

Broadband Workforce Survey Results

October 2023



DEPARTMENT OF
AGRICULTURAL ECONOMICS



OKLAHOMA
Broadband Office

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Survey Details

- Qualtrics (online) survey open from April – October 2023
 - Approved by Oklahoma State University Institutional Review Board
- Taken by representatives of terrestrial fixed internet service providers
 - No mobile-only providers, no satellite providers
- Advertised via Oklahoma Broadband Expansion Council / Oklahoma Broadband Office
 - NTCA / Rural Electric Cooperative conferences (QR code)
 - Emails from Expansion Council members (mostly providers)
 - Emailed from provider-focused organizations
- 46 distinct responses (13 from Oklahoma)
 - 17 states represented

Survey Intro

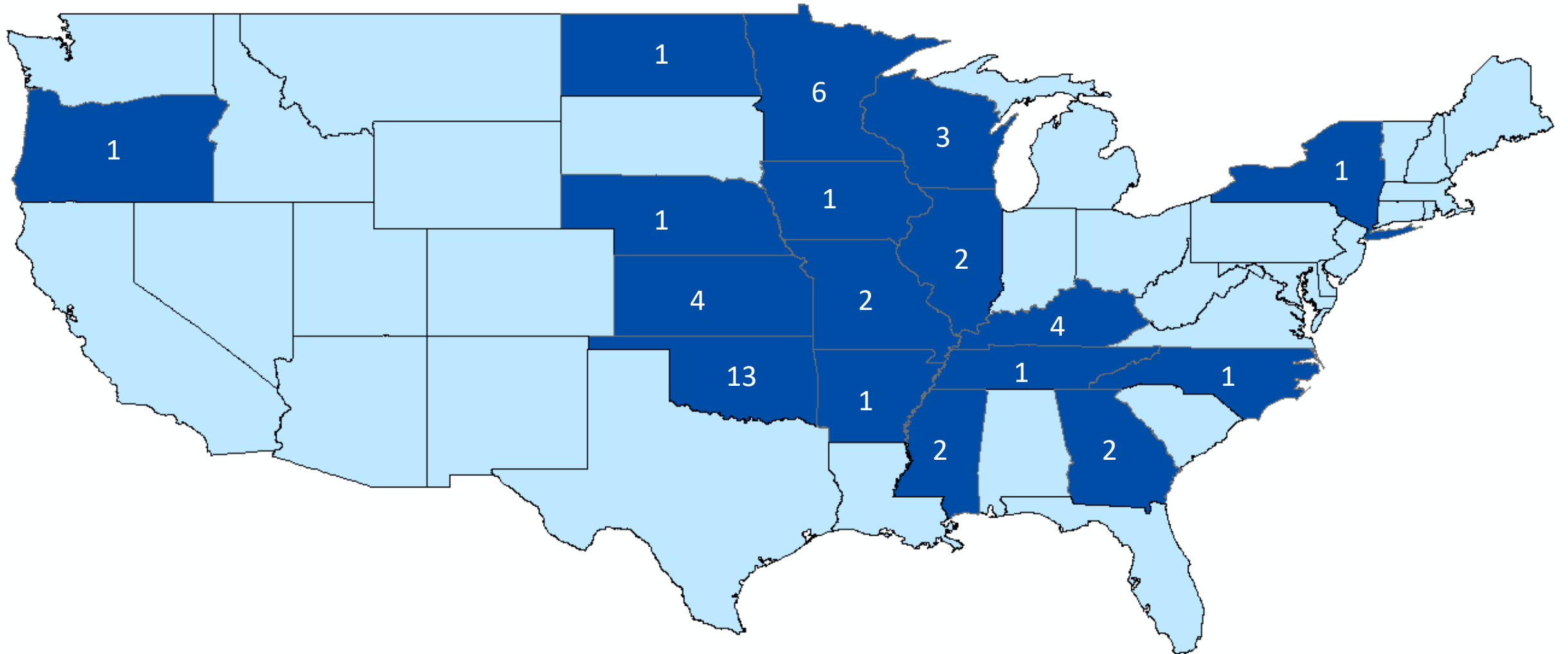
A recent report from the Government Accountability Office found that the forthcoming \$42.5B in the Broadband Equity, Access, and Deployment (BEAD) Act would support an additional 5,000 – 15,000 workers annually in the fixed broadband industry during 2023-2032 (on top of the estimated 480,000 currently employed in the fixed broadband workforce). However, the distribution of these additional jobs is not well-understood. The purpose of this survey is to understand the workforce needs of fixed internet service providers who will largely be responsible for this work.

Please take this survey only if you are employed by a fixed broadband provider and are knowledgeable about the customer base / broadband workforce needs of your employer.

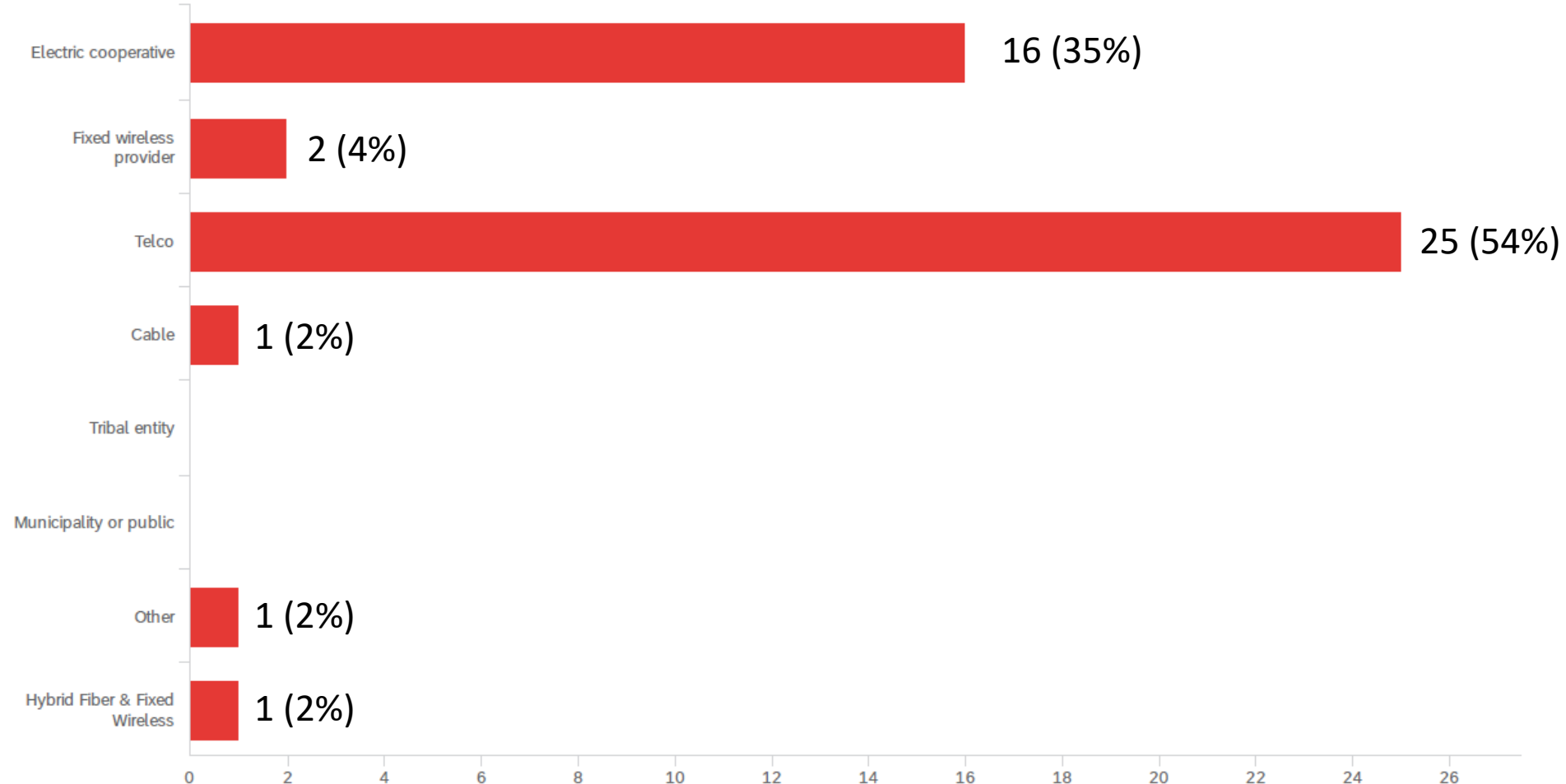
Please do not take this survey if your employer only offers satellite broadband service.

All information gathered is anonymous, the research team has worked to ensure that answers cannot be used to identify any specific provider or respondent.

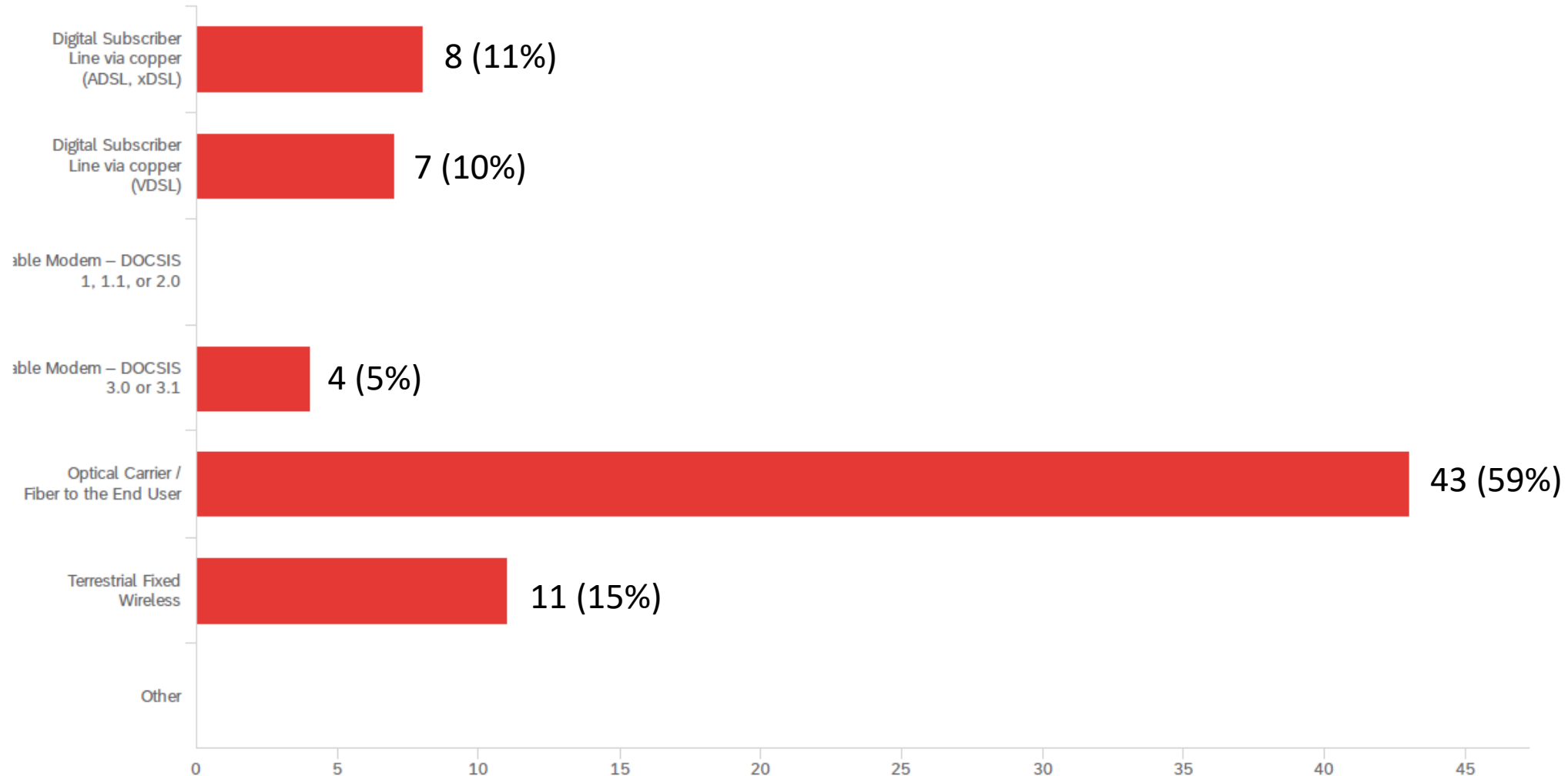
States Represented



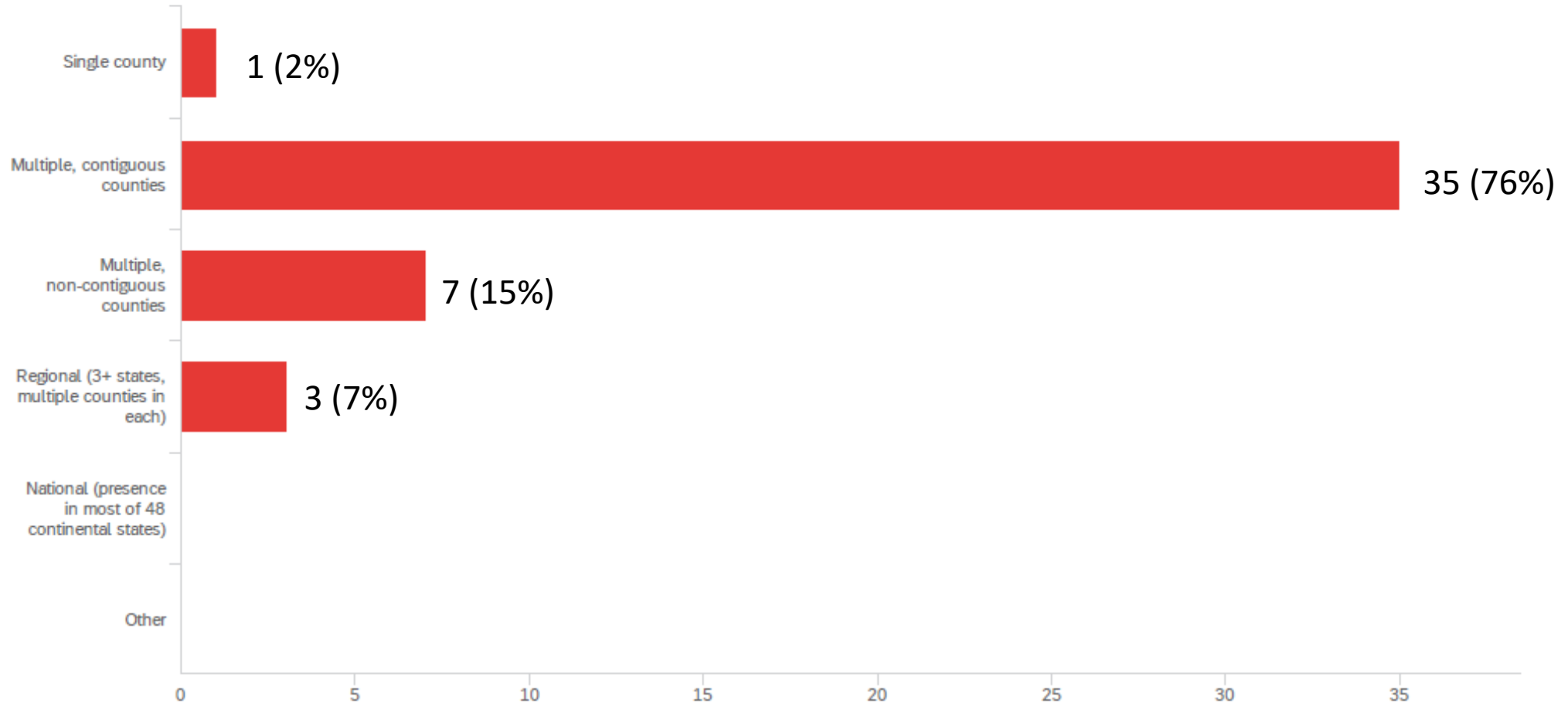
What type of provider do you work for?



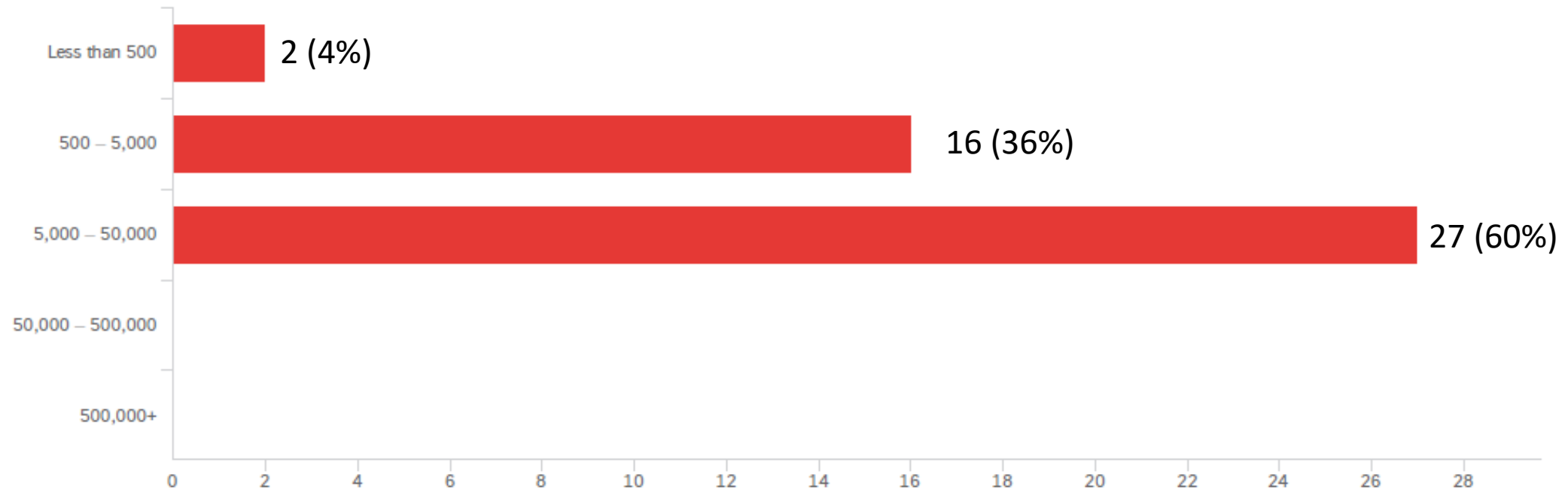
What fixed broadband technologies do you currently offer to customers? (Select all that apply)



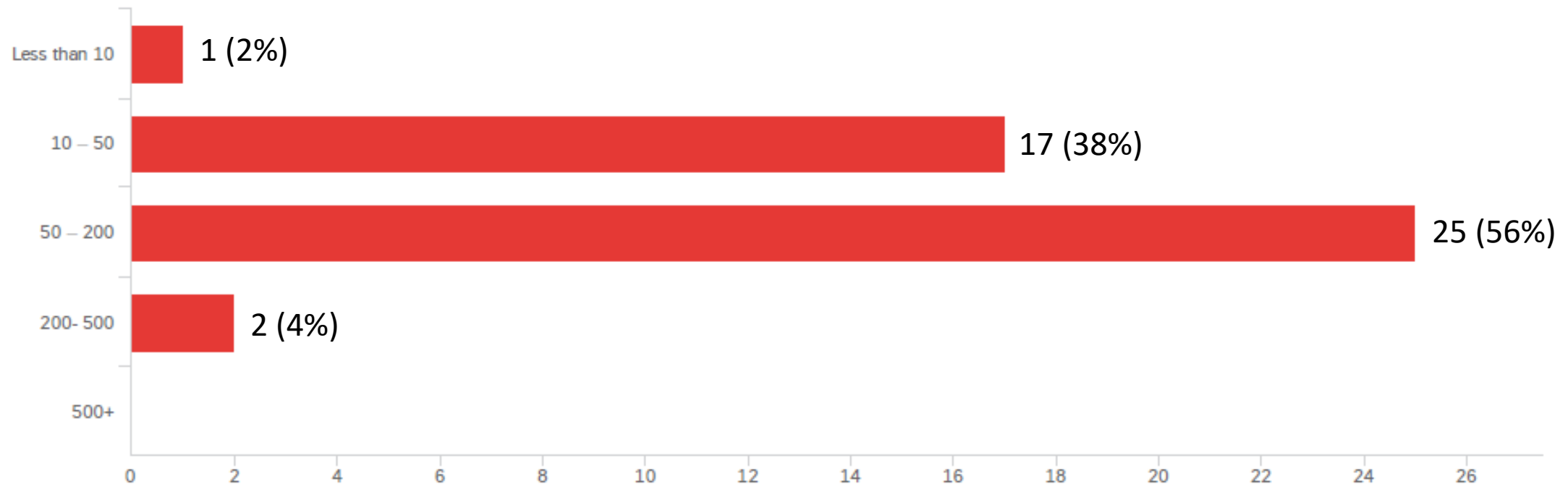
What is the geographical reach offered by your broadband provider?



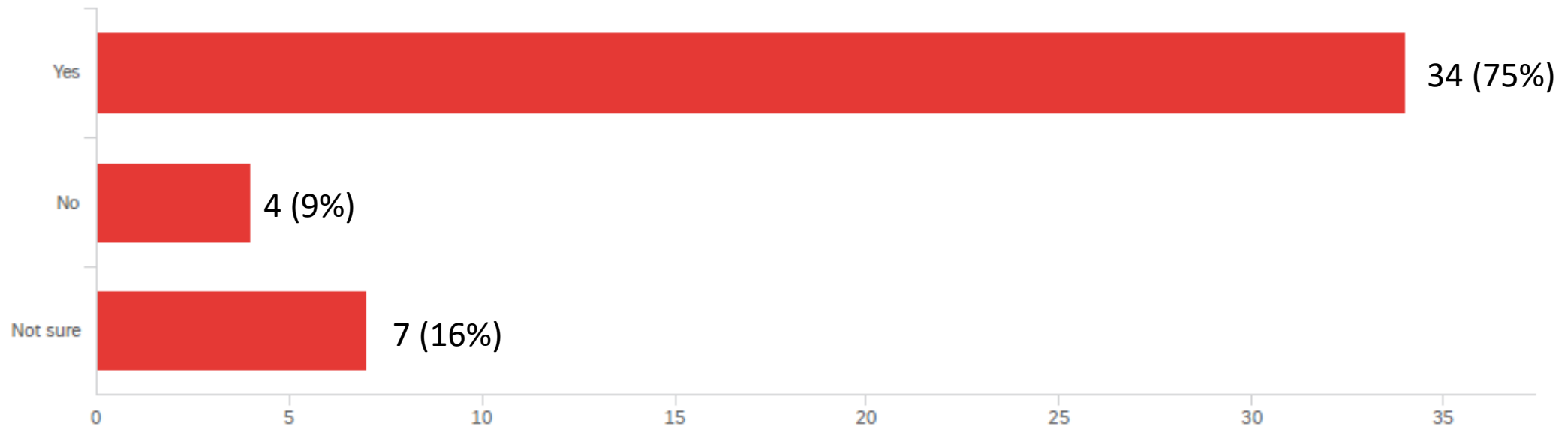
How many customers do you currently serve?



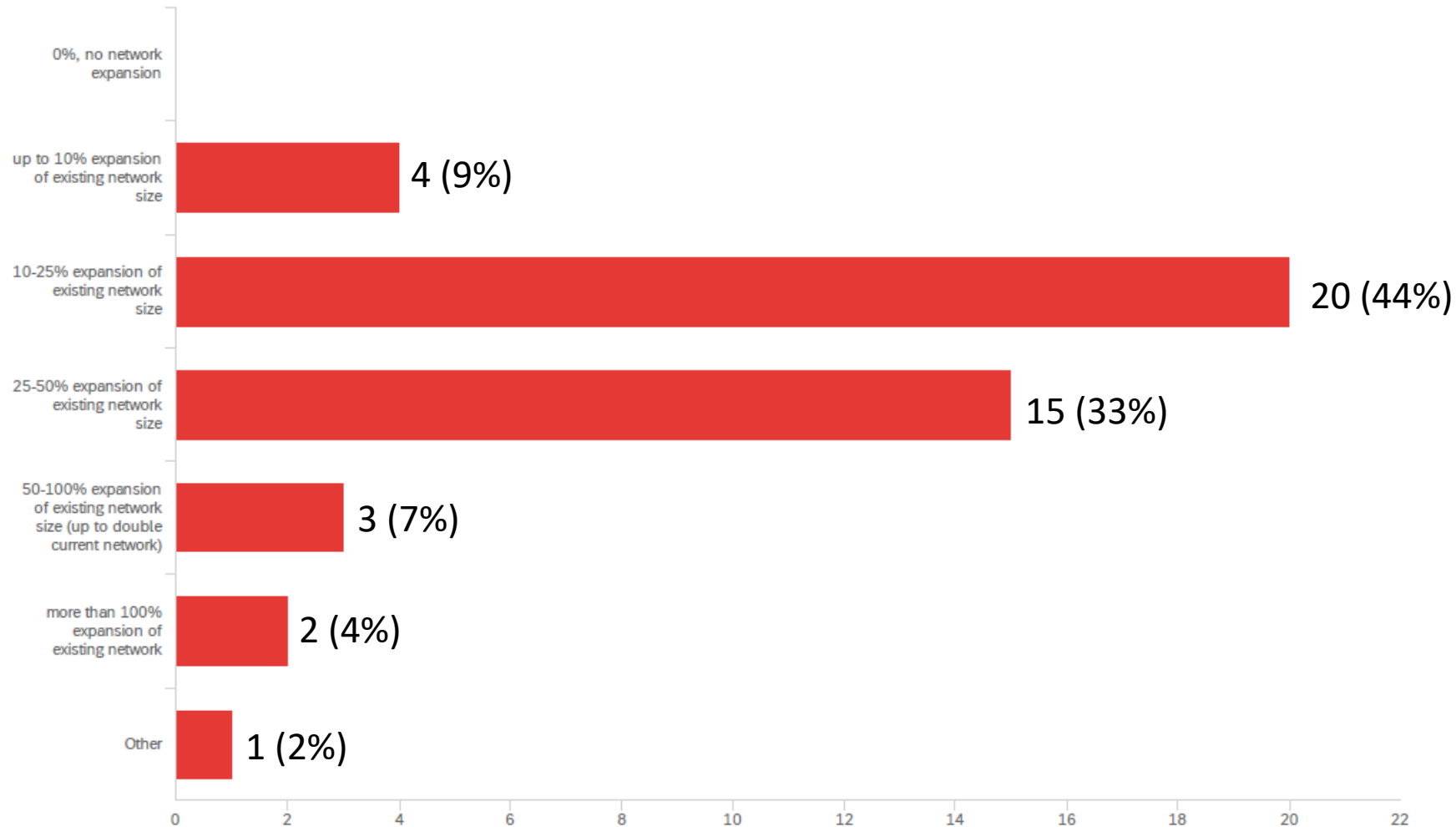
Please estimate your total number of employees (office and field based). Do not include sub-contracted employees.



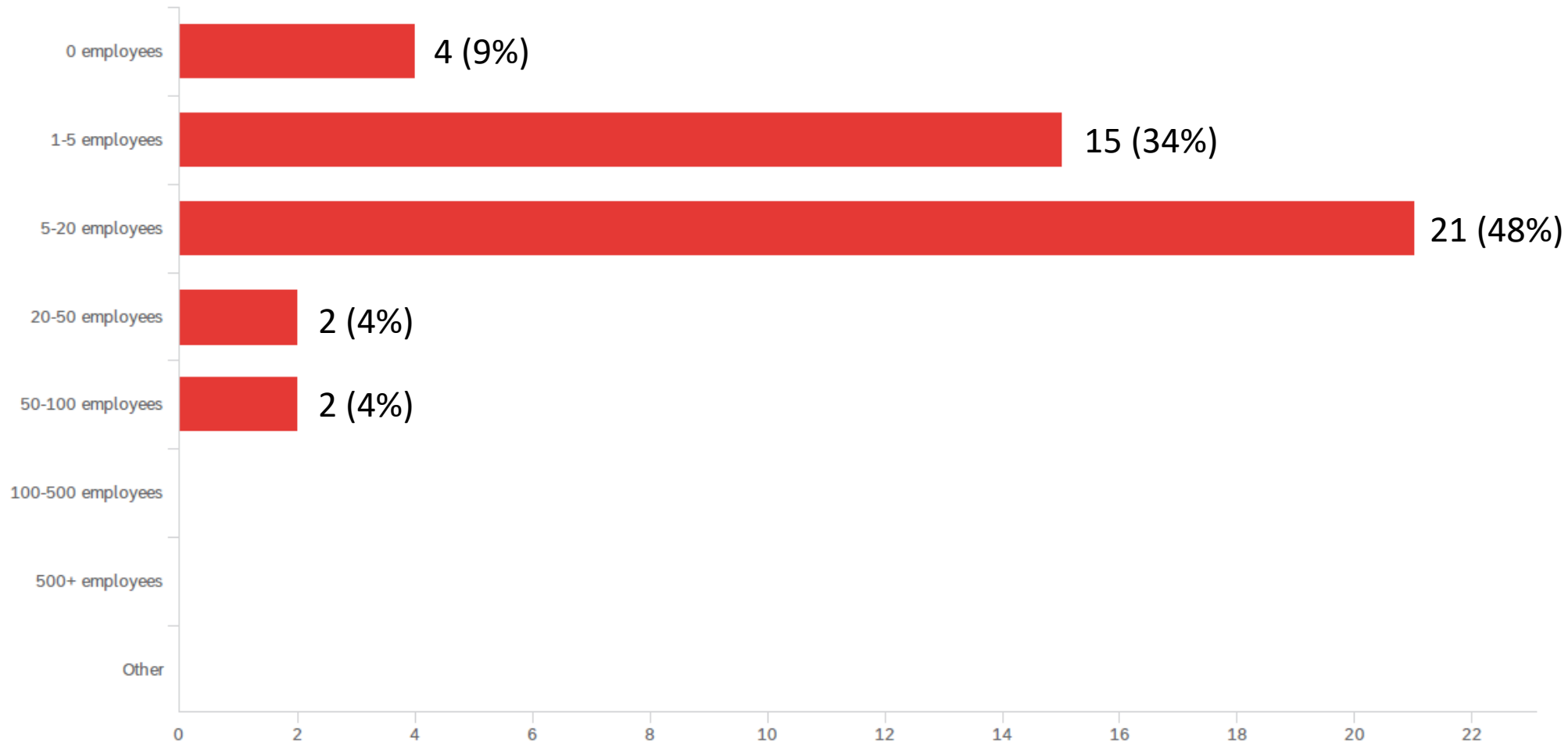
Do you expect to receive federal or state broadband funding over the next 5-10 years?



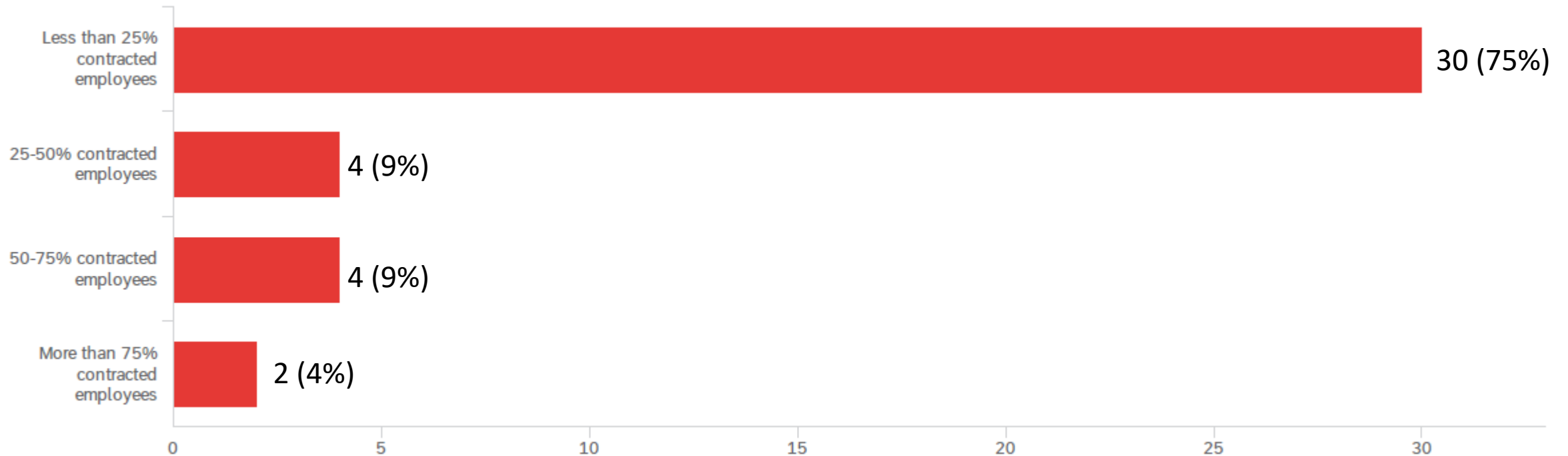
What is your expected network expansion, in terms of geographic size, over the next 5-10 years?



Assuming the expansion listed above, how many new positions (office and field staff) do you anticipate hiring?



What percentage of these new hires will be contracted labor?



Defining 2 categories of workforce needs

The following questions break down workforce needs into two general categories:

- (1) **Engineers / managers** (project managers, network analysts, etc.)
- (2) **Technicians** (line installers / repairers, first-line supervisors)

Please answer the following questions assuming all employees will be hired into one of these categories

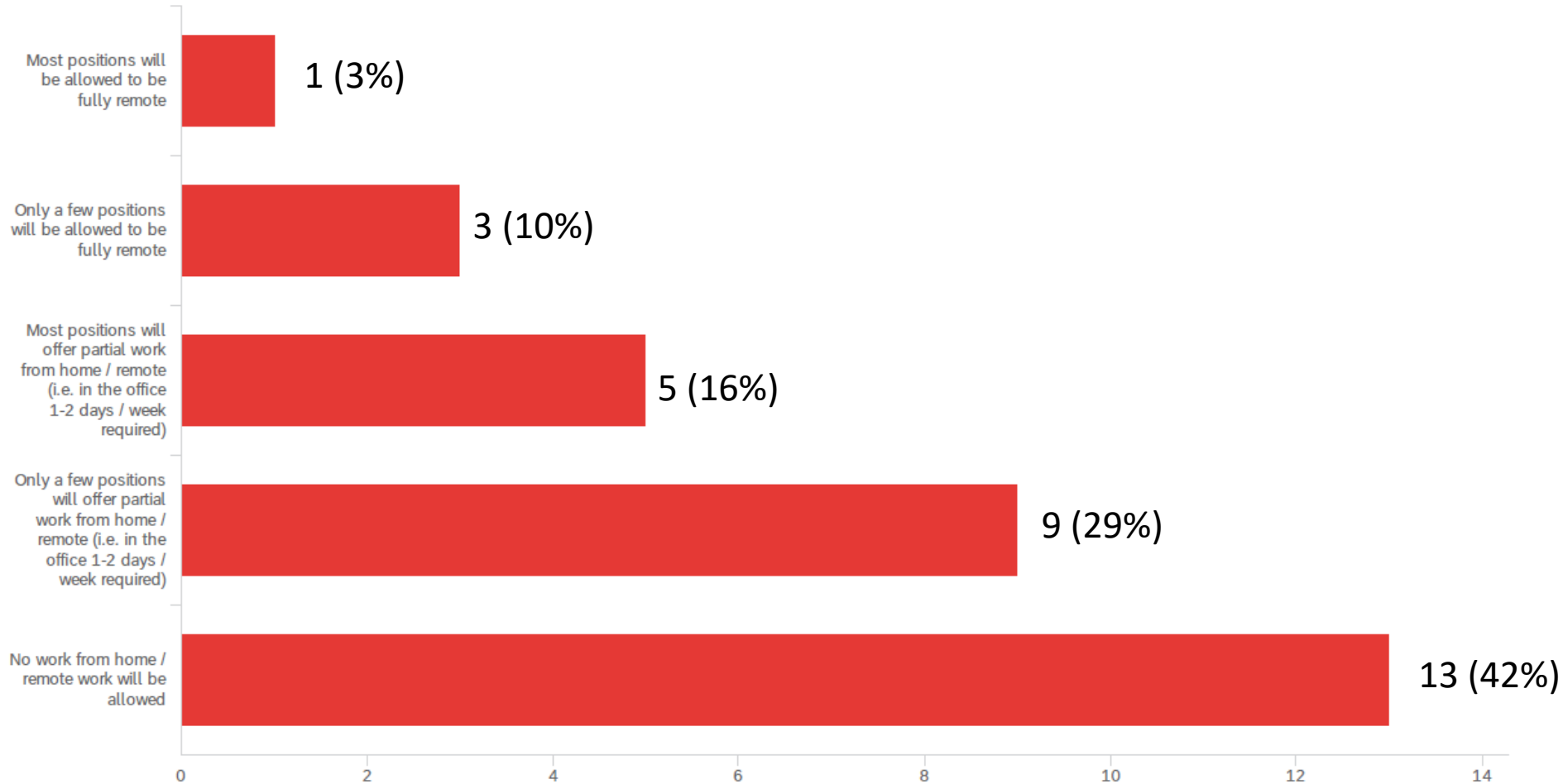
Of the people your company plans to hire, what percentage will be (1) engineers / managers vs (2) technicians?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Engineers / managers	0.00	75.00	19.72	17.32	299.92	36
2	Technicians	25.00	100.00	80.28	17.32	299.92	36

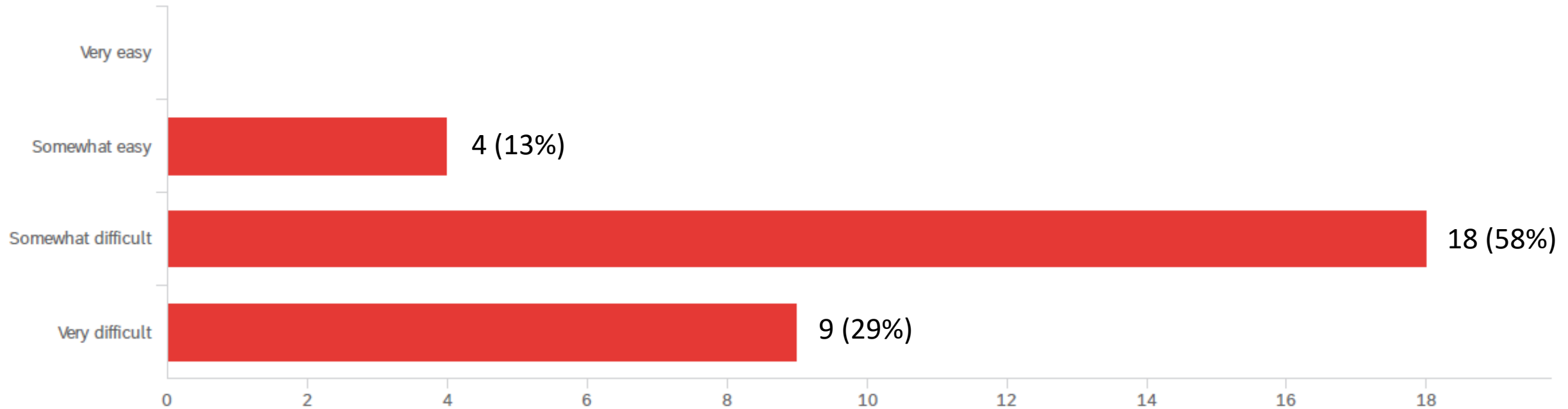
Please distribute the % of Engineer / Managers to the categories below (should add up to % given)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Outside plant planning / management / engineer	0.00	25.00	4.03	5.39	29.00	31
2	Network Architects	0.00	100.00	9.60	24.64	606.97	30
3	GIS analysts / managers	0.00	10.00	1.50	2.68	7.18	31
4	Cybersecurity manager	0.00	25.00	1.74	4.79	22.97	31
5	Electrical and electronics engineers	0.00	10.00	1.07	2.69	7.26	30
6	Technical project / program management or Technical process / quality management	0.00	50.00	3.45	8.97	80.38	31
7	Regulatory, compliance, audits, and accounting	0.00	25.00	2.66	4.97	24.73	31
8	Other	0.00	100.00	4.03	18.07	326.48	31

To what extent do you expect offer work from home for the Engineer / Manager positions?



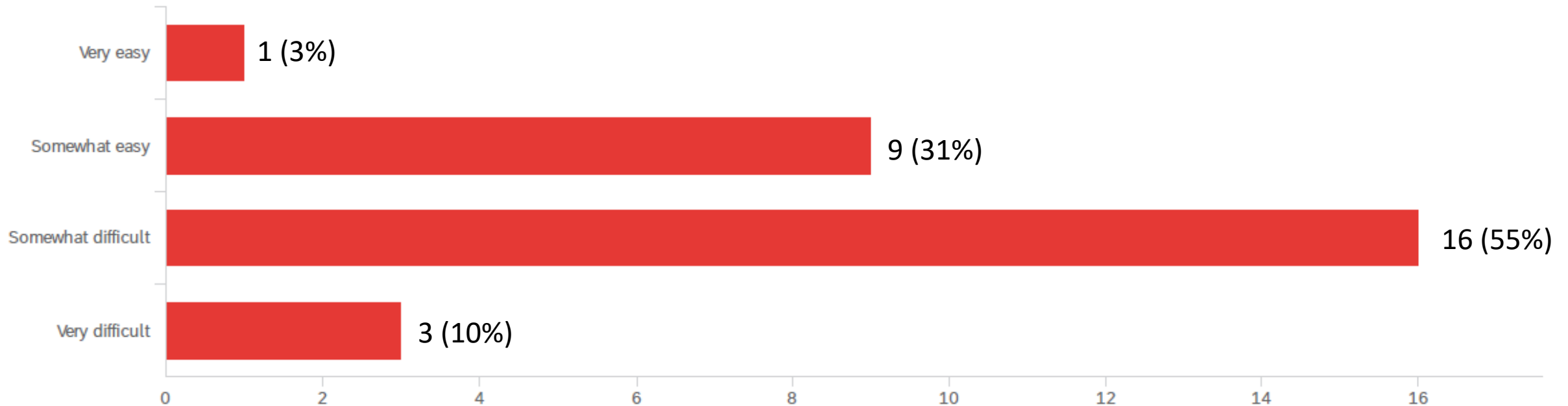
How difficult do you expect recruiting and filling these Engineer / Manager positions will be?



Please distribute the % of Technicians to the categories below (should add up to % given)

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Telecommunications line installers / repairers (including fiber technicians)	0.00	100.00	46.97	35.99	1295.10	30
2	Electrical power-line installers / repairers	0.00	100.00	6.77	22.54	507.85	30
3	Audiovisual and electrical installers / repairers	0.00	5.00	0.23	0.96	0.91	30
4	First-line supervisors of mechanics / installers / repairers	0.00	25.00	4.73	7.14	51.00	30
5	Surveyors / Technicians	0.00	50.00	4.27	10.46	109.46	30
6	Other	0.00	35.00	1.23	6.28	39.45	30

How difficult do you expect recruiting and filling these Technician positions will be?



To what extent is your company actively working on broadband workforce development in their region and state?

