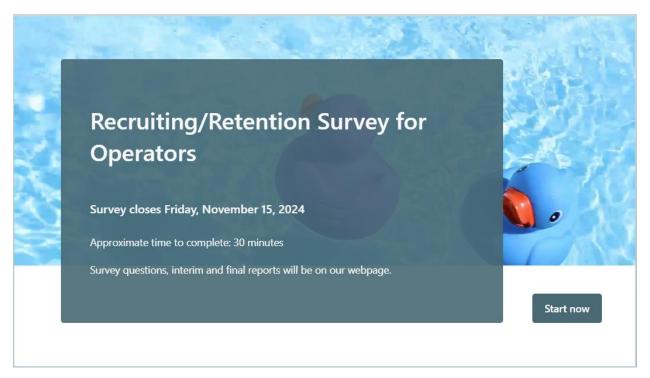
Appendix A contains the full text of the survey Questionnaire. Surveys were developed and distributed on Microsoft Forms. Question types included multiple choice, single choice, dates, and free text or free number responses.

Questions were presented in "Sections". The bottom of each section had "Back" and "Next" buttons to allow survey respondents to navigate. The survey progress was indicated by a progress bar.

Here's a screenshot of the opening screen:



Here's a screenshot of a typical section end:



Each section of the digital survey will start on a new page in this Appendix.

Section 1

About this survey

The Alabama Department of Environmental Management's (ADEM's) Operator Certification Program invites you to take part in a survey about your experiences as an operator in the water workforce. The purpose of this Water Workforce Recruiting and Retention Survey is to serve as our benchmark and to help us direct new Outreach opportunities. We hope to follow up annually to track the progress of our outreach efforts.

We are asking you to participate because you have experience as a water or wastewater operator in Alabama which qualifies you to take the survey. The survey will help us gather information about Alabama's water workforce to gain a better understanding of the challenges, barriers, and opportunities in hiring and retaining operators.

The survey will take about 15 minutes to complete. There are no known risks to participating. Your response to the survey is anonymous which means no names, IP addresses, email addresses, or any other identifiable information will be collected with the survey responses. We will not know which responses are yours if you choose to participate.

We hope to receive completed surveys from operators in every Alabama county. Your participation is very important to us; however, you have a choice about whether or not to complete the survey. If you do participate, you may choose to skip or refuse to answer questions. There is no penalty for skipping questions or discontinuing the survey.

This survey borrows a few questions from similar water workforce surveys conducted in Tennessee in 2024, West Virginia in 2023 and Kentucky in 2022. By aligning our questions with these surveys, we can start to form a regional picture of the water sector workforce.

If you have any questions about the survey, please feel free to ask at any time.

Thank you in advance for your assistance with this important project.

Sincerely,
Pam Monaghan [monahan]
ADEM's Operator Certification Program

pam.monaghan@adem.alabama.gov 334-271-7872

>>

*Required

O1. Do you want to continue with the survey?

The questions on the Operator Survey start with "O".

On multiple choice questions, there is a number in parentheses, like this (1). This is to help us analyze the results of the survey. It's not a part of the choices.

You will not be asked every question on the questionnaire. The questions with circles and the questions with dropdown lists have a little bit of "logic" behind the scenes. If you see the question numbers skip, for example from O27 to O36, it could mean questions O28 through O35 were not for you because of your answer to O27.

Or, it could mean you left a circle or dropdown list question unanswered and the rest of the questions in that section were skipped.

Use the "Back" and "Next" buttons at the bottom of each page in this survey. Do not use your browser "back" button or you may lose your answers.

Yes, continue (1)

No, skip to the end (2)

>> Choice (2) takes them to

>> Choice (1) takes them to Section 2

Section 2

Defining an ACTIVE OPERATOR

For the purposes of this survey, here's how we define "active operator":

if you have an active certificate and work full time at a utility in operations, or if you have an active certificate, work at a utility, but not in operations, or if you have an active certificate, retired from or left a utility and now work for yourself or for a contractor, or

if you <u>have an active certificate</u>, and are at home, living the dream, and you keep up your hours, "just in case", or

any other circumstance, <u>as long as you have at least one active certification</u>, and you keep up your hours, and in an emergency, you could be called on to fill in as a treatment operator,

then you are an "active operator" for the purposes of this survey.

>>

O2. According to the definition above, are you an "active operator"?

If you make a mistake, there's a little eraser looking thing to the right of the question. Tap to clear your answer.

Yes (1)

No (2)

Section 3

Certifications
>>
O3. What grade of certification(s) are currently active? (Select all that apply)
I don't have a certificate, yet (1)
I don't have a certificate, and won't be getting one (2)
Water I (3)
Water II (4)
Water III (5)
Water IV (6)
Wastewater I (7)
Wastewater IC (8)
Wastewater II (9)
Wastewater III (10)
Wastewater IV (11)
None (11)
Other
>>
O4. If any of your certifications are inactive, tell us why. (Select all that apply)
This is asking about your highest level of certification.
For example, if your Water I is inactive because you tested up to a Water IV, and then you let

Another example, if your Wastewater I is inactive because you tested up to a Wastewater IV, and then you let your Wastewater IV go inactive, we're asking about the Wastewater IV.

your Water IV go inactive, we're asking about the Water IV.

I am no longer employed in this industry (1)

I am a retired operator, and I am employed doing something else. (2)

I am a retired operator and I'm no longer employed. (3)

Renewal fees are too expensive (4)

Jobs in this industry don't provide adequate pay (5)

Jobs in this industry don't provide adequate benefits (6)

Too many regulations (7)

Too much responsibility (8)

Certification exam and process is too difficult (9)

Unable to find a job (10)

Other

Section 4

Your roles and responsibilities

These questions are about the place where you work the most hours in a week.

It could be a utility, or for a contractor, or you might be self-employed. You could be out of the workforce and have an active certificate. If so, tell us about the last place you worked.

I tried to remove the word "utility" from the questions, but **if there is any question that asks about "utility", what I mean is "the place where you work"**. Thanks!

>> O5. Which of the following best describes your operator role(s) where you work?

Certified operator (1)

Operator trainee (2)

Contract operator (3)

Field operator (4)

I no longer work as an operator. (5)

Other

>> O6. In the last 12 months, what other roles have you held at any of your work locations?

Manager/Supervisor (1)

Office Manager/Administrator (2)

Laboratory (3)

Instructor/Trainer (4)

>>

Other

I left the water sector more than 12 months ago. (5)

O7. In the last 12 months, what job duties have you been responsible for at your work location(s), other than basic system/treatment works? (Select all that apply)

Office work (1)

Collecting payments (2)

Equipment maintenance (3)

Trash services (4)

Natural gas services (5)

Electrical utility services (6)

City maintenance (e.g., mowing) (7)

I am not responsible for any other job duties (8)

I left the water sector more than 12 months ago. (9)

Other

Section 5

How many Work Locations?

You may be an employee of the system or you may be a contract operator who has multiple systems to manage.

We want to understand the burden on each individual.

If you are "the person" for a system, that counts for this question.

>>

O8. How many Drinking **Water** systems do you work for (or at) **right now**?

>>

O9. How many Drinking Water systems have you worked for (or at) in your career?

>>

O10. How many Wastewater systems do you work for (or at) right now?

>>

O11. How many Wastewater systems have you worked for (or at) in your career?

Section 6

Your utility - Type and Size

The following questions ask about the utility where you currently work. This is about the actual utility, whether or not that is your direct employer.

If you work at multiple utilities, please answer questions for the utility where you work the greatest number of hours per week.

If you are not currently working as an operator, answer the questions about your most recent job as an operator.

>>

O12. Which of the following best describes your utility? (Select all that apply)

Wastewater I (Lagoon) (1)

Wastewater IC (Collections) (2)

Wastewater II (3)

Wastewater III (4)

Wastewater IV (5)

Water I (Distribution) (6)

Water II (Basic Groundwater) (7)

Water III (Advanced Groundwater) (8)

Water IV (Surface Water) (9)

I'm not sure (10)

Other

>>

O13. How many people does your utility directly serve? (Select the highest range for the drinking water or wastewater services provided.)

>dropdown<

2024 Alabama Water Workforce Survey Operator Survey Questionnaire
1,500 or less (1)
1,501 - 10,000 (2)
1,501 - 10,000 (2)
15,001 - 30,000 (4)
30,001 - 50,000 (5)
More than 50,000 (6)
I'm not sure (7)
>>
O14. In what county is your utility located?
This is a really important question. Our goal is to have answers from every county in the state.
>dropdown<
Autauga (1)
Baldwin (2)
Barbour (3)
Bibb (4)
Blount (5)
Bullock (6)
Butler (7)
Calhoun (8)
Chambers (9)
Cherokee (10)
Chilton (11)
Choctaw (12)
Clarke (13)

Appendix A

Lamar (38)

2024 Alabama Water Workforce Survey Operator Survey Questionnaire Lauderdale (39) Lawrence (40) Lee (41) Limestone (42) Lowndes (43) Macon (44) Madison (45) Marengo (46) Marion (47) Marshall (48) Mobile (49) Monroe (50) Montgomery (51) Morgan (52) Perry (53) Pickens (54) Pike (55) Randolph (56) Russell (57) Shelby (58) St. Clair (59) Sumter (60) Talladega (61) Tallapoosa (62)

Tuscaloosa (63)

Appendix A

2024 Alabama Water Workforce Survey
Operator Survey Questionnaire

Walker (64)

Washington (65)

Wilcox (66)

Winston (67)

>>

O15. If your utility covers more than one county, select the second one here

>see county list for question O14<

>>

O16. Here's room for a third county, if you need it.

> see county list for question O14<

Appendix A

Section 7

Your Hours and Wage
>>
O17. How many years have you worked at your current employer?
>>
O18. On average, how many hours do you work per week?
>>
O19. Are you currently working part time?
Yes (1)
No (2)
>>
O20. What is your hourly wage?
>>
O21. What do you think your hourly wage should be?

Section 8

Leaving your current employer

We are going to ask questions that seem like the same thing, but they are not.

Some folks may leave their current employer because they retire or because they find another job doing the same thing, or both.

Some folks may be leaving the water workforce before they are eligible to retire. Some may leave a municipality, but still remain in the water workforce.

Here you will tell us about leaving your current employer.

>>

O22. Are you planning to leave your current employer?

Either because of retirement or just changing jobs

>dropdown<

Yes, as soon as I find a new job (1)

Yes, when I retire (2)

I'm not sure (3)

N/A I do not have an employer (4)

>>

O23. How soon might you leave your current employer?

This means leaving through retirement or just going to another employer.

>dropdown<

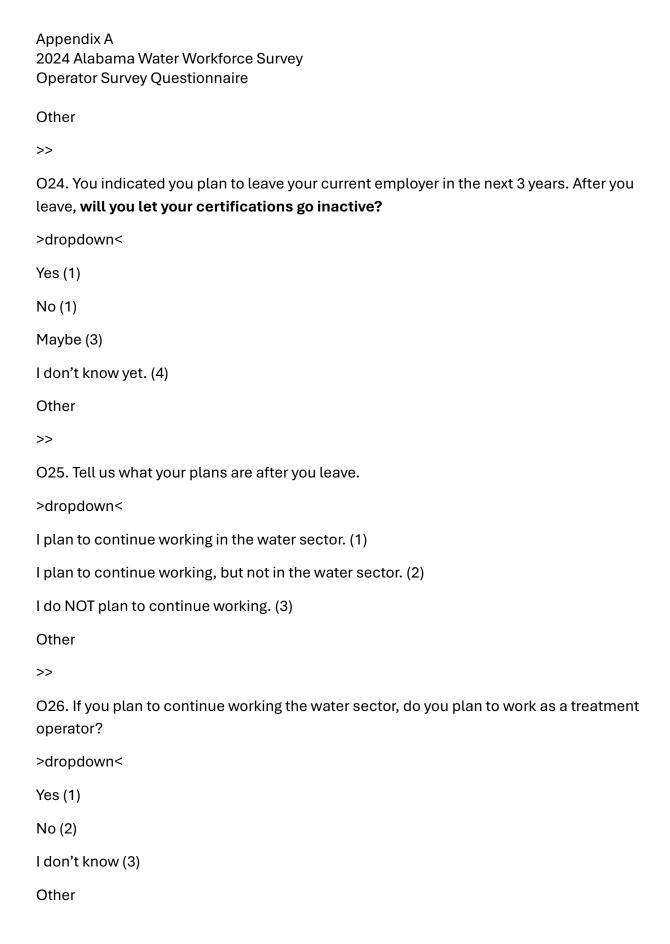
Within the next 12 months (1)

In 1-3 years (2)

In 4-6 years (3)

In 7-9 years (4)

In 10+ years (5)



Section 9

Leaving the water workforce

We are going to ask questions that seem like the same thing, but they are not.

Some folks may retire and then go on to another employer but still be an active operator.

Some folks may be leaving the water workforce before they are eligible to retire.

Some may leave a municipality, but still remain in the water workforce.

(In this survey, "water workforce" and "water industry" are used to mean the same thing.)

Here you will tell us about ending your time as an "active operator" - as defined earlier.

>>

O27. Are you planning to leave the water workforce?

This means no longer being an "active operator" as defined earlier. You may or may not be retiring.

Here's where there's a big skip in question numbers. You will only see questions O31-O36 if you select item 4.

Yes (1)

No (2)

I'm not sure (3)

I have already left the water industry. (4)

>>

O28. When do you plan to leave the water workforce?

>dropdown<

Within the next 12 months (1)

In 1-3 years (2)

In 4-6 years (3)

In 7-9 years (4)

In 10+ years (5)

>>

O29. This question intentionally left blank.

In the final review, I realized we didn't need this question and I didn't have time to renumber everything. The form logic was set up so that respondents will not see this question.

>>

O30. You indicated you plan to leave the water workforce in the next 3 years. Tell us what your plans are after you leave.

>dropdown<

I plan to continue working, but not in the water sector. (1)

I do NOT plan to continue working. (2)

I will be taking a break from work. I may return in the future. (3)

Other

Section 10

Dates you left the water workforce

To enter a date, tap/click the rectangle and a calendar will pop up.

Tap where it says September 2024.

Then tap **2024**

Use the arrows to scroll to find the year.

Tap the year.

Then tap the month.

Then tap the day. **Use the 1st of the month** - we don't need to know the exact day of the month.

If you make a mistake, there's a little eraser looking thing above the rectangle. Tap to clear your answer.

>>

O31. Tell us how you left the water workforce. (Select all that apply)

I RETIRED from my first and only water sector job.

I RETIRED from a water workforce job. Got a second water workforce job. Then left the workforce after that.

I left the water workforce, but **did not RETIRE** from the water workforce job.

Other

>>

O32. Before I left the water workforce, I was a Water Operator.

Select the highest Grade you held before you left the water workforce.

Select "n/a" if you were never a Water operator. That will make the "Wastewater Operator" question appear.

>dropdown<

Water Grade I (1)

Water Grade II (2)

Appendix A 2024 Alabama Water Workforce Survey Operator Survey Questionnaire
Water Grade III (3)
Water Grade IV (4)
n/a (5)
>>
O33. Date you left the Water Operator workforce.
>>
O34. Before I left the water workforce, I was a Wastewater Operator.
Select the highest Grade you held before you left the wastewater workforce
>dropdown<
Wastewater Grade IC (1)
Wastewater Grade I (2)
Wastewater Grade II (3)
Wastewater Grade III (4)
Wastewater Grade IV (5)
n/a
>>

O35. Date you left the **Wastewater Operator workforce**

Section 11
Benefits and Opportunities
>>
O36. What benefits does your employer provide? (Select all that apply)
Health insurance (1)
Retirement benefits (2)
Life and disability insurance (3)
Paid sick and vacation days (4)
Paid holidays (5)
Annual raises (6)
Overtime (7)
Comp time (8)
Paid time and travel to attend trainings (9)
Paid or reimbursed tuition or training expenses (10)
Paid or reimbursed certification fees (11)
Paid or reimbursed certification renewal fees (12)
Paid time to study for exams (13)
Other
>>
O37. Over the last two years, which of the following have you experienced? (Select all that apply)
Increased workload (1)
Decreased workload (2)
Increased work hours (3)
Decreased work hours (4)

2024 Alabama Water Workforce Survey
Operator Survey Questionnaire

Higher morale (5)

Lower morale (6)

Financial hardships (7)

Financial benefits (8)

Increased stress (9)

Decreased stress (10)

None of the above (11)

Other

>>

O38. Does your utility offer opportunities for promotions and career advancement?

Yes (1)

No (2)

I'm not sure (3)

Appendix A

Section 12

Your opinions - part 1

These questions use "utility".

If you are a contract operator, this could mean your employer, or it could mean the utility where you spend the most hours each week.

We are trying to understand what it's like at the place where you do your work, whatever that may be called.

>>

O39. How well do your utility's decision makers (e.g., city council or utility board) understand what you do in your job?

1 Star: Not well

5 Stars: Extremely well

>>

O40. How often do your utility's decision makers (e.g., city council or utility board) communicate with the operators?

1 Star: Never

5 Stars: Very Frequently

>>

O41. How much do you feel appreciated by your utility?

1 Star: Not at all

5 Stars: A great deal

>>

O42. How well do your managers listen to your opinions on matters that you deal with on a daily basis?

1 Star: Not well

5 Stars: Extremely well

Section 13

Your opinions - part 2

The services provided by drinking water and wastewater utility operators protect public health, the environment, and water quality. Consider each of the following groups of people and tell us, in your opinion, do they think the work you do is not at all important, slightly important, moderately important, very important, or extremely important?

O43. In your opinion, does your utility have enough operators?

Yes (1)

No (2)

>>

O44. Do you think the general public knows the operator career exists?

1 Star: Not at all

5 Stars: Definitely yes

>>

O45. Do you wish the general public knew the operator career exists?

1 Star: Doesn't matter

5 Stars: Very much

Section 14

Your opinions - part 3

The services provided by drinking water and wastewater utility operators protect public health, the environment, and water quality. Consider each of the following groups of people and tell us, in your opinion, do they think the work you do is not at all important, slightly important, moderately important, very important, or extremely important?

>>

O46. The services provided by drinking water and wastewater utility operators protect public health, the environment, and water quality. Consider each of the following groups of people and tell us, in your opinion, do they think the work you do is not at all important, slightly important, moderately important, very important, or extremely important?

>Not at all important (1) to Extremely important (5) I'm not sure (6)

City council or utility board (1)

Community (2)

Friends and family (3)

Coworkers (4)

Supervisors (5)

>>

O47. Consider each of the following and indicate whether you are extremely dissatisfied, somewhat dissatisfied, neither satisfied nor dissatisfied, somewhat satisfied, or extremely satisfied with that aspect of your job.

>Extremely dissatisfied (1) to Extremely satisfied (5) n/a (6)

Pay (1)

Availability of preferred shifts (2)

Hours (3)

Workload (4)

Type of work (5)

Appendix A 2024 Alabama Water Workforce Survey **Operator Survey Questionnaire** Certification exam process (6) Certification renewal process (7) >> O48. Consider the following statements and indicate whether you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, or strongly agree with each. >Strongly disagree (1) to Strongly agree (5) I am given the equipment and tools I need to do my job effectively. (1) My utility has the right people and skills to do the work that needs to be done. (2) Work is distributed evenly at my utility. (3) I am being paid a fair amount for the work I do. (4) I am satisfied with the benefits I receive. (5) I like doing the tasks I do at work. (6) >> O49. Consider the following and indicate whether each factor is an important motivation for you to work in the water industry. Indicate if the factor is not at all important, slightly

important, moderately important, very important, or extremely important.

>Not at all important to Extremely important

Pay and benefits (1)

Provide a service to the community (2)

Protect the environment (3)

Work close to home (4)

Section 15

Operator Retention

The following is a list of things that utilities can do to encourage operators to stay in the water industry. In your opinion, which are the most effective?

Evaluate each measure on how effective you think that measure is.

>>

O50. The following is a list of things that utilities can do to encourage operators to stay in the water industry. In your opinion, which are the most effective?

>Not at all effective (1) to Very effective (5) n/a

Create incentive programs (1)

Have more certified operators on staff (2)

Have more certified operators on staff (2)

Increase overtime pay (4)

Offer more training opportunities (5)

Provide better benefits (6)

Provide comp time (7)

Provide new equipment (8)

Provide new supplies (9)

Offer more opportunities for professional development and career advancement (10)

>>

O51. Is there something else you'd like to add to this list?

Section 16

Your opinions – part 4

>>

O52. How satisfied are you with your choice to work in the water sector?

1 Star: Very dissatisfied

5 Stars: Very satisfied

>>

O53. How likely are you to recommend a career in the water sector to a friend or colleague?

Net Promoter Score (NPS) from 0 (Not at all likely) to 10 (Extremely likely)

Section 17

Recruiting and Certification

O54. What resources have you used in the past to find jobs in the water sector? (Select all that apply)

Newspaper (1)

Online job post (e.g. Indeed, ZipRecruiter, CareerBuilder, LinkedIn, etc.) (2)

Job fair (3)

School guidance counselor (4)

Unemployment office (5)

Industry-specific website (e.g. NRWA, ARWA, WEF, AWEA, AWPCA, etc.) (6)

Social media (7)

Video ad (e.g. Live TV or streaming service) (8)

Audio ad (e.g. radio, podcast, Spotify, Pandora, etc.) (9)

Billboard (10)

Local government website (11)

Temp agency (12)

Friend or family (13)

Industry contacts ("networking") (14)

Other

>>

O55. What resource did you use to find your current job?

Section 18

Certification
>> O56. How old were you when you started working as an operator?
>>
O57. How long did you work as an operator before you tested for your first certification?
Less than 1 year (1)
1 year (2)
2 years (3)
3 years (4)
4 years (5)
5+ years (6)
Not applicable (7)
>>
O58. Why did it take you 3 or more years to test for your first certification? (Select all that apply)
My utility didn't support it (1)
Too expensive (2)
The certification process was overwhelming (3)
I was concerned that I could not pass the exam (4)
Personal reasons (5)
Other
>>
O59. Is there anything else you'd like to tell us about Recruiting or Certification?

Section 19
Operator Education
>>
O60. What's your highest level of education?
>dropdown<
High school/GED (1)
Trade School (2)
Associate's Degree (2 year) (3)
Bachelor's Degree (4 year) (4)
Master's Degree (5)
Doctoral Degree (6)
Prefer not to say (7)
Other
>>
O61. Have you earned a certificate from an Alabama Community College?
Yes (1)
No (2)
>>
O62. What certificate did you earn? (If more than one, tell us the one(s) most relevant to your work experience.)
>>
O63. At which Community College did you earn your certificate?
>dropdown<
Beville State Community College (1)
Bishop State Community College (2)

Appendix A 2024 Alabama Water Workforce Survey **Operator Survey Questionnaire** Calhoun Community College (3) Central Alabama Community College (4) Chattahoochee Valley Community College (5) Coastal Alabama Community College (6) Drake State Community and Technical College (7) Enterprise State Community College (8) Gadsden State Community College (9) Ingram State Technical College (10) Jefferson State Community College (11) Lawson State Community College (12) Lurleen B. Wallace Community College (13) Marion Military Institute (14) Northeast Alabama Community College (15) Northwest Shoals Community College (16) Reid State Technical College (17) Shelton State Community College (18) Snead State Community College (19) Southern Union State Community College (20) Trenholm State Community College (21) Wallace Community College – Dothan (22) Wallace State Community College (23) Wallace Community College – Selma (24) Other >> O64. Have you earned a degree from an Alabama Community College?

Yes (1)

Appendix A 2024 Alabama Water Workforce Survey Operator Survey Questionnaire
No (2)
>>
O65. What degree did you earn? Tell us the degree program, e.g. General Studies, Music, Electronics, etc. (If more than one, name ones most relevant to your work experience.)
>>
O66. At which Community College did you earn your degree?
>dropdown<
Beville State Community College (1)
Bishop State Community College (2)
Calhoun Community College (3)
Central Alabama Community College (4)
Chattahoochee Valley Community College (5)
Coastal Alabama Community College (6)
Drake State Community and Technical College (7)
Enterprise State Community College (8)
Gadsden State Community College (9)
Ingram State Technical College (10)
Jefferson State Community College (11)
Lawson State Community College (12)
Lurleen B. Wallace Community College (13)
Marion Military Institute (14)
Northeast Alabama Community College (15)
Northwest Shoals Community College (16)
Reid State Technical College (17)
Shelton State Community College (18)
Snead State Community College (19)

Southern Union State Community College (20)

Trenholm State Community College (21)

Wallace Community College – Dothan (22)

Wallace State Community College (23)

Wallace Community College – Selma (24)

Other

>>

O67. Do you want to tell us anything else about your education?

Section 20

Demographic Questions

>>

O68. What is your age?

>>

O69. What is your gender?

>dropdown<

Woman (1)

Man (2)

Prefer not to say (3)

Section 21
Thank you
We will read every answer.
>>
O70. Is there anything else you'd like to tell us about recruiting ?
>>
O71. Is there anything else you'd like to tell us about retention ?
>>
O72. Is there anything else you'd like to tell us about the operator career field?
>>
O73. Is there anything else you'd like to tell us about ADEM's Operator Certification Program ?
>>
O74. Is there anything else you'd like to tell us?
END