flower beds, walks, and walls.
- Care for natural turf fields, making sure the underlying soil has the required composition to allow proper drainage and to support the grasses used on the fields.
- Decorate gardens with stones and plants.
- Follow planned landscaping designs to determine where to lay sod, sow grass, or plant flowers and foliage.

### Tire Repairers and Changers

#### Core Tasks

##### Generalized Work Activities:

- Operating Vehicles, Mechanized Devices, or Equipment - Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

#### Specific Tasks

##### Occupation Specific Tasks:

- Apply rubber cement to buffed tire casings prior to vulcanization process.
- Assist mechanics and perform other duties as directed.
- Buff defective areas of inner tubes, using scrapers.
- Clean sides of whitewall tires.
- Drive automobile or service trucks to industrial sites in order to provide services, and respond to emergency calls.
- Glue boots (tire patches) over ruptures in tire casings, using rubber cement.
- Hammer required counterweights onto rims of wheels.
- Identify and inflate tires correctly for the size and ply.
- Inflate inner tubes and immerse them in water to locate leaks.
- Inspect tire casings for defects, such as holes and tears.
- Locate punctures in tubeless tires by visual



- Gather and remove litter.
- Haul or spread topsoil, and spread straw over seeded soil to hold soil in place.
- Install rock gardens, ponds, decks, drainage systems, irrigation systems, retaining walls, fences, planters, and/or playground equipment.
- Maintain and repair tools, equipment, and structures such as buildings, greenhouses, fences, and benches, using hand and power tools.
- Maintain irrigation systems, including winterizing the systems and starting them up in spring.
- Mark design boundaries, and paint natural and artificial turf fields with team logos and names before events.
- Mx and spray or spread fertilizers, herbicides, or insecticides onto grass, shrubs, and trees, using hand or automatic sprayers or spreaders.
- Mow and edge lawns, using power mowers and edgers.
- Operate powered equipment such as mowers, tractors, twin-axle vehicles, snow blowers, chain-saws, electric clippers, sod cutters, and pruning saws.
- Plan and cultivate lawns and gardens.
- Plant seeds, bulbs, foliage, flowering plants, grass, ground covers, trees, and shrubs, and apply mulch for protection, using gardening tools.
- Provide proper upkeep of sidewalks, driveways, parking lots, fountains, planters, burial sites, and other grounds features.
- Prune and trim trees, shrubs, and hedges, using shears, pruners, or chain saws.
- Rake, mulch, and compost leaves.
- Shovel snow from walks, driveways, and parking lots, and spread salt in those areas.
- Trim and pick flowers, and clean flower beds.
- Use hand tools such as shovels, rakes, pruning saws, saws, hedge and brush trimmers, and axes.
- Use irrigation methods to adjust the amount of water consumption and to prevent waste.
- Water lawns, trees, and plants, using portable sprinkler systems, hoses, or watering cans.

#### Detailed Tasks

##### Detailed Work Activities:

- advise clients or customers
- construct, erect, or repair wooden frameworks or structures
- drive truck with capacity greater than 3 tons
- finish concrete surfaces
- follow horticulture irrigation techniques
- maintain physical building or grounds of property

inspection or by immersing inflated tires in water baths and observing air bubbles.

- Order replacements for tires and tubes.
- Patch tubes with adhesive rubber patches, or seal rubber patches to tubes using hot vulcanizing plates.
- Place casing-camelback assemblies in tire molds for the vulcanization process, and exert pressure on the camelbacks to ensure good adhesion.
- Place wheels on balancing machines to determine counterweights required to balance wheels.
- Prepare rims and wheel drums for reassembly by scraping, grinding, or sandblasting.
- Raise vehicles using hydraulic jacks.
- Reassemble tires onto wheels.
- Remount wheels onto vehicles.
- Replace valve stems and remove puncturing objects.
- Roll new rubber treads, known as camelbacks, over tire casings, and mold the semi-raw rubber treads onto the buffed casings.
- Rotate tires to different positions on vehicles, using hand tools.
- Seal punctures in tubeless tires by inserting adhesive material and expanding rubber plugs into punctures, using hand tools.
- Separate tubed tires from wheels, using rubber mallets and metal bars, or mechanical tire changers.
- Unbolt wheels from vehicles and remove them, using lug wrenches and other hand and power tools.

#### Detailed Tasks

##### Detailed Work Activities:

- adhere to safety procedures
- apply adhesives, caulking, sealants, or coatings
- apply cleaning solvents
- estimate time or cost for installation, repair, or construction projects
- fabricate, assemble, or disassemble manufactured products by hand
- locate puncture in tubeless tires or inner tubes
- move or fit heavy objects
- operate sandblasting equipment
- perform safety inspections in industrial, manufacturing or repair setting
- read vehicle manufacturer's specifications
- read work order, instructions, formulas, or processing charts
- repair or install tires
- use hand or power tools
- use knowledge of metric system



- mix paint, ingredients, or chemicals, according to specifications
- move or fit heavy objects
- operate tractor with accessories or attachments
- plant, cultivate, or harvest crops, including aquaculture
- prepare site or surfaces for concrete or masonry work
- repair and maintain grounds keeping equipment and tools
- resolve landscaping problems
- use chain saws
- use hand or power tools
- use herbicides, fertilizers, pesticides or related products
- use plant disease control techniques
- use plant or crop transplant techniques
- use portable hand spray equipment
- use power mower
- use truck-mounted hydraulic lifts or other accessories

- use lifting equipment in vehicle repair setting
- use oral or written communication techniques
- use pneumatic tools

#### Tools - Examples

- Hand rollers for adhesives
- Air/steam bags
- Awns
- Air spray guns
- Deburring tools
- Desktop computers
- Tire stands
- Bead expanders
- Handheld extruders
- Hammers
- Holding clamps
- Airless spray guns
- Electric knife heaters
- Tire tread depth gauges
- Power hoists
- Hydraulic pumps
- Heavy duty T-handle spiral probe cement tools
- Hydraulic jacks
- Cutting blades
- Mallets
- Personal computers
- Air drills
- Pneumatic wrenches
- Buffers
- Power grinders
- Regroovers
- Safety gloves
- Bead seaters
- Hub-cap pullers



- Hand rasps
- Bail cutting knives
- Heavy duty T-handle reamers
- Respirators
- Truck lock ring removers
- Mold presses
- Eye protection
- Safety shoes
- Inner-liner scrapers
- Scissors
- 4-way tire valve tools
- Mechanical tire changers
- Torque wrenches
- Utility knives
- Hot vulcanizing plates
- Bead breakers
- Balancing machines
- Wire brushes
- Workshop cranes

### Labor Market Comparison

Maine Department of Labor.

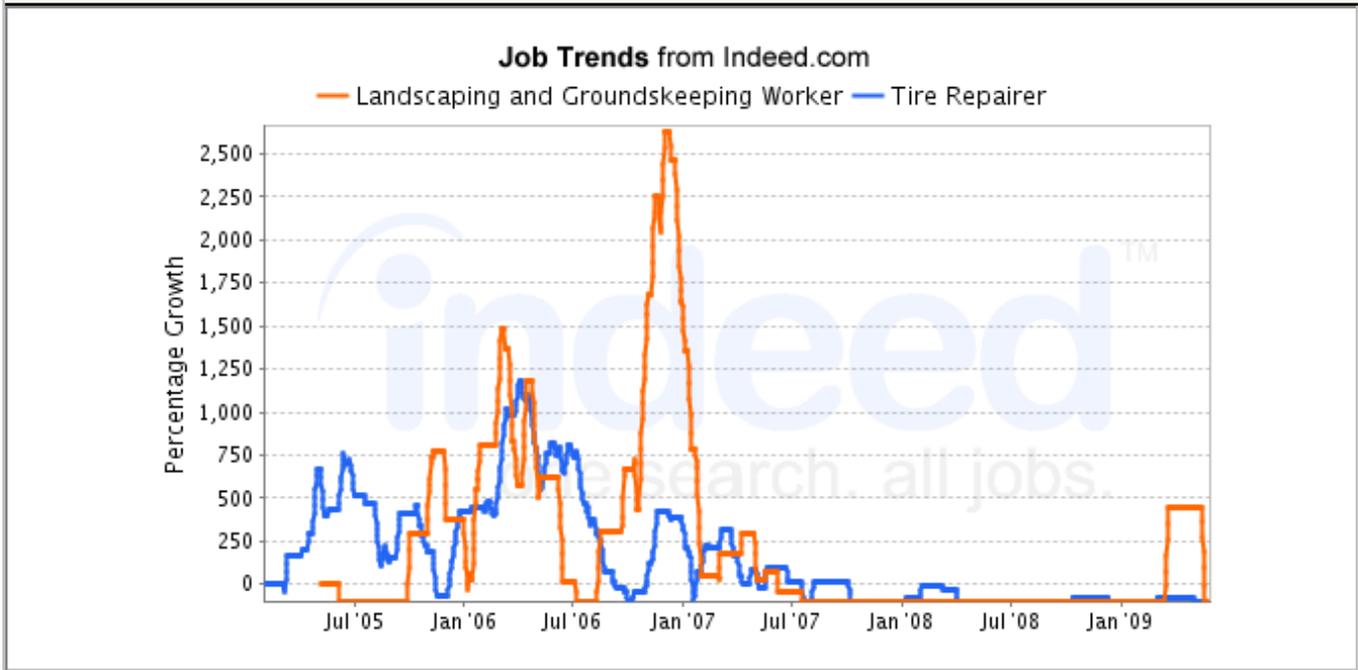
Description	Landscaping and Groundskeeping Workers	Tire Repairers and Changers	Difference
Median Wage	\$ 24,450	\$ 19,920	\$(4,530)
10th Percentile Wage	\$ 15,870	\$ 16,420	\$ 550
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,940	\$ 25,510	\$(4,430)
90th Percentile Wage	\$ 35,600	\$ 29,690	\$(5,910)
Mean Wage	\$ 25,000	\$ 21,500	\$(3,500)
Total Employment - 2346	4,040	330	-3,710
Employment Base - 2006	5,237	329	-4,908



Projected Employment - 2355	5,850	410	-5,440
Projected Job Growth - 2006-2355	11.7 %	24.6 %	12.9 %
Projected Annual Openings - 2006-2355	130	15	-115
Special			
Special Occupations:			

### National Job Posting Trends

Trend for Landscaping and Groundskeeping Workers and Tire Repairers and Changers



Data from [Indeed](http://Indeed.com)

### Programs

No information on programs or the occupation.

### Maine Statewide Promotion Opportunities for Landscaping and Groundskeeping Workers

O* NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
37-3011.00	Landscaping and Groundskeeping Workers	100	1	4,040	\$24,450.00	\$0.00	12%	130	
51-6041.00	Shoe and Leather Workers and Repairers	85	2	90	\$25,030.00	\$580.00	-19%	3	



51-4121.06	Welders, Cutters, and Welder Fitters	84	2	1,610	\$38,030.00	\$13,580.00	7%	49	
51-7021.00	Furniture Finishers	81	2	70	\$28,550.00	\$4,100.00	-31%	2	
47-5021.00	Earth Drillers, Except Oil and Gas	81	3	140	\$37,470.00	\$13,020.00	2%	4	
51-7041.00	Sawing Machine Setters, Operators, and Tenders, Wood	81	2	700	\$24,790.00	\$340.00	-8%	15	
47-2151.00	Pipelayers	80	2	60	\$33,170.00	\$8,720.00	8%	3	
51-2031.00	Engine and Other Machine Assemblers	80	3	20	\$29,010.00	\$4,560.00	-45%	1	
51-4071.00	Foundry Mold and Coremakers	80	2	20	\$25,420.00	\$970.00	0%	1	
45-4022.00	Logging Equipment Operators	80	1	1,390	\$29,280.00	\$4,830.00	4%	46	
47-2071.00	Paving, Surfacing, and Tamping Equipment Operators	80	2	320	\$25,520.00	\$1,070.00	1%	7	
51-2021.00	Coil Winders, Tapers, and Finishers	80	2	90	\$31,910.00	\$7,460.00	-53%	1	
47-2061.00	Construction Laborers	79	2	3,020	\$26,660.00	\$2,210.00	5%	46	
51-9122.00	Painters, Transportation Equipment	78	2	320	\$32,230.00	\$7,780.00	2%	8	
51-9022.00	Grinding and Polishing Workers, Hand	77	1	270	\$31,060.00	\$6,610.00	4%	5	

Special Occupations:

### Top Industries for Tire Repairers and Changers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Automotive parts, accessories, and tire stores	441300	69.38%	73,432	92,760	26.32%
Automotive mechanical and electrical repair and maintenance	811110	6.74%	7,133	7,622	6.86%
Self-employed workers, primary job	000601	3.34%	3,531	3,386	-4.12%
Other automotive repair and maintenance	811190	2.45%	2,591	3,714	43.35%



Automobile dealers	441100	1.63%	1,728	1,765	2.09%
Rubber product manufacturing	326200	1.60%	1,695	1,077	-36.45%
Gasoline stations	447100	1.57%	1,660	1,338	-19.43%
Motor vehicle and motor vehicle parts and supplies merchant wholesalers	423100	1.44%	1,519	1,561	2.73%
General freight trucking	484100	0.94%	997	1,015	1.80%
Automotive equipment rental and leasing	532100	0.67%	710	725	2.12%
Specialized freight trucking	484200	0.40%	424	430	1.37%
Employment services	561300	0.35%	366	417	13.91%
Commercial and industrial machinery and equipment rental and leasing	532400	0.31%	329	362	9.97%
Wholesale electronic markets and agents and brokers	425100	0.18%	185	189	2.13%
Waste collection	562100	0.11%	116	132	13.47%

### Top Industries for Landscaping and Groundskeeping Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Landscaping services	561730	36.82%	449,188	575,491	28.12%
Self-employed workers, primary job	000601	17.30%	211,079	226,203	7.17%
Local government, excluding education and hospitals	939300	6.79%	82,877	86,862	4.81%
Self-employed workers, secondary job	000602	3.24%	39,476	39,530	0.14%
Employment services	561300	2.29%	27,944	31,057	11.14%
Elementary and secondary schools, public and private	611100	1.89%	23,031	24,414	6.00%
Lessors of real estate	531100	1.77%	21,582	23,919	10.83%
Colleges, universities, and professional schools, public and private	611300	1.62%	19,754	22,230	12.53%
Fitness and recreational sports centers	713940	1.61%	19,680	26,376	34.03%
Religious organizations	813100	1.52%	18,555	22,398	20.71%
Death care services	812200	1.37%	16,677	19,176	14.98%
Activities related to real estate	531300	1.16%	14,139	18,125	28.19%
Lawn and garden equipment and supplies stores	444200	0.84%	10,300	9,322	-9.49%
State government, excluding education and hospitals	929200	0.66%	8,034	7,930	-1.29%
Private households, primary jobs	814100	0.66%	8,015	8,384	4.60%

## Industry & Occupational Data Sources

TORQ Results: The TORQ Scores is based upon an proprietary algorithm applied against Knowledge, Skills and Ability levels and importance derived from O\*NET 12.

ASK Analysis, Experience & Education Levels and Tasks: O\*Net 12

Labor Market Comparisons Occupational Projections data from Maine Department of Labor

National Posting Trends Indeed.com

Labor Pool & Promotions Opportunities: Occupational Projections data from Maine Department of Labor

Top Industries: Occupational Employment Statistics program (U.S. Bureau of Labor Statistics)