

## Step by Step Instructions for Finding Labor Market Information for Career Interest Research

### Section 1: National Information on Career Choices 1, 2 and 3

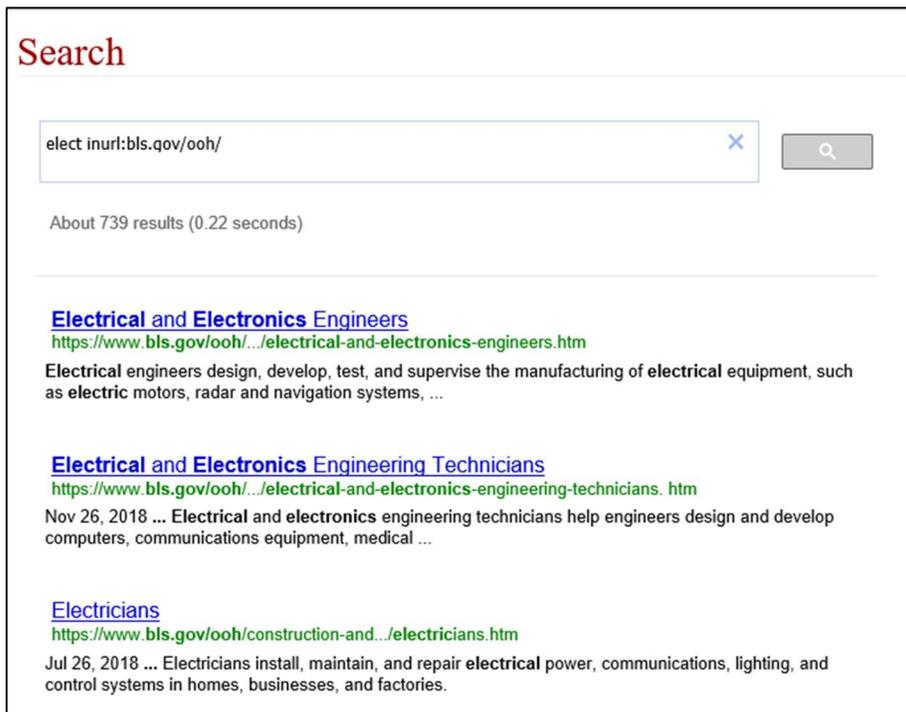
1. Using the [Occupational Outlook Handbook](#) (published by the U.S. Department of Labor), type the first few characters of each of your career choices into the “Search Handbook” field, then click on the Go button.



In the example below, we typed in “elect” to search for Electrician, then clicked on the Go button.



2. You should see a list of possible matches, as shown in the example below. Click on the occupational title you feel is the best match. In this example, we clicked on the last option shown in the screen shot below, “Electricians.”



- Once you have selected a specific occupation from the options available, you should see a screen of information on the occupation as shown in the example below.

Occupational Outlook Handbook > Construction and Extraction >

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## Electricians

[Summary](#) | [What They Do](#) | [Work Environment](#) | [How to Become One](#) | [Pay](#) | [Job Outlook](#) | [State & Area Data](#) | [Similar Occupations](#) | [More Info](#)

### Summary

Quick Facts: Electricians	
<b>2017 Median Pay</b> ?	\$54,110 per year \$26.01 per hour
<b>Typical Entry-Level Education</b> ?	High school diploma or equivalent
<b>Work Experience in a Related Occupation</b> ?	None
<b>On-the-job Training</b> ?	Apprenticeship
<b>Number of Jobs, 2016</b> ?	666,900
<b>Job Outlook, 2016-26</b> ?	9% (As fast as average)
<b>Employment Change, 2016-26</b> ?	59,600

**What Electricians Do**

Electricians install, maintain, and repair electrical power, communications, lighting, and control systems in homes, businesses, and factories.

**Work Environment**

Electricians work indoors and outdoors in nearly every type of facility. Almost all electricians work full time, which may include evenings and weekends. Potential on-the-job injuries include electrical shocks and burns, cuts, and falls.

**How to Become an Electrician**

Most electricians learn through an apprenticeship, but some start out by attending a technical school. Most states require electricians to be licensed.



Electricians connect a variety of fixtures to internal and external electricity sources.

- Much of the information you need to fill in on Form 27B for each Career Choice will be displayed on that first screen of information for the occupation. For example, “What they do” is the first section on the page, as shown in the example below.

Occupational Outlook Handbook > Construction and Extraction >

## Electricians

[Summary](#) | [What They Do](#) | [Work Environment](#) | [How to Become One](#) | [Pay](#) | [Job Outlook](#)

### Summary

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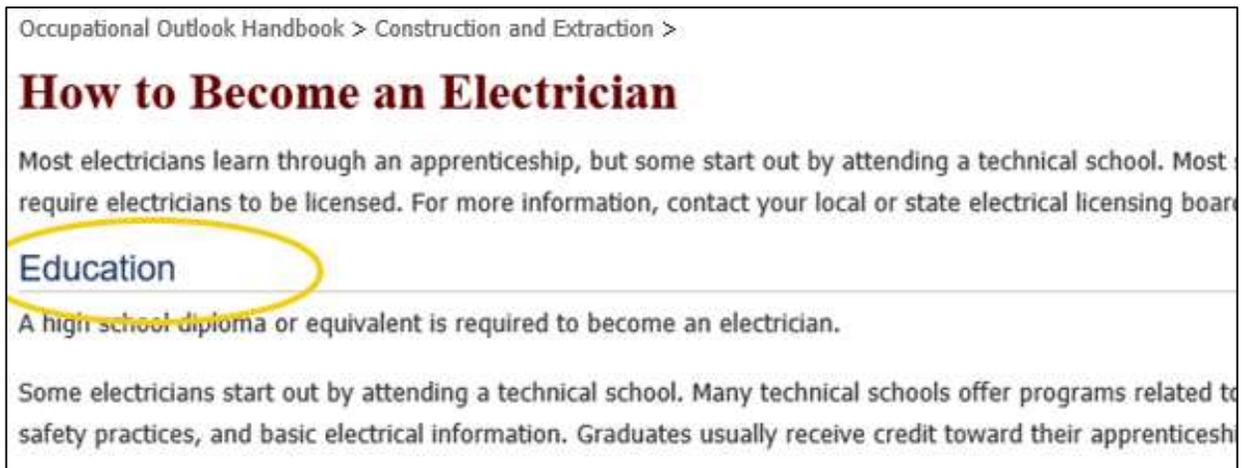
**What Electricians Do**

Electricians install, maintain, and repair electrical power, communications, lighting, and control systems in homes, businesses, and factories.

5. For the “Typical Education Needed” and “Typical On-the-Job Training Needed” sections of the form, click on the “How to Become One” tab at the top.



6. Read through the information provided under “Education” to determine what to write on Form 27B for “Typical Education Needed.”



- Use the information under “Training” to determine what to write on Form 27B for “Typical On-the-Job Training Needed.”

Occupational Outlook Handbook > Construction and Extraction >

## How to Become an Electrician

Most electricians learn through an apprenticeship, but some start out by attending a technical school. Most require electricians to be licensed. For more information, contact your local or state electrical licensing board.

### Education

A high school diploma or equivalent is required to become an electrician.

Some electricians start out by attending a technical school. Many technical schools offer programs related to safety practices, and basic electrical information. Graduates usually receive credit toward their apprenticeship.

### Training

Most electricians learn their trade in a 4- or 5-year apprenticeship program. For each year of the program, a typically receive 2,000 hours of paid on-the-job training as well as some classroom instruction.

In the classroom, apprentices learn electrical theory, blueprint reading, mathematics, electrical code requirements, and safety and first-aid practices. They may also receive specialized training related to soldering, communication systems, alarm systems, and elevators.

Several groups, including unions and contractor associations, sponsor apprenticeship programs. Apprenticeship requirements vary by state and locality.

- Click on the “Job Outlook” tab to help identify which Job Outlook (“Bright,” “Average” or “Below Average” on Form 27B is the most appropriate to circle.

Occupational Outlook Handbook > Construction and Extraction >

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## Electricians

Summary What They Do Work Environment How to Become One Pay **Job Outlook** State & Area Data Similar Occupations More Info

### Job Outlook

About this section ?

Employment of electricians is projected to grow 9 percent from 2016 to 2026, about as fast as the average for all occupations. Increases in construction spending and growing demand for alternative energy sources will drive demand for electricians.

Alternative power generation, such as solar and wind, is an emerging field that should require more electricians for installation. Increasingly, electricians will be needed to link these alternative power sources to homes and power grids over the coming decade. Employment growth stemming from these sources, however, will largely be dependent on government policy.

#### Electricians

Percent change in employment, projected 2016-26

Construction trades workers	10%
Electricians	9%

If the Job Outlook section on the screen does not include one of those phrases to describe job outlook, instead write in the projected employment growth.

**Job Outlook** About this section ?

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**Job Prospects**

Electricians who can perform many different tasks, such as electronic systems repair, solar photovoltaic installation, and industrial component wiring, should have the best job opportunities.

Employment of electricians fluctuates with the overall economy. On the one hand, there is greater demand for electricians during peak periods of building construction and maintenance. On the other hand, workers may experience periods of unemployment when the overall level of construction and maintenance falls.

**Employment projections data for electricians, 2016-26**

Occupational Title	SOC Code	Employment, 2016	Projected Employment, 2026	Change, 2016-26		Employment by Industry
				Percent	Numeric	
Electricians	47-2111	666,900	726,500	9	59,600	<a href="#">xls</a>

SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program

**Electricians**

Percent change in employment, projected 2016-26

Notes: All Occupations includes all occupations in the U.S. Economy.  
Source: U.S. Bureau of Labor Statistics, Employment Projections program

- Click on the "Pay" tab at the top of the screen for the information to write on Form 27B for "Salary (U.S.)."

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**Electricians**

Summary What They Do Work Environment How to Become One **Pay** Job Outlook State & Area Data Similar Occupations More Info

**Pay** About this section ?

The median annual wage for electricians was \$54,110 in May 2017. The median wage is the wage at which half the workers in an occupation earned more than that amount and half earned less. The lowest 10 percent earned less than \$32,180, and the highest 10 percent earned more than \$92,690.

In May 2017, the median annual wages for electricians in the top industries in which they worked were as follows:

Government	\$60,570
Manufacturing	58,470
Electrical contractors and other wiring installation contractors	52,190
Employment services	47,520

**Electricians**

Median annual wages, May 2017

- Complete the "Why I like it" and "Concerns" sections on your own, based on the information you have learned about the Career Choice.
- Repeat steps one through 10 above for Career Choice #2 and Career Choice #3.

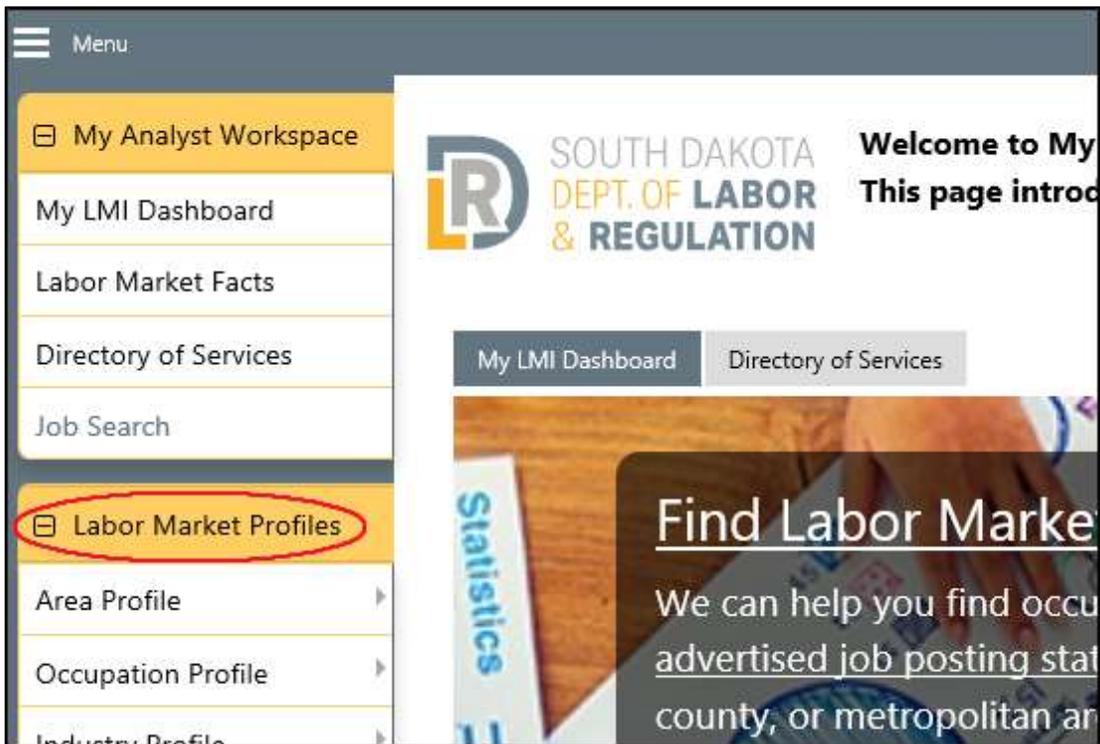
**Section 2: South Dakota-specific information on Career Choices 1, 2 and 3**

**“Current Supply & Demand” section of Form 27B**

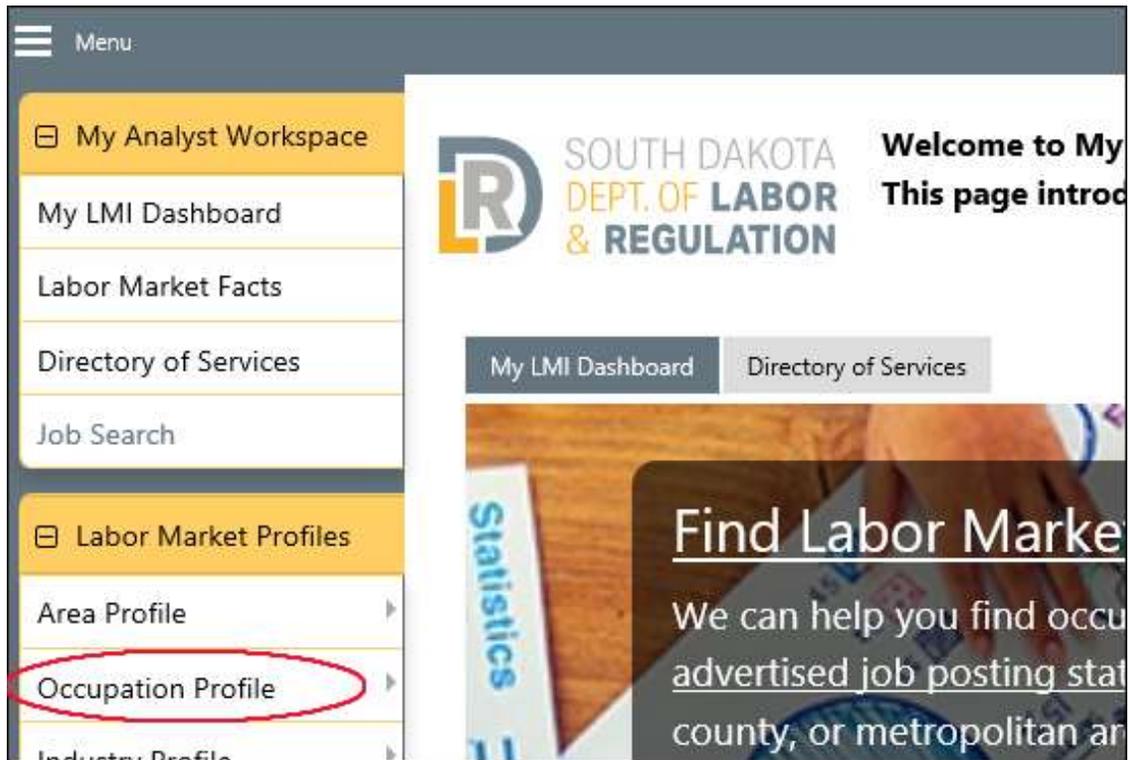
12. While on LMIC’s homepage [dlr.sd.gov/lmic](http://dlr.sd.gov/lmic), from the left-hand menu, choose “Virtual Labor Market Data System.”



13. Within the virtual labor market data system, from the left-hand menu, you will want to use the second section down, the “Labor Market Profiles” section. (If the left-hand menu is not displayed, click on the three bars in the upper left-hand corner to access it.)



14. Hover your mouse over the “Occupation Profile” option to get another menu that expands to the right.



15. Click on "Occupational Comparison."



16. From the next screen that appears, choose the first option, “Compare multiple occupations in an area.”



17. If “South Dakota” is not already set as the Area, you will need to click on the Area that appears (it will be underlined). As shown in the screen shot example below, you would click on “Hughes County, SD” to change the area. *Please note: anytime text is underlined in the virtual system, it means it is a clickable item that you can click to see other options.*



18. You should then see an “Area Type” drop-down box. Click on the down arrow to the right of that drop-down box to see the options for Area Type.

Area (click to change): [Hughes County, SD](#)

Select New Area:  
[\[ Select by Map \]](#)

State: South Dakota

Area Type: None Selected 

19. From the list of Area Type options, choose the last one, “State.”

Area (click to change): [Hughes County, SD](#)

Select New Area:  
[\[ Select by Map \]](#)

State: South Dakota

Area Type: 

- None Selected
- Balance of State (2013)
- Combined Statistical Area
- Combined Statistical Area (2013)
- County
- Metropolitan Statistical Area
- Metropolitan Statistical Area (2013)
- Micropolitan Statistical Area (2013)
- State

Display only occupations with a Bright Outlook  Dis

[Search for an occupation by keyword\(s\)](#)

Type a job title or occupational keywords in the box and c

20. Now you are ready to search for the first occupation (“Career Choice #1” on Form 27B). You will see several options across the top for ways to find an occupation in the virtual system: by Keyword, by Group, by Occupation Listing, etc. Use your preferred method to find the occupation. Keyword search may be the easiest to use, entering the first few letters of the occupation.

\* Indicates required fields.

Occupations by Keyword    Occupations by Group    Occupation Listing    Occupations by Education Program

Area (click to change): [South Dakota](#)

Display only occupations with a Bright Outlook     Display Green occupations only

Search for an occupation by keyword(s)

Type a job title or occupational keywords in the box and click the *Search* button. (e.g. Accountant)

In the example below, the keyword search was used, and “plumb” was entered to search for the plumber occupation. As you begin typing, you may see a list of matching occupational titles pop up. If the occupation you are searching for appears in that pop-up list, you may click it there.

\* Indicates required fields.

Occupations by Keyword    Occupations by Group

Area (click to change): [South Dakota](#)

Display only occupations with a Bright Outlook

Search for an occupation by keyword(s)

Type a job title or occupational keywords in the

21. If you choose to search by **key word**, **military specialty** or **occupational code**, you will also need to press the gold “Search” button to perform the actual search. **If you choose one of the other search options, you may skip this step.**



22. Whichever search method you chose to use, you will likely be presented with a list of possible matching occupational titles. Click on the occupational title you feel is the best match to what you are looking for. Using the example above (searching for “plumber”), you would click on the second option, “Plumbers.”

Search for an occupation by keyword(s)

Here is a list of occupations that matched your keyword search. Occupations description of each occupation.

You may click on the matched indicator in the Related Job Titles and Occupa

Score	Occupation
100%	<a href="#">Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters</a> ✨
71%	<a href="#">Plumbers</a> ✨ 🌱

🌟 BRIGHT OUTLOOK NATIONALLY | 🌱 GREEN OCCUPATIONS

***Please note: If you cannot find the occupation you are looking for, contact LMIC at 605.626.2314; they will be happy to help you.***

23. You should then be presented with various labor market information for the occupation you selected, including most of the information to be included on Form 27B.

**Before proceeding**, however, please note a quick way to view the same information for the second occupation (Career Choice #2 on Form 27B) is to click on the “Compare” option appearing directly below the title of the occupation for which you are currently viewing labor market information.

**Plumbers**  
[Compare](#)

[Summary](#) | [Description](#) | [Jobs](#) | [Candidates](#) | [Supply and Demand](#) | [Employers](#) | [Skills](#)

**Plumbers** - Assemble, install, or repair pipes, fittings, or fixtures of heating, water, or drainage systems, a

Source: This information is based on O\*NET™ data. O\*NET

						\$49,95
Outlook Stable	Demand Medium	Supply Low	Supply Shortage	PS	2+ Years	\$34,11

24. By clicking on the “Compare” option, you will be presented with a list of related occupations to compare. In the example below, we see a list of occupations related to Plumbers. **If the second occupation you are interested in (Career Choice #2) appears in the list, click in the small box to the left of that occupational title. Then you will need to scroll down the page and press the gold “Continue” button. You may skip step 14.**

Select related occupations or [choose other occupations to compare](#) with **Plumbers**.

- Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
- Animal Trainers
- Automotive Master Mechanics
- Boilermakers
- Commercial Divers
- Construction Carpenters
- Control and Valve Installers and Repairers, Except Mechanical Door
- Drywall and Ceiling Tile Installers
- Electrical Power-Line Installers and Repairers
- Electricians
- Elevator Installers and Repairers
- First-Line Supervisors of Construction Trades and Extraction Workers
- Forest and Conservation Technicians

Continue

25. If the second occupation you are interested in (Career Choice #2) does NOT appear in the list, click where it says, “choose other occupations to compare” in the text above the list.

Select related occupations or choose other occupations to compare with Plumbers.

- Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
- Animal Trainers
- Automotive Master Mechanics
- Boilermakers
- Commercial Divers
- Construction Carpenters
- Control and Valve Installers and Repairers, Except Mechanical Door
- Drywall and Ceiling Tile Installers
- Electrical Power-Line Installers and Repairers
- Electricians
- Elevator Installers and Repairers
- First-Line Supervisors of Construction Trades and Extraction Workers
- Forest and Conservation Technicians

You will then again see the screen in Step 20 above, presenting several options for searching for another occupation. Choose the option you prefer, following the instructions in Steps 20 through 22 above, as needed.

For this example, we chose to use the key word search option again for the second occupation, searching for “carpenter.”

Area (click to change): [South Dakota](#)

Display only occupations with a Bright Outlook

Search for an occupation by keyword(s)

Type a job title or occupational keywords in the

×

From the list of matching occupations that appeared as shown below, "Construction Carpenters" was selected.

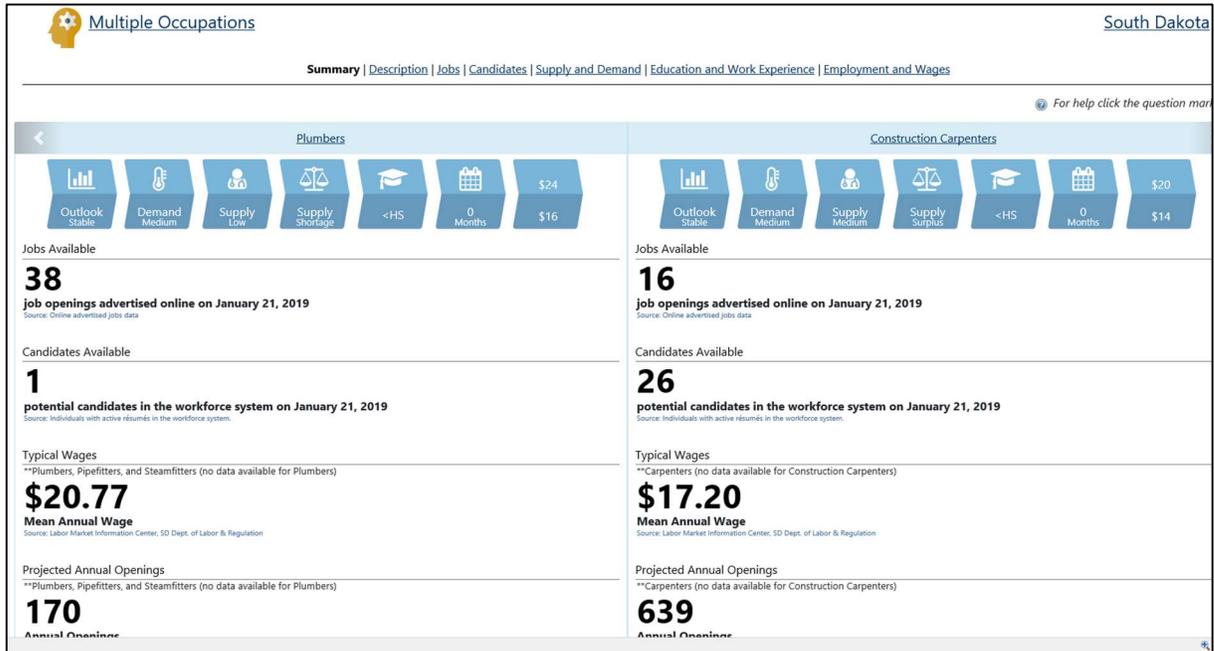
Search for an occupation by keyword(s)

Here is a list of occupations that matched your keyword search. Occupational description of each occupation.

You may click on the matched indicator in the Related Job Titles and Occu

Score	Occupation
100%	<a href="#">Construction Carpenters</a>  
52%	<a href="#">Rough Carpenters</a>  
51%	<a href="#">Helpers--Carpenters</a>  
21%	<a href="#">First-Line Supervisors of Construction Trades and Extraction Workers</a> 
15%	<a href="#">Cabinetmakers and Bench Carpenters</a>
8%	<a href="#">Drywall and Ceiling Tile Installers</a>

26. Once you have selected both occupations, you should see a screen of labor market information for each of the occupations, side by side.



27. For the first item of South Dakota-specific information on Form 27B, “Mean (average) Wage,” see the “Typical Wages” information for each occupation.
28. For the second item, “Annual Average Percent Employment Change Projected,” see the options running across the top of the screen and click on the “Employment and Wages” option (as shown below).



29. Scroll down to the fourth table of information presented on the screen, to the table with the heading “Occupational Employment & Future Employment Outlook.”

### Occupational Employment & Future Employment Outlook

This section shows the long term employment projections for the occupations selected in South Da

*Click a column title to sort.*

30. Use the data in the last row of that table, labeled “Annual Avg. Percent Change” to enter on Form 27B for Career Choice #1 and Career Choice #2.

**Occupational Employment & Future Employment Outlook** ⓘ

This section shows the long term employment projections for the occupations selected in South

*Click a column title to sort.*

Data
Estimated Employment
Projected Employment
Total Employment Change
Annual Avg. Percent Change

31. Now scroll down further on the screen, to the section labeled, “Projected Annual Openings,” for the next item on Form 27B, the “Projected Annual Openings.”

**Projected Annual Openings** ⓘ

This section shows the long term projected annual openings for the occupations selected in South Dakota from 2016 to 2026.

*Click a column title to sort.*

Data	Carpenters	Plumbers, Pipefitters, and Steamfitters
Annual Openings	639	170

32. Write the numbers in the top row of the table, labeled “Annual Openings” for each of the occupations on Form 27B.

**“Current Supply & Demand” section of Form 27B**

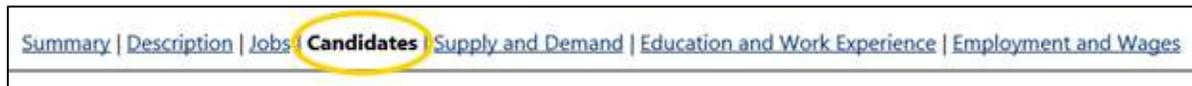
33. Scroll back up to the top of the screen until you again see the options running across the screen, as shown in the screen shot below. Click on the “Jobs” option.



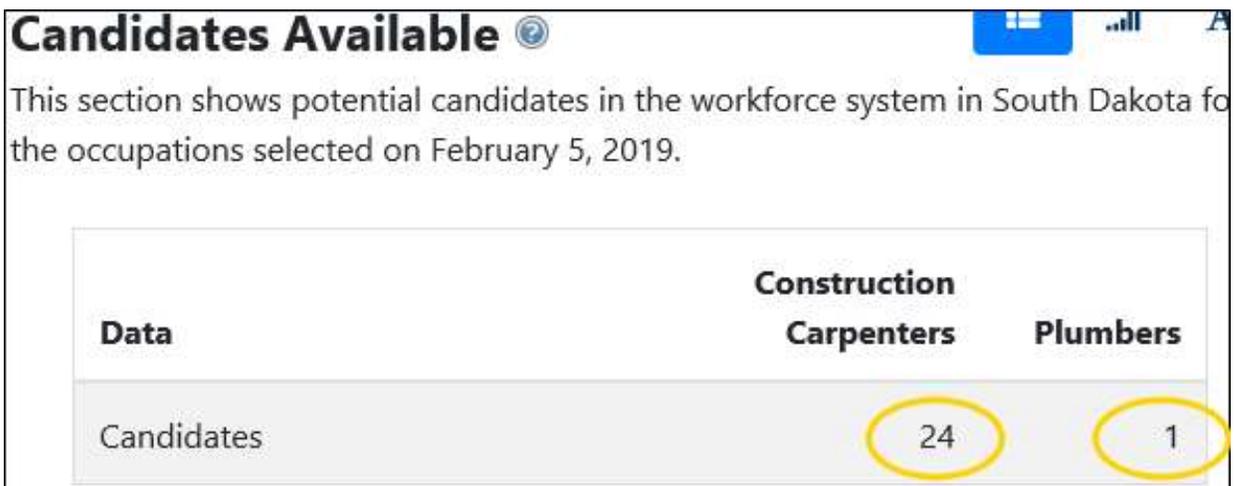
34. The first information displayed, “Jobs Available” can be entered on Form 27B as the “Current Job Openings” for each of the occupations.



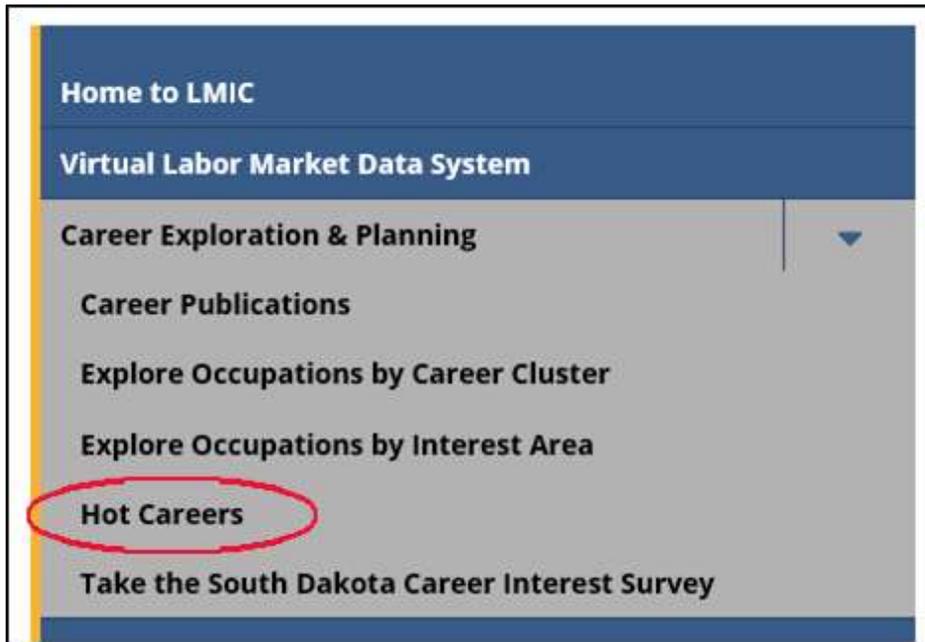
35. Refer again to the options across the top of the screen and click on “Candidates.”



36. Enter on Form 27B the number of candidates for each of the occupations.



37. For the “SD Hot Career (yes or no)” item on Form 27B, return to the LMIC homepage [dlr.sd.gov/lmic](http://dlr.sd.gov/lmic). (Unless you closed that window, it should still be open in your browser.)
38. This time, from the left-hand menu of the LMIC homepage ([dlr.sd.gov/lmic](http://dlr.sd.gov/lmic)), click on the down-pointing arrow next to the third item down, Career Exploration & Planning.” From the additional options that appear, choose “Hot Careers,” the second option from the bottom.



39. From the Hot Careers page ([https://dlr.sd.gov/lmic/menu\\_hot\\_careers.aspx](https://dlr.sd.gov/lmic/menu_hot_careers.aspx)), choose “Employment Projections and Current Wage Estimates of the Hot Careers.”

**Labor Market Information Center**

**Hot Careers (High Demand-High Wage Occupations)**

To help individual career planners and job seekers identify occupations with the most favorable job prospects, the Labor Market Information Center identifies high demand-high wage occupations, or "Hot Careers."

Learn **how Hot Careers are determined.**

**Hot Careers Resources**

- [Current Job Openings in Hot Careers](#)
- Employment Projections and Current Wage Estimates of the Hot Careers**
- [Hot Careers flier](#)

Learn **even more about each Hot Career** in the virtual labor market data system

**Occupational Profiles**

**How Hot Careers Are Determined**

To be on the Hot Careers list, an occupation must 1) be projected to show employment growth, 2) have an average annual demand above the median (2016-2026) and 3) have an average wage above the median wage across all occupations (\$32,338).

For more information on average annual demand, visit our **Employment Projections Technical Wages Technical Notes** page.

40. The table of employment projections and wage data you will see has each of the Hot Careers listed in alphabetical order. Check the occupational titles in the second column of the table for the occupations you chose as Career Choice #1 and Career Choice #2 on Form 27B. If the occupation appears in this table, it is a Hot Career, and you may indicate “Yes” on Form 27B. If it does not appear in the table, you may indicate “No” on Form 27B.

<b>Labor Market Information Center</b>	
<b>Hot Careers</b>	
<b>South Dakota's Highest Projected Growth Occupations</b>	
<b>SOC Code</b>	<b>Occupational Title</b>
00-0000	Total, All Occupations
13-2011	Accountants and Auditors
49-3023	Automotive Service Technicians and Mechanics
47-2031	Carpenters
47-2051	Cement Masons and Concrete Finishers
21-1021	Child, Family, and School Social Workers
21-2011	Clergy
27-2022	Coaches and Scouts
47-2111	Electricians
25-2021	Elementary School Teachers, Except Special Education
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers
35-1012	First-Line Supervisors of Food Preparation and Serving Workers
43-1011	First-Line Supervisors of Office and Administrative Support Workers
41-1011	First-Line Supervisors of Retail Sales Workers

41. To complete the information on Career Choice #3 on Form 27B, repeat steps 1 through 23, then 27 through 40 above. (The only steps you will be skipping are those involved in selecting a second occupation to compare, since you need information on just one additional occupation for Form 27B).

***If you have questions or need assistance with these instructions, please contact the Labor Market Information Center at 605.626.2314.***