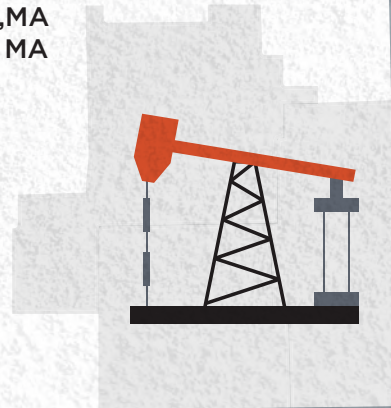


Southeastern New Mexico Oil & Gas Workforce Study

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Commissioned by:



NOTES & DISCLAIMER:

This publication is a product of The University of New Mexico Center for Social Policy commissioned by Somos Un Pueblo Unido. The views expressed in this report are those of the authors and do not necessarily represent those of the Center for Social Policy, the University of New Mexico, collaborating organizations, or funders.

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Executive Summary

Somos Un Pueblo Unido commissioned The University of New Mexico Center for Social Policy (CSP) to conduct a research project in the Permian Basin with three main objectives. First, to understand the experiences, pay levels, access to benefits, and workplace conditions of the oil and gas workforce as well as their families in the Southeastern New Mexico's Permian Basin. Second, to describe the oil and gas community's perceived current and long-term training needs as New Mexico executes a transition to clean energy. Finally, to describe the current training landscape in New Mexico's Permian Basin drawing from discussions with local educators, workforce boards, and community-based organizations. By providing voice to the community most directly impacted by the transition to clean energy in the state, the oil and gas workforce, the report provides insights for stakeholders engaged in the just transition to clean energy in the state of New Mexico.

The research design for this project included focus groups and surveys to collect information from oil and gas workers and their spouses in the New Mexico Southeastern Permian Basin region with a particular focus on the Latino workforce in Chavez, Eddy, and Lea counties. We also leveraged a survey of young adults to isolate respondents from these three counties to include the perceptions and attitudes of this overall population who will also be vital to the success of the transition to clean energy. The team recruited oil and gas workers, their spouses, and community members employed in oil and gas adjacent communities to assess the needs of these communities and learned the following: Working conditions of oil and gas workers are brutal, with long work hours, dangerous working conditions where accidents are common. Many of the members of the workforce lack access to health insurance, unemployment insurance, and other benefits.

For our assessment of the perceived economic, social, and employment context of these communities, our team found that:

1. Employment in the oil and gas industry is unstable and unreliable in the long term; and
2. Workers want targeted economic development in the region to replace their reliance on oil and gas and other low-paying jobs currently available for non-English speakers in adjacent industries.

Members of the workforce are aware that their jobs are being phased out with the transition to clean energy in the region. They are very interested in workforce training opportunities to help them find employment in other industries, particularly in manufacturing, construction, and HVAC. We learned that this training will need to be paired with basic skill development courses in computer literacy and English language skills to support the specific needs of Latino workers who are often Spanish speaking and foreign-born. The flexibility to do online training outside of traditional work hours is of high interest to this community. However, many lack access to high-speed internet or a quiet place at home to do virtual training. There is a willingness to participate in training away from home for workers if compensated and if childcare is available to them. Finally, we found a high desire from young adults in the region for training in growth industries, entrepreneurship, and the construction trades, but a general concern that they will need to leave the region to find careers in STEM oriented industries in particular.

In addition to the focus groups and surveys, the team conducted a landscape analysis to assess existing structural barriers for integrated training and education. Our team found that first, current available ESL and GED courses lack flexibility for residents. Second, we found that access to childcare is limited, which presents a barrier especially for women in

participating in the workforce and training programs. Third, language, transportation, and the digital divide continue to be challenges in the region. Fourth, residents lack adequate income to participate in training and would benefit from incentives such as living stipends and supplemental income to participate. Finally, we find that more outreach is needed to increase awareness of existing resources and that in general, more resources are needed.

Goals and Focus of Research Project

Somos Un Pueblo Unido commissioned the Center for Social Policy (CSP) at the University of New Mexico to conduct a comprehensive research project with three main objectives. First, to understand the attitudes, experiences, and workplace conditions of the oil and gas workforce as well as their families in the Southeastern New Mexican Permian Basin. By providing voice to the most directly impacted community, the oil and gas workforce, the report provides insights for stakeholders engaged in the just transition to clean energy in the state of New Mexico. Second, to describe the oil and gas community's perceived current and long-term training needs as New Mexico executes a transition to clean energy. Finally, to describe the current training landscape in the Permian Basin drawing on the experiences and perceptions of local educators, workforce boards, and community-based organizations. Our recruitment strategy targeted the most overlooked members of the oil and gas workforce, including women, immigrants, and Spanish dominant workers.

Importance of the Southeastern Permian Basin

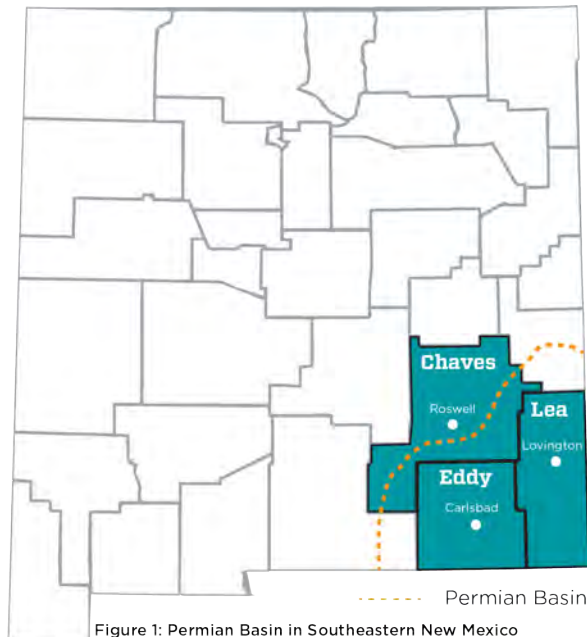


Figure 1: Permian Basin in Southeastern New Mexico

Our research strategically focuses on collecting information from oil and gas workers and their spouses from the Permian Basin of New Mexico. The Permian Basin includes the counties of Lea, Chaves, and Eddy, see figure 1, which were the focus of our recruitment efforts. The Permian Basin is an ideal location for this study given that it is a major driver of the state's economy due to the concentration of oil and natural gas in the region. In 2022, oil and gas added \$16.1 billion to New Mexico's gross domestic product (GDP) and fossil fuel workers accounted for 8.5% of New Mexico's total workforce.¹

Despite the role of oil and gas in the state's economy, New Mexico policy makers are more aware than ever that a transition to clean

¹ Hedden, Adrian. 2023. Oil and Gas Sends \$16 Billion to New Mexico's Economy, Industry Reports, Health Concern Linger. Carlsbad Current Argus. May 17, 2023. Accessed 1/7/2024 <https://www.currentargus.com/story/news/2023/05/17/oil-gas-new-mexico-economy-industry-american-petroleum-institute/70220794007/>

energy is critical. This is amplified by time constraints posed by the need to execute transitions to clean energy before we see irreversible climate change related harms. This will require substantial reductions of fossil fuels, including in oil and gas. There is also evidence that oil and gas production will peak over the next 10-15 years. Policy makers are keenly aware that a continued over-reliance on oil and gas is an unviable economic strategy.

This transition will also require large-scale deployment of new technologies including wind and solar energy, electric vehicles, and energy efficient buildings in the region.² These long-term shifts are particularly relevant for New Mexican communities that have relied on the oil and gas industry for employment either indirectly or directly.

In 2022, oil and gas industry added **\$16.1 BILLION** to New Mexico's GDP and accounted for **8.5%** of New Mexico's total workforce.¹

This report fills a pressing need for policy makers to understand the current landscape of the oil and gas field with an emphasis on understanding the immigrant workforce. This segment of the workforce is crucial because they are the least paid and invisible to policy makers, business owners, and the wider public. This includes understanding current working conditions, perceived prospects for future work, and training needs. This report emphasizes the need for new training opportunities and adult education for workers as well as their families who are often underemployed. This is central to equip workers with tools necessary to reach the goals outlined in New Mexico Economic Development Department's strategic economic development plan, *Empower & Collaborate-New Mexico's Path Forward*, which centers upon building a robust economy in the region bolstered by fostering growth of diverse industries. Understanding the current landscape of the workforce in this region, will equip policymakers to better plan for the future and aid in the development of the region to meet its development goals.

Policymakers have increasingly recognized the need to address justice and equity when pursuing these changes in order to achieve a "just transition."³ A "just transition" seeks to ensure that, "no people, workers, places, sectors, countries or regions are left behind in the move from a high-carbon to a low-carbon economy."⁴ Just transition policies often focus on mitigating adverse impacts on or creating opportunities for vulnerable and historically marginalized groups, including immigrants, communities of color, and communities that are dependent on the fossil-fuel economy.

While New Mexico's overall population has only grown by 2.8% over the last decade, the Permian Basin has seen much greater population growth. In Eddy County, from 2010-2020, the Hispanic and Latino population increased by 31.9% (7,576 people). In neighboring Lea County, the Hispanic and Latino population increased by 36.7% (12,130) between 2010 and 2020. Additionally, Lea County has a foreign-born population of 19.7% compared to 9.3% in

² Skea, J., Shukla, P. R., Reisinger, A., Slade, R., Pathak, M., Al Khourdajie, A., van Diemen, R., Abdulla, A., Akimoto, K., Babiker, M., Bai, Q., Bashmakov, I. A., Bataille, C., Berndes, G., Blanco, G., Blok, K., Bustamante, M., Byers, E., Cabeza, L. F., ... Winkler, H. (2022). Summary for Policymakers. In P. R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, & J. Malley (Eds.), *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 1–48). Cambridge University Press. <https://doi.org/10.1017/9781009157926.001>

³ IPCC, Mitigation: Technical Summary at TS-5 (2022).

⁴ id.

New Mexico. Not only are the populations of these counties growing at noticeably higher rates than other regions and New Mexico as a whole, those moving to these counties see the area as where they plan to build long-term homes. It is essential that policy makers understand this growth as well as needs and wants of individuals who make up these constituencies. This is especially important given that residents of the Southeastern Permian Basin feel under-represented in policy making while remaining eager to see changes reflected in their communities, lives, and jobs. According to two male workers:

*"I just want to mention that as a Geologist the green energy transition is going to be very tough and **oil workers need to be included**. First, it's going to take these **conversations** and the government to be very proactive. It's not going to be something that's going to happen overnight, but **workers need to be included and represented**."* - Male, Roswell

"This part of the state generates a lot of money, but it is not seen, it is not reflected." - Male, Hobbs

In line with community-engaged policymaking, this project provided the community with an opportunity to share their input on the policy decisions facing the state of New Mexico as it implements a just transition to clean energy. The goal of this research is to provide a mechanism to include the voices of the populations who are going to be the most directly impacted by the movement toward clean energy, yet who are often underrepresented in policy discussions. As policy makers grapple with how best to execute a just transition to clean energy, understanding the experiences and needs of oil and gas workers in the Southeastern Permian Basin is paramount.

Research Design & Methodology

The research uses a mixed methods approach, utilizing both survey data and qualitative focus groups. Commissioned by Somos Un Pueblo Unido, the state's leading organization advocating for immigrant communities across the state, the study gathered valuable insights into the needs and concerns of its residents to utilize the findings to develop and implement effective policies and initiatives.

The University of New Mexico (UNM) Center for Social Policy (CSP) and the UNM College of Population Health (COPH) worked in partnership with the Somos Un Pueblo Unido team to collect information from residents of southeastern New Mexico who are either directly or indirectly connected to the oil and gas industry. Participants included current employees and retired employees of oil and gas companies, their spouses, and employees of the many industries that support the oil and gas industry in the region.

We conducted two waves of qualitative focus groups in Hobbs, Roswell, and Artesia with 28 total participants in the spring of 2023. The second wave of focus groups were conducted in the winter of 2023 and included two focus groups in Hobbs and two in Artesia with 39 total participants.

The focus groups were facilitated by trained members of our team and included native Spanish-language speakers to moderate in both English and Spanish. Moderators used a focus group script (see Appendix) to guide discussions and asked follow-up questions where appropriate. In total, 67 oil and gas workers and community members participated in the focus groups. The groups averaged between 2 and 3 hours, and participants received a \$100 Visa gift card for their time. The sessions were audio-recorded and later transcribed and

translated by members of the team and/or contractors, they were then analyzed by members of the team. Anonymized quotes are included to highlight major themes that emerged from these discussions.

In addition to the focus groups, two professionally guided quantitative surveys were conducted in-person that included 96 responses. Members of our research team recorded the survey responses of participants on hard copy survey instruments that were recorded in Qualtrics for statistical analysis. The first wave of surveys were conducted in the winter of 2022-23 and included 50 participants. The content of these surveys focused on working conditions and broad training needs. The second wave of surveys, conducted in the winter of 2023, included 46 participants. The content of the second wave of surveys focused primarily on training needs. All focus groups and surveys were conducted in Spanish and/or English depending on the preferences of the respondents, but most responses were collected in Spanish by native-level Spanish speakers on the research team.

Oil and gas workers who are mostly immigrants and Spanish speakers are hard-to-reach residents through traditional survey methods. We therefore implemented targeted recruitment, relying extensively on Somos Un Pueblo Unidos networks. It is also important to note that because this population is hard to reach, it is difficult to accurately assess its demographics. Therefore, the data collected here is not intended to be representative of all New Mexicans living in the southeastern part of the state. Rather, we are focusing on oil and gas workers, community members, and primarily immigrants that work in and live adjacent to these industries.

When considering all aspects of our research design collectively, we were able to collect information from a wide and diverse set of community members across the Permian Basin. It is vital that we protect the anonymity of our respondents to ensure confidentiality. This allowed respondents to provide honest and uncensored responses. In that regard, any mentioned quotes have been anonymized to only include basic demographics such as gender and the location where the focus group or interview was conducted.

We spoke to both oil and gas workers and their spouses, which led to a diverse sample. Overall, our survey included 36 women and 64 men. This allowed our team to make comparisons based on gender across the lived experience of the workforce, which proved important given the gender inequalities gleaned from the research. We also had distribution across our three target counties in the Permian Basin; 64 respondents from Lea County, 15 from Chaves County, and 28 from Eddy County. Nearly all of our respondents were Hispanic and the population was dominated by foreign-born residents (99% were Hispanic and 72% of participants were foreign-born). The majority of respondents were Spanish speaking members of the community (64.1% spoke Spanish only at home, 29% spoke English and Spanish, and 7% spoke English only). Consequently, 107 of the completed surveys were through Spanish interviews compared to only 19 completed in English.

Regarding age, the survey included community members across the entire life span. This is important because it allows us to capture the perspectives of youth, young adults, middle-aged and older members of the population. Five percent (5%) were under 18, 12% were between the ages of 18-24, 18% were 25-29, 16% were 30-39, 28% were 40-49, 9% were 50-59 and 12% were 60 or older. The average number of children across all respondents was 2.26 and 85% of total respondents had children. With respect to education, 44% completed high school, 28% did not complete high school, 22% had some college or vocational school, and 6% had bachelors degrees.

The survey also included representation from community members employed by the oil and gas industry and other employees who work for businesses that often support this industry in the region. Roughly half (46%) of the respondents were oil and gas workers directly employed by one of the local oil and gas companies. The remaining 54% were non-oil and gas worker community members which includes contractors working in oil and gas, family members of oil and gas workers, and people working in industries serving oil and gas workers (e.g. restaurants, hotels, cleaning services, etc.)

In addition to the data the research team collected, this report also includes secondary data from BSP Research and the University of New Mexico Anderson School of Management who conducted a survey of young adults in New Mexico. This survey has a large sample of young adults between the ages of 16-35 to add the perspective of the projected workforce for new jobs in emerging industries associated with clean energy. The survey was designed to capture an oversample (n=1,000) of New Mexicans who either currently reside in rural areas of New Mexico or who are originally from rural counties of the state.

To help inform our efforts to identify the needs and attitudes of young adults in southeastern New Mexico, our team isolated respondents from these counties for the analysis that follows. For the counties of Lea, Chavez, and Eddy there was a sample of 211 participants. This is just above the n=200 threshold our research team sets for analyses of specific sub-groups. The survey has a mixed-mode data collection design, with approximately 75% of interviews conducted on-line and the other 25% conducted over landline and cell phones with live interviewers. The survey, conducted in both English and Spanish, has an overall margin of error of +/- 2.3%, fielded from February to March of 2022.

Finally, our team conducted a landscape analysis to assess the training and education landscape of southeastern New Mexico. Our scan of the infrastructure for the workforce included General Education Development (GED) preparation and programs, English as a second language (ESL), High School Equivalency (HSE) preparation, Nursing prep, EMT test prep, and preparation for citizenship tests. The focus areas were motivated by the preliminary evidence of our focus groups that suggested training was needed not only for oil and gas workers, but also for their spouses who could help offset lost wages to their families.

This consisted of our team reaching out to 76 program heads and representatives of adult education and workforce development programs we identified through web searches, inquiries through our networks, and suggestions from our funder and their partners out of the 76 of potential interviewees, 30 interviews were conducted for a response rate of 39 percent.

The interviews were conducted from the summer of 2023 to January 2024. Smaller organizations offering adult education also participated in these interviews and were contacted via phone.

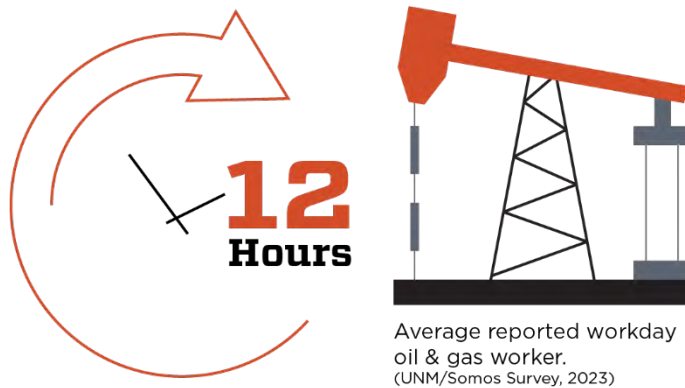
NOTE: All survey figures in the report come from the data gathered by the survey and interviews commissioned for this report unless otherwise noted.

Findings

Working Conditions of Oil and Gas Workers

Across 5 qualitative focus groups and 2 quantitative surveys from oil and gas workers and their families, we were able to glean several themes related to the economic, social, and employment context of Southeastern New Mexico. Crucial to a just transition to clean energy is improving working conditions and benefits for workers and their families. Our qualitative and quantitative data collected from oil and gas workers makes clear that this workforce endures challenging working conditions that often lead to serious accidents and injuries. The state has an opportunity to put the policies and infrastructure in place now that will ensure that the emerging clean energy industry will provide workers with safe working environments.

Long Work Hours



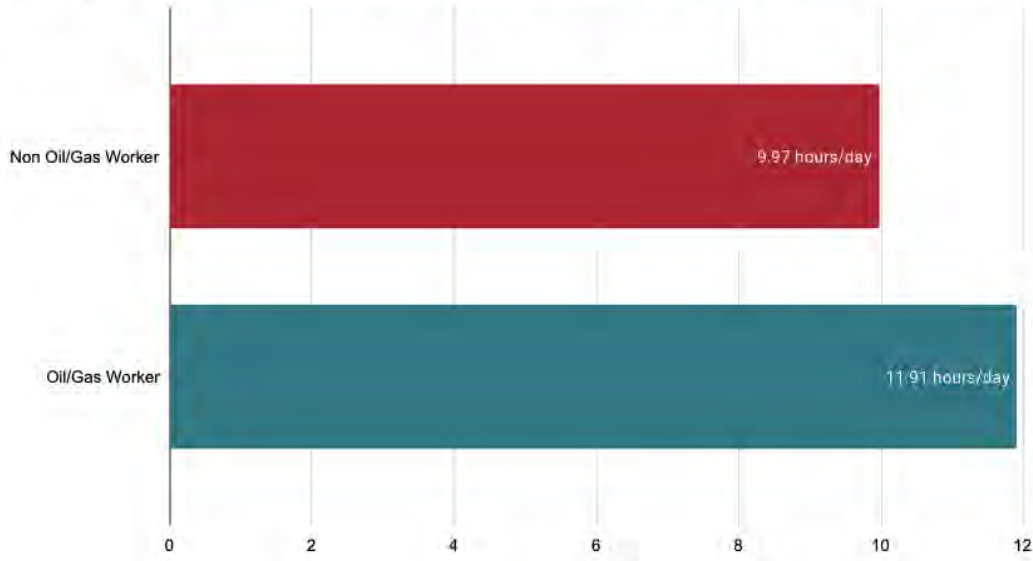
Average reported workday
oil & gas worker.
(UNM/Somos Survey, 2023)

A consistent finding across both waves of the study is that oil workers experience long working hours. This is made clear by the average amount of hours they put into work in a day. The average workday of oil and gas workers from our survey was nearly 12 hours long. Our team spoke with members of the workforce that are indirectly or adjacently connected to the oil and gas industry to allow comparisons to be made when appropriate. Even in the same region of the state, we see

statistically significant differences in the number of hours oil and gas workers work compared to their industry adjacent⁵ counterparts.

⁵ Industry adjacent here are all other respondents that are employed outside of the home working in close proximity to the oil and gas industry workers. This includes independent contractors, small business owners that work with the oil and gas companies, working for a business that is indirectly connected, and a company that provides services (such as cleaning, welding, etc.). Family members, which include full-time homemakers, are not included although we acknowledge that that is also usually more than a full-time job.

Average Hours Worked Per Day: Oil/Gas Workers vs Adjacent Industry Workers



When we asked workers about the underlying reasons for the excessive work hours each day, the most common response was that working long hours ensured that they could increase their hourly pay through overtime. Essentially, workers said the only way to effectively increase their wages to make ends meet was to work more days with longer hours. In addition to long work hours, workers consistently said that they travel long distances to and from work.

Moreover, there is a perception that the oil and gas workforce is highly paid, and although there are high wages for many of the workers we connected with, this is not the experience of all workers. Roughly, 20% of the participants in our study reported making less than \$25,000 annually in their jobs in the industry. Long working hours with low compensation leaves oil and gas workers feeling exploited for their labor. One woman frames the choice of joining the field as being forced to sell her freedom for her wage, a wage that she compares to a crumb. Those who live in Southeastern New Mexico often refer to the choice one has to make between forgoing the employment and economic opportunities available in the oil and gas field or accepting the less than poor working conditions and exploitation they see as inevitable.

“I work. The pay was okay but I didn’t know as much about overtime and the hours that are worked here. When I got here, I thought the time they worked was exaggerated, so I panicked and said, no, I don’t want to go into it. Do I say, well, I’m going to do it there, it’s not going to have a life and say, what time am I going to sleep, what am I going to do? **I’m going to be enslaved. I see modern slavery here, obviously. Because of the brightness of the money, right? I’m going to say I’m selling you my freedom, right?** Then you’ll get it. **They buy it from you and you risk it. They benefit because they are paying a crumb for you to expose yourself there.**” - Female, Hobbs.

“In order to be able to grab overtime, you don’t get home until 8 or 9 at night, because what quality of life are they giving to the family if you don’t even see them...” - Female, Hobbs

"I worked as a welder's assistant. **And yes, it's good pay, but very long hours. As a woman it is very hard to be there because it's hard work because you have to get up very early and you get home very late.** And then I still have to do the things that need to get done at home." - Female, Hobbs

Women in particular report experiencing great difficulty in their jobs and even poorer working conditions. According to women working directly in the oil fields, they lack adequate resources or even necessities, including bathrooms, because the industry has traditionally been designed to accommodate male workers in the field. Additionally, women cite that their work takes away from their ability to complete other responsibilities such as caring for their children.

"...it's hard being a woman working there. It's really hard for women because we have different necessities than men and there are no bathrooms." - Female, Hobbs

Women who join the oil and gas field face unique working conditions that make their ability to work and stay in the field difficult. Without basic necessities, such as women's bathrooms and childcare assistance, these women are often unable to work and face great barriers to entering the field.

Finally, focus group participants also vividly describe the impact of long working hours on their familial and personal relationships. Male workers commonly describe that after working six days a week away from home they come home exhausted and unable to fully participate in family life. Many say that they mostly sleep on their day off and while they are doing a good job of taking care of their families' financial needs, the work brings a sense of loneliness and disconnection.

"I basically went through **two failed marriages** before I quit as an engineer in the oil field...my last boss told me that maybe a third wife would work out because you've been in the field long enough to teach them how it works..." - Male, Hobbs

As the infrastructure for the clean energy industry begins to develop across the state, it will be important to put policies in place that motivate companies to pay living wages across the sector that provide benefits. This may reduce the demand for excessive reliance on overtime for working families.

Dangerous Working Conditions and Accidents

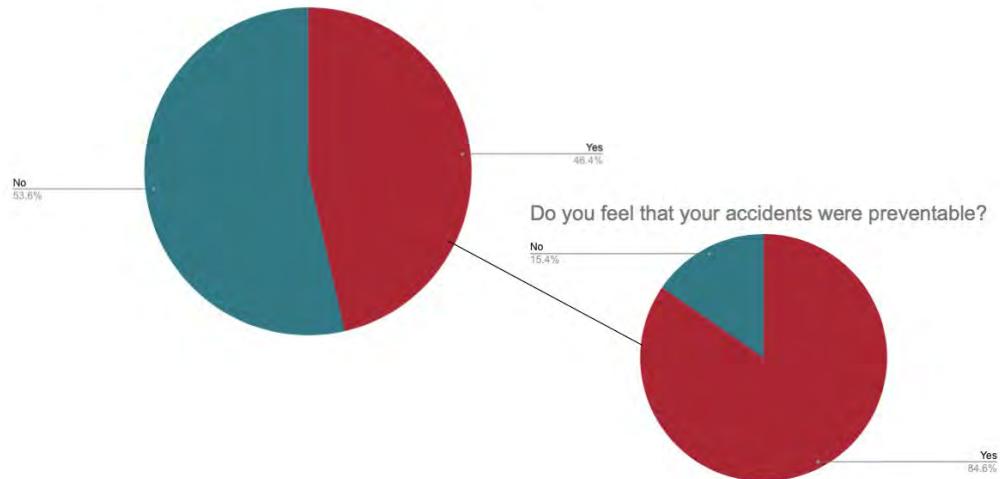
Workers and their families describe their working conditions with a palpable fear for their safety, health, and survival. The wife of an oil and gas worker, when describing her husband's experience working with dangerous chemicals, articulates this experience, stating:

"My husband was working for a company and he had an accident. He almost cut his whole finger off unloading equipment. The owner didn't want to have problems, so they fired him. When he returned to work, he got really skinny and he was drying up because of all the chemicals he was working with. **Those tanks are like death. We experience disillusionment, impotence and anger because we are completely hopeless.** The manager of that company is my husband's nephew, but profit for the owner comes first." - Female, Hobbs



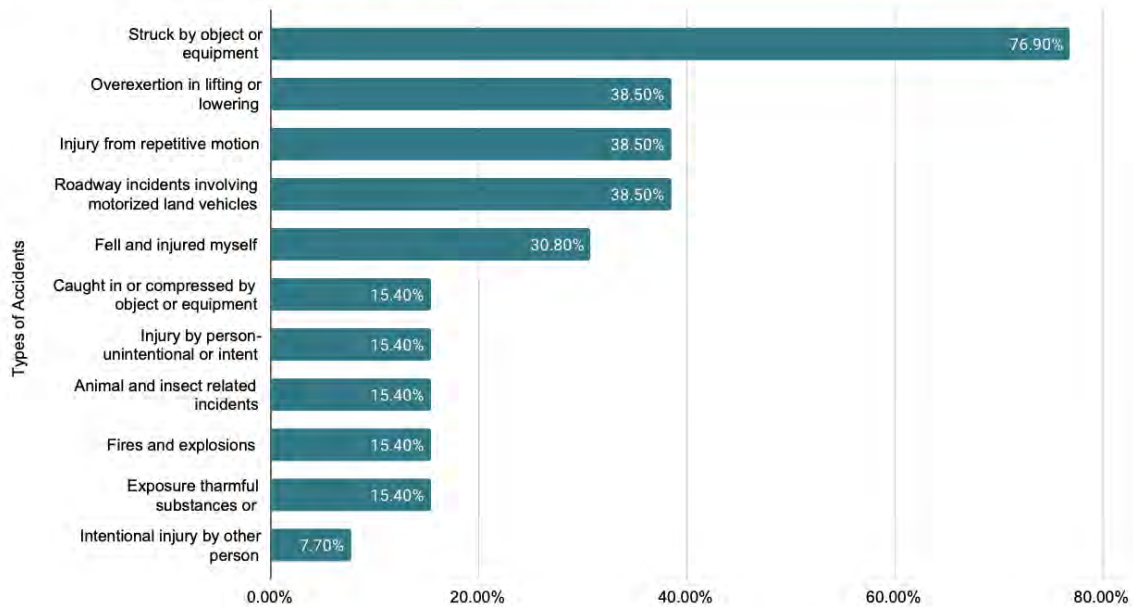
As both focus groups and survey data revealed, on the job accidents are quite common for those working in the oil and gas field. When asked if they experienced an accident, 46% of participants stated that they had. What is notable is that of the respondents who were involved in workplace accidents, the vast majority (85%) stated that they felt that the accident was preventable.

Have you ever had an accident on the job?



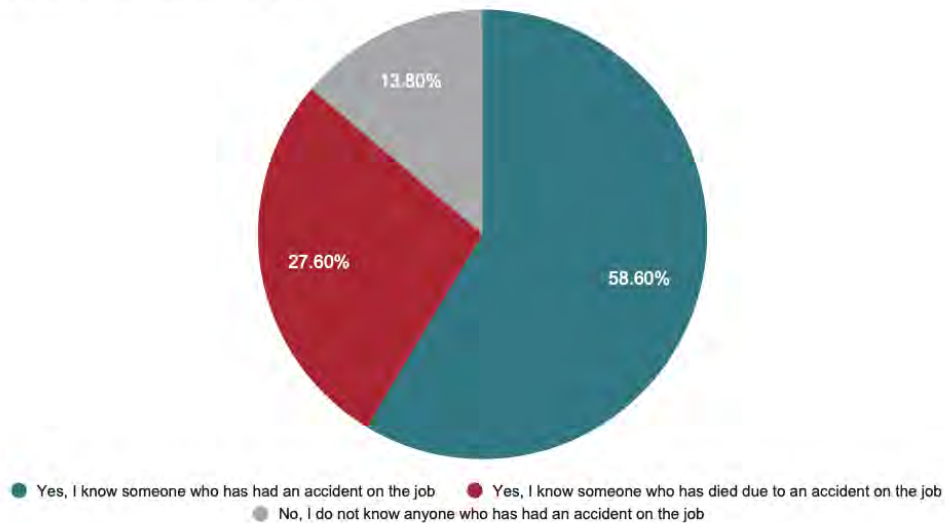
Among those who experienced an accident, when asked about the type of accidents that had occurred, the most frequent answer was “struck by an object or equipment,” with 77% choosing this type of accident. Other frequent injuries besides being struck by objects or equipment, included overexertion in lifting and injury from repetitive motion. Three in 10 had witnessed an injury from a fall.

What kind of accidents occurred? Select all that apply.



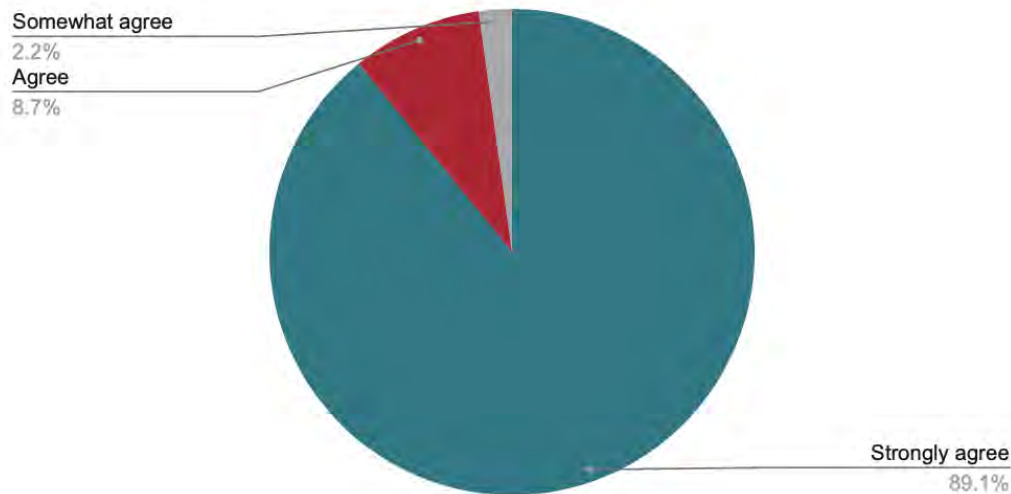
To the question of whether they had any co-workers who have had accidents or died due to an accident on the job, an alarming 8 in 10 workers stated that they knew someone who had an accident on the job. Tragically, nearly 28% of those who reported knowing someone who had an accident on the job said that they know someone who has died due to an injury sustained due to that accident. Specifically, 27.6% stated that they knew someone who had died due to the accident and 58.6% of respondents stated that they know someone who had an accident on the job.

Do you know of any co-workers who have had accidents or died due to an accident on the job? Select all that apply.



This suggests that increased safety training and oversight of working conditions could lead to fewer accidents as well as improved working conditions. Survey respondents agree with this recommendation as an overwhelming 89% strongly agree that the state needs to ensure health and safety standards for energy workers. As the state begins to build out the infrastructure for the clean energy industry policies, creating a stronger safety-training infrastructure with requirements should be put into place to advance these protocols from the start. This will help ensure that the future clean energy workforce has lower rates of accidents than those in the oil and gas industries.

The State Needs to Ensure Health and Safety Standards for Energy Workers

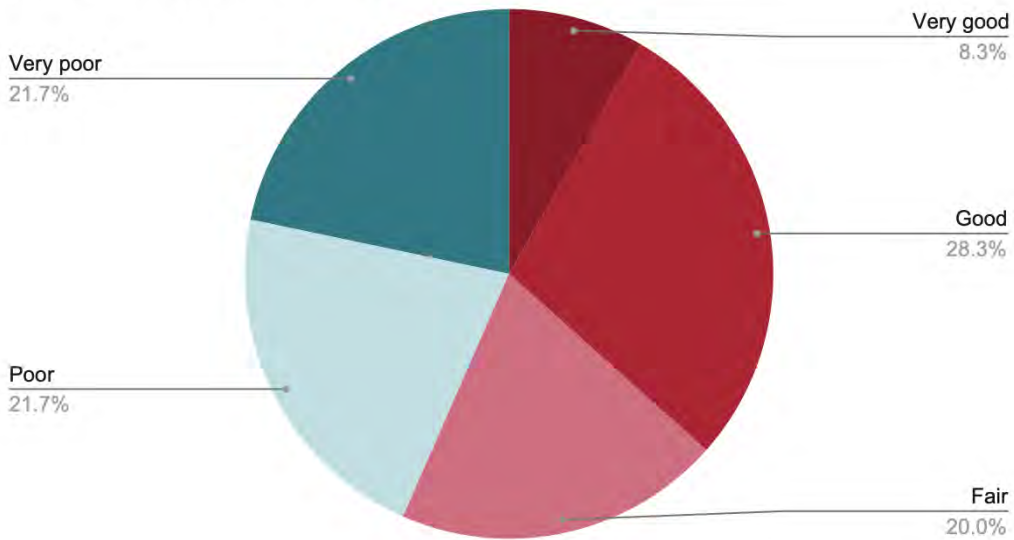


“They call that the road of death because of how many accidents occur there. Just last week three people died...oil pays well and everything, but the thing is you have to leave your family to go work long hours.”
- Male, Roswell

Unfortunately, the dangerous reality of being an oil and gas worker is not solely confined to the workplace but extends into the homes, cars, and private lives of those who live and work in the region. Oil and gas workers living in the Permian Basin had a lot to say about the dangerous driving conditions when speaking about their commute to job sites. The majority of survey respondents (63.4%) described regional road conditions as fair to very poor. This commute often requires traversing a highway known to those who travel along it as *The Road of Death*. The highway receives its name due to the prevalence of motor vehicle accidents directly resulting from over-exhausted drivers falling asleep at the wheel while attempting to return home after mounting shifts lasting 12+ hours.⁶ Workers report their fear of driving along the Road of Death and families report waiting up at night with worry that their loved ones will suffer accidents not only on the job but also on their way to and from.

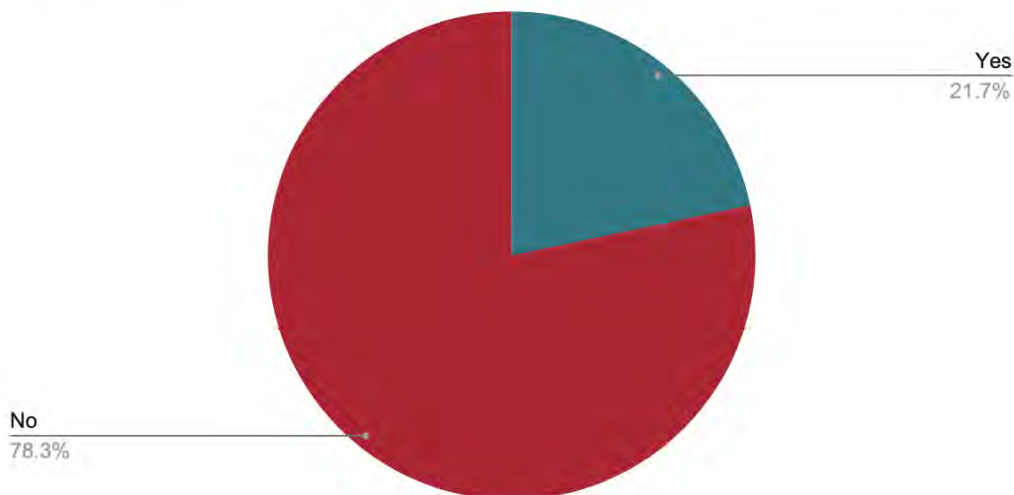
⁶ The dangers associated with the Road to Death have been well documented. See the following news article for example: <https://nmpoliticalreport.com/news/death-highway-a-massive-oil-boom-in-the-permian-basin-has-turned-rural-roads-into-deadly-highways/>

Road Safety and Quality



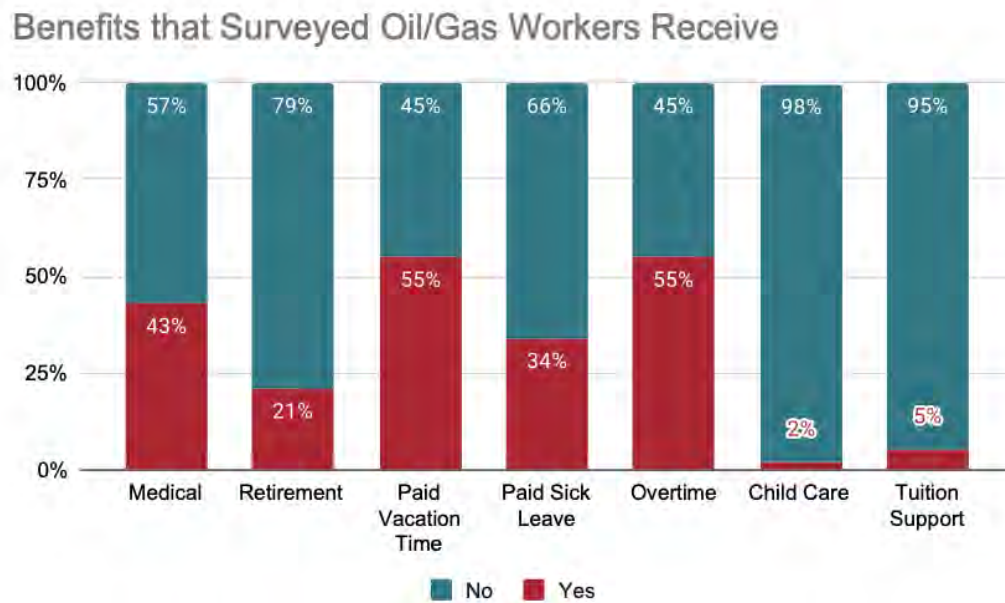
In summary, while oil workers take pride in their efforts to financially support their families, the work comes at a great cost to their health, family life, and ability to participate in their communities. The toll of this work is exemplified by their overwhelming desire for their children to stay in the community, but to work in other industries. Survey participants overwhelmingly stated (78.3%) that they do not want their children to work in this field. The shift toward emerging industries to drive the economy of the region provides an opportunity to provide career paths with stronger safety protocols that pay living wages that do not require the excessive use of overtime pay to support workers and their families.

Would you like it if your children worked in the oil and gas industry?



Inadequate Safety Net

Our research included a focus on the benefits that the workforce in the oil and gas industry is able to access. Although most of the oil and gas workers we surveyed had some type of medical, health, or other benefit, there was large variation between respondents as to the exact benefit they received, indicating inconsistent and inadequate safety nets for people. Specifically, we asked respondents whether their place of work provided them with medical/health insurance, retirement benefits, paid vacation time, paid sick leave, overtime, child care, and/or tuition support for college or training. The bar graph below shows the benefits that the oil and gas workers did or did not receive through their employer.

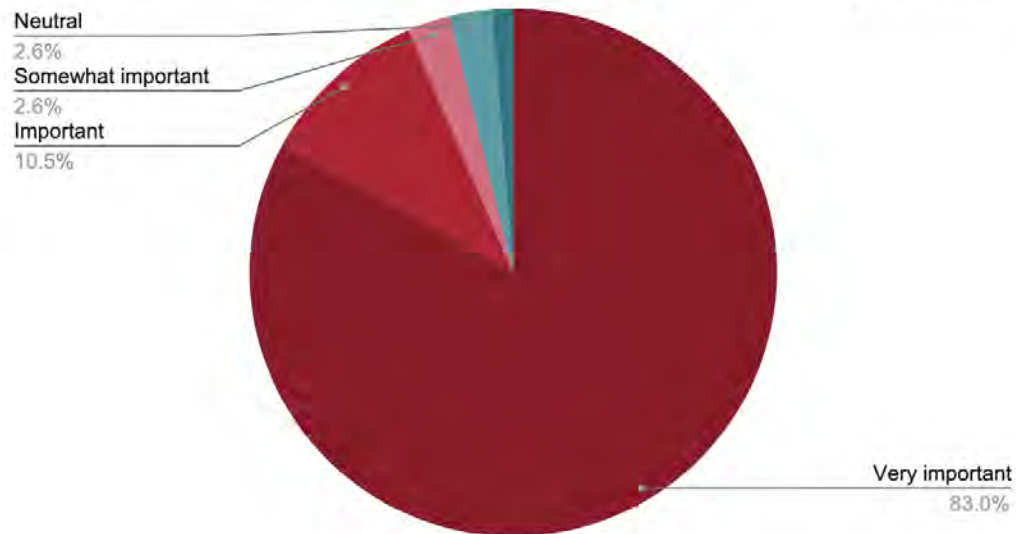


The most common benefit oil and gas workers in our sample received were overtime and paid vacation time, with 55% receiving these benefits. Followed by medical or health insurance, which 43% of workers in the survey receive. Just over half (55%) receive paid sick leave and only 21% receive retirement benefits. The benefits that the fewest share of workers receive are tuition support and childcare support, with 5% and 2% of the sample receiving these benefits, respectively. Although there is large variation across the type of benefits provided to members of the oil and gas workforce, what is striking is overall, a significant amount of oil and gas workers do not receive any support. Furthermore, given the negative impact of work in extractive industries has on the health of its workforce, it is notable that over half of the workers we spoke with were not provided with health insurance.

Due to the volatile nature of the oil and gas market, workers are often the first to suffer when the market performs poorly. The overwhelming majority (69%) of workers report being laid off or having hours cut when such dips occur. These losses are even more devastating considering the lack of access to necessary benefits, with 78% of workers reporting that they do not have access to unemployment benefits. This is primarily because the majority of respondents are immigrants. Immigrant oil and gas workers are unable to access any available benefits due to their immigration status, which exempts them from any unemployment benefits.

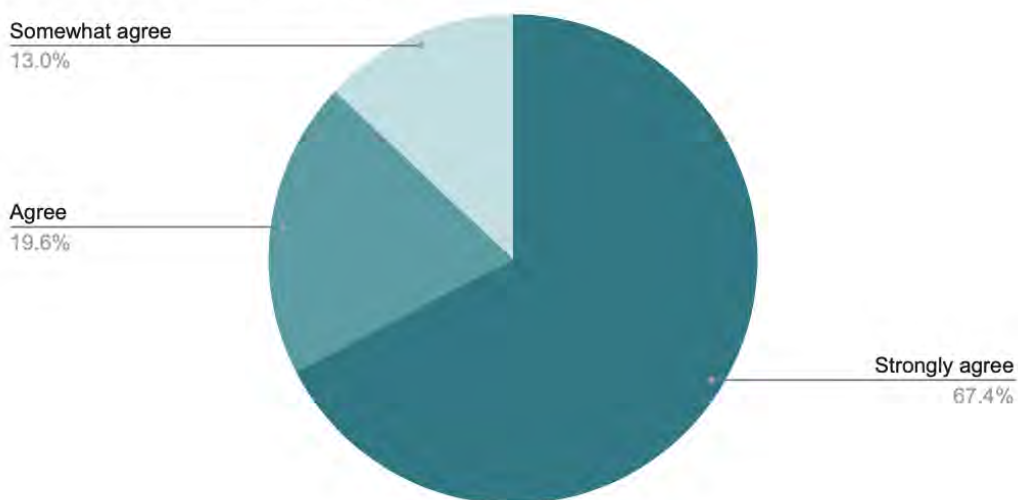
Overall, the overwhelming majority (83%) of study participants believe it is very important to ensure that the state provides broad economic support to workers, including access to economic benefits.

The State Should Provide Economic Support Including Benefits



Specific to oil and gas workers, 100% of survey participants agreed that the state should fund retirement plans for oil and gas workers currently without retirement benefits. Not a single participant disagreed with this statement and 67.4% strongly agreed. The state may be able to address the existing needs of oil and gas workers who are near retirement age and can be compensated as part of the overall transition to clean energy. However, it will be important to ensure that clean energy companies provide these resources for employees as those labor sectors begin to replace oil and gas over time in the region.

The State Should Fund Retirement Plans for Oil/Gas Workers Without Retirement Benefits



Perceived Economic, Social, and Employment Context

Employment in Oil and Gas Industry is Unstable and Unreliable in the Long Term

A major theme that arose across groups and surveys is that oil and gas workers are keenly aware that their work is both unstable and unreliable. They have lived through the boom and bust periods of oil and gas production and are aware of the state's plans to move away from fossil fuel extraction.

Oil and Gas workers share a collective understanding, as well as worry, that demand for their work will disappear or be greatly diminished over the next 15-20 years. Focus group participants share that climate change plus the push for clean energy in the region, they anticipate that oil companies will leave the area, thus leaving them without jobs to support their families.

As reflected in the figure below, over 60% of survey respondents are very concerned that the good paying jobs available now in the oil and gas industry will not be replaced by other labor sectors. The workforce is willing to work long hours, often in dangerous environments, to earn wages high enough to support their families. Their high concern about jobs with that resource available to them is driven by this underlying motivation to support their loved ones.

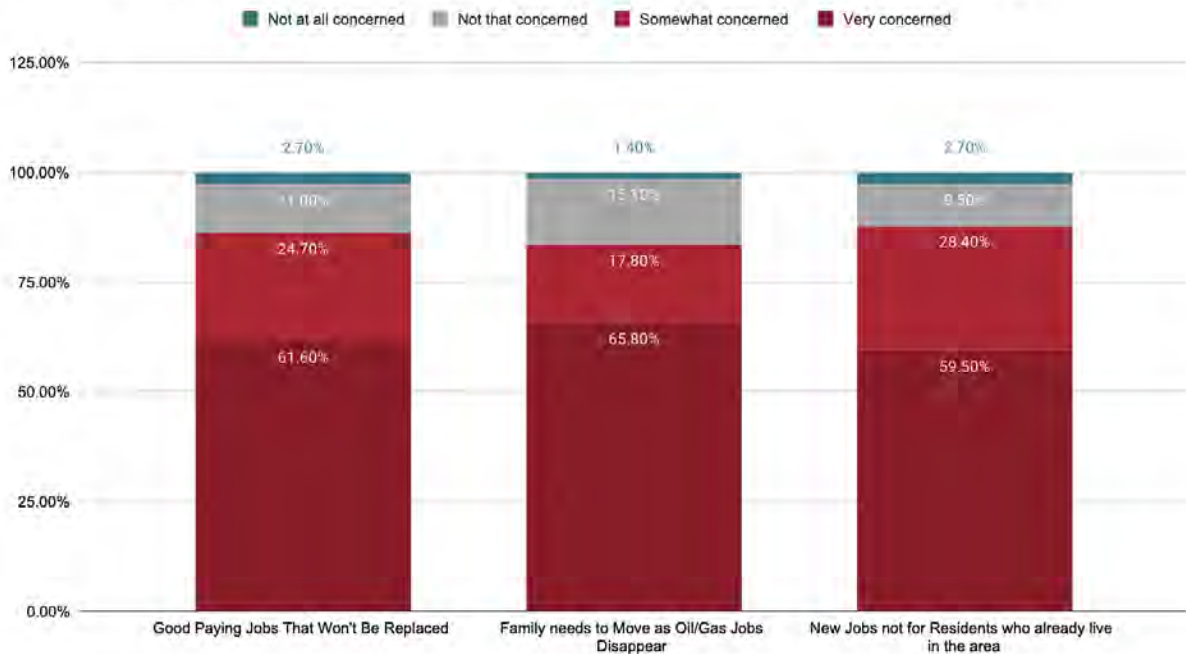
“Earth, all that is of the Earth, it is running out [of natural resources such as oil]. Yes, then yes [oil will leave the region in 10-12 years], when it ends, they will not be able to support us, they are all going to leave [oil companies]”

- Focus group participant when asked by another participant if oil will soon leave the region, Artesia, NM.

Nearly 60% are very concerned that the new jobs that will come with clean energy will not be available to state residents who already live in New Mexico. This is a concern that is shared by the wider community across the state,⁷ so communicating to the public any policies in development that will address this concern should be a priority. Most of the workers we spoke with have families that are also connected to this region, and 65% of respondents are very concerned that they will have to move their families away from the Permian basin region of the state when the jobs in the oil and gas industry disappear. This is an important finding from our research, as strategic planning focused on the oil and gas industry should encompass the families of the oil and gas workforce, many of whom may face displacement as the economy of the region shifts.

⁷ https://www.dws.state.nm.us/Portals/0/DM/LMI/NM_Clean_Energy_Workforce_Report.pdf

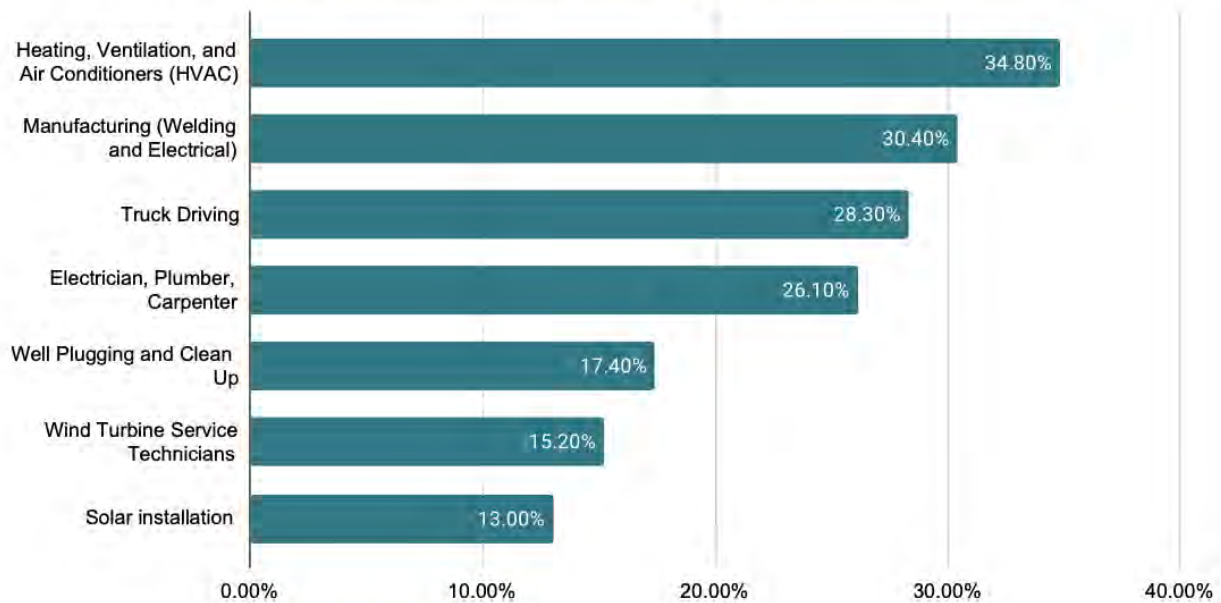
Concern That Oil and Gas Jobs Won't be Replaced and Many Will Have to Leave the Region



Workers Want Targeted Economic Development to Replace Their Reliance on Oil and Gas and other Low Skilled Jobs for Non-English Speakers

Respondents were asked what employment opportunities that they believe will be available to themselves and others in the region over the next four years. The bar graph below shows the percentage of respondents who chose a given employment opportunity that they believed would be available. Over a third of respondents (34.8%) believed that Heating, Ventilation, and Air Conditioners (HVAC) jobs will be available. This is followed by manufacturing (which includes welding and electrical), which 30.4% of respondents will be an employment opportunity. Twenty eight point three percent (28.3%) of respondents believed truck driving would be an available form of employment, followed by electricians, plumbers, and carpenters at 26.1%. Interestingly, respondents did not seem to have high hopes for renewable providing many job opportunities, with only 15.2% of respondents believing that there will be employment opportunities in wind turbine service technicians, and 13% believing that there will be jobs in solar installation.

What employment opportunities do you anticipate being available in the next four years in the Southeastern New Mexico Region?



Oil and gas workers want targeted economic development to replace their reliance on oil and gas for jobs in the region. These workers prefer large-scale economic development with little to no barriers to entry. Across focus groups, many share that they see manufacturing as the solution. Manufacturing work and similar jobs are seen as able to provide the most abundant opportunities for work without required off-the-job training.

“There needs to be other things to work in to be able to stay here, if not we’ll have to go looking elsewhere.” - Male, Hobbs, New Mexico.

“Factories, normally the factories.” - Male, Hobbs, New Mexico, when asked what jobs workers would like to see.

When considering renewable energy, workers welcome these new industries and the jobs they bring but remain concerned that they will not be as abundant or reliable as compared to the oil and gas industry. Trepidation arises especially because these fields do not require the same amount of human labor as do oil and gas. In Hobbs, New Mexico, a focus group participant comments on this, noting that while some work is necessary for installation and maintenance, renewable energy sources rely on natural resources and processes such as the wind and the sun, not the work of people. Workers anticipate that these jobs will require fewer working hours and thus less opportunity for work and pay. As aforementioned, this is particularly noteworthy given that many in the region rely on the ability to work extended hours to make sufficient wages to support themselves and their families.

“If it’s wind or solar there’s not much work to do, right? In solar, **we’re just going to maintain and install...I guess we’ll just work 8 hours a day.** The sun, I’m sure, is going to come up every day...” - Male, Hobbs, New Mexico

Specific to women, the focus group data shows that non-English speaking women typically find informal work in the hospitality industry working in restaurants and hotels doing cooking and janitorial work. These jobs come with instability that often coincides with the booms and busts associated with the oil and gas economy. Women commonly shared feeling isolated because of this work and often described an everyday routine, which includes taking care of their children, driving them to school, while simultaneously working to make ends meet.

“Women are almost focused on the restaurant area, the hotel cleaning area, and many times they do not have the opportunities.” - Female, Hobbs

Focus group participants commonly said that while cleaning and cooking puts food on the table, this work is unstable, inflexible, and isolating. Participants consistently expressed the desire to expand their English and skills to find meaningful employment. Women, in particular, expressed a desire to do work that contributes to local community development.

“I want something that can benefit mothers so much because there are many of us who are alone, more than anything for that.”- Female, Artesia

This finding regarding women’s roles in the adjacent economy in the region is an important one. For the most part, discussions regarding the just transition to clean energy have been narrowly focused on the members of the workforce working directly in fossil fuel extraction. While this is understandable, our work here reveals that the residents of the Permian Basin employed in sectors that depend on the oil and gas workforce for sustainability are also in danger of displacement.

Finding paths to provide the largely female workforce within the restaurants, hotels, and other businesses with workforce training in other sectors should be part of the state’s overall transition plan.

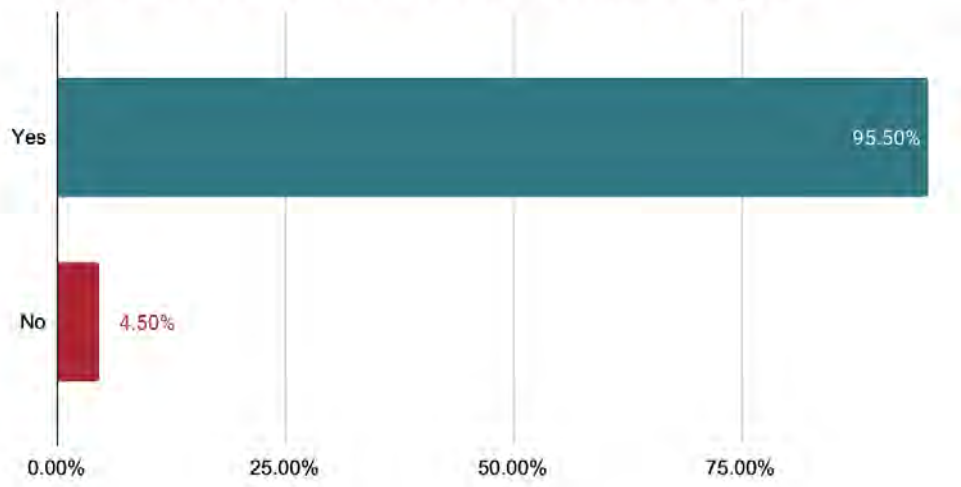
Perceived Training Needs and Desires of Oil and Gas Workers

Widespread Interest in Diverse and Comprehensive Training Programs

The primary focus of this study was to identify not only the regional workforce’s underlying interests in workforce development training opportunities, but also the specific types of training opportunities these workers will need to find alternative employment as the region shifts from a reliance on oil and gas to clean energy. As we discuss in this section, the workforce will require a comprehensive set of skill-building resources, including computer literacy and English language courses to aid in a just transition.

A majority of participants expressed an eager desire for substantive training in a variety of skills and industries, particularly if they are provided free of cost and childcare is provided. Overall, 95.5% of the survey respondents said that they would participate in job training opportunities if they were both free and offered at a convenient time for their schedules.

Would you participate in job retraining programs if they were free and had convenient hours and locations for you?



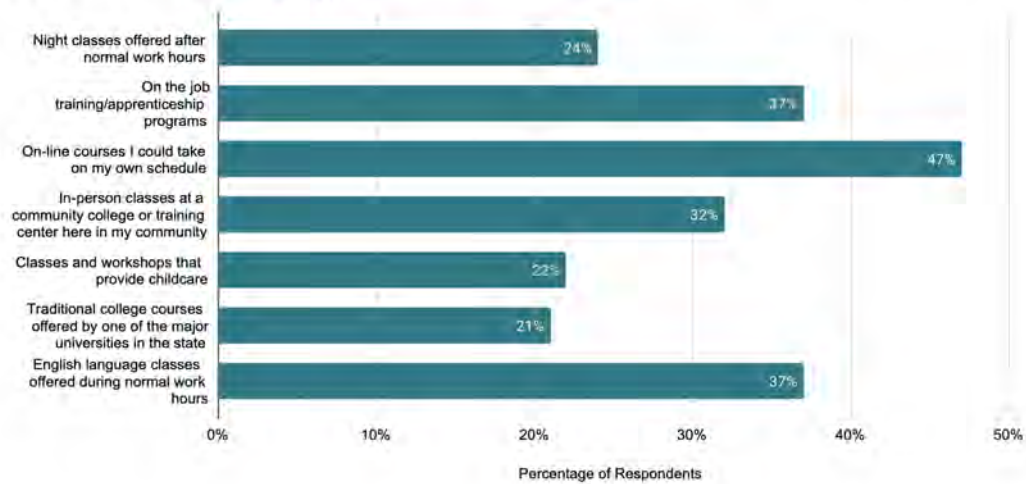
The need for training to accommodate workers' existing schedules is further highlighted in the respondents answers to the question of which types of training would work best for them to prepare them for jobs outside of the oil and gas industry. Nearly half of the respondents (47%) stated that they wanted online courses that they can take at their own schedule.

Participants were open to new opportunities to expand their language and vocational skills, resources they recognize are necessary to find diversified employment. The fact that 37% of workers and their families noted that English language classes were valued identifies that there is also a need to ensure infrastructure to support ESL programs. Focus group participants said that in addition to ESL programs, it is vital to improve their access to adult education and career and technical education. In fact, many respondents said it would be ideal if local communities had access to integrated training programs that allow them to meet their needs more holistically. Oil workers and women consistently said that it is challenging to piece together "classes here and there" traveling long distances while balancing work and family life. For them, it makes sense to braid training programs together so they are accessible to families living in rural communities.

There was also equivalent interest in "on-the-job training" or apprenticeship programs, with 37% of respondents noting that this training modality works best for them. This is an important finding given that our team learned through our conversations with workers in solar installation and other clean energy jobs that they believe on-the-job training is vital to the retention of workers looking to begin careers in this industry.⁸ Finally, a third of respondents (32%) also indicated that they would be interested in in-person classes at a community college or training center in their community. This shows that communities are willing to be trained in order to adapt to new industries, but any efforts to provide training, the work and child-rearing needs of workers need to be considered so that they can participate in these training without any barriers.

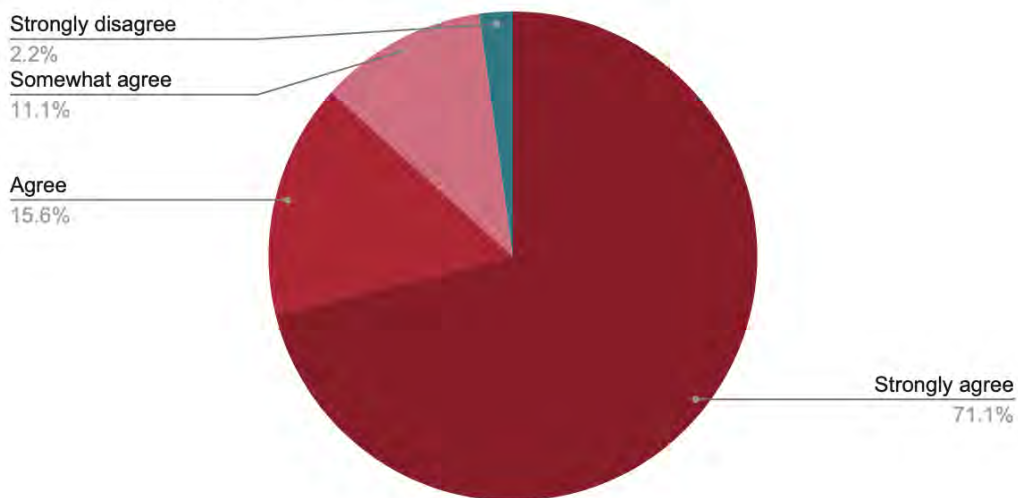
⁸ https://www.dws.state.nm.us/Portals/0/DM/LMI/NM_Clean_Energy_Workforce_Report.pdf

If job training opportunities were made available here in southeastern New Mexico to prepare for jobs outside of the oil and gas industry, which of the following would work best for you? (Select all that apply)



When the state considers the type of training that should be provided, one important thing to note here is that members of the community are also open to integrated training models. In other words, training that combines multiple skills such as substantive training in clean energy related skills, such as manufacturing, but also English language training. As the figure below shows, almost all respondents (97.8%) agreed to some extent about having a preference for integrated training, with 71.1% strongly agreeing, 15.6% agreeing, and 11.1% somewhat agreeing. Only 2.2% of respondents disagreed and indicated that they would not prefer training that combines multiple skills.

Preferences for Integrated Training in Clean Energy with Manufacturing, etc.



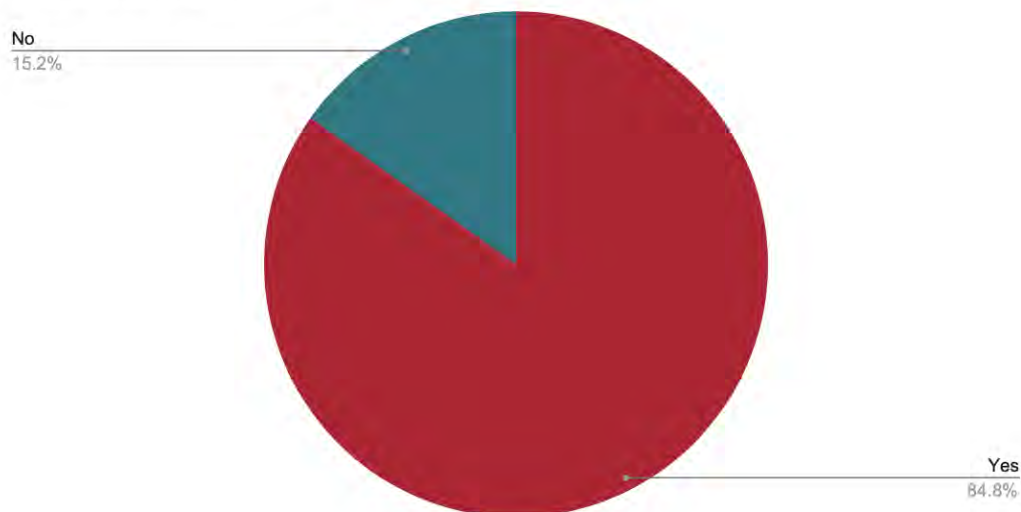
Widespread Interest in On-line Training Programs

A vital purpose of the research for this report was to provide stakeholders with information on the education delivery modules that are of interest to the oil and gas workforce, as well as any barriers or challenges they may face accessing workforce development opportunities. The interest in on-line trainings and courses thus prompts careful consideration and understanding of digital and computer literacy as well as high-speed internet and computer access in the region.

The section above showed that oil and gas community members are interested in being trained as energy transitions happen but many of them prefer flexible training programs where they undergo training on their own schedule. As previously noted, 47% of respondents shared that online courses that could be taken on their own schedule worked best for them.

Furthermore, the survey data shows that the majority of individuals living in the region have access to high-speed internet and possess the skills necessary to use the internet to further their education and workforce skills. More specifically, 72% of survey respondents report that they have access to regular, reliable high-speed internet where they live. While this is a positive overall finding, it is important to note that the other 28% of respondents will not be able to participate in online training, whether that is for workforce training or GED/ESL training. For this population, gaining access to high-speed reliable internet remains a pressing need.

Are you able to use the internet to find information or further your education or skill training?

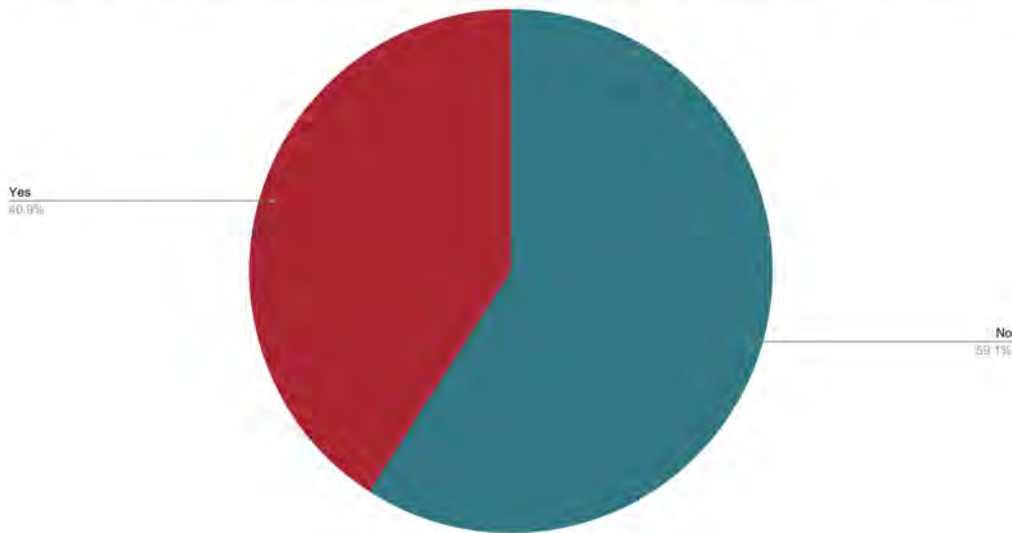


In addition to high speed internet, the survey also asks oil and gas workers about their computer literacy. An overwhelming majority (85%) of respondents share that they have the skills necessary to use the internet to find training opportunities and further their education or skill training. This leaves only 15% of respondents who do not yet possess these necessary skills and who may need access to basic computer literacy courses or programs in order to become proficient and be able to take advantage of online-based training opportunities. Although those without computer literacy are a minority in our sample, offering basic computer skills in general will also provide oil and gas workers and community members with

more employment opportunities and may therefore be beneficial to the community as a whole.

While 85% of participants in our study share they are proficient in using the internet and 72% have access to high speed internet at home, the biggest obstacle to online or virtual training lies in lack of access to private and quiet spaces to complete online training as well as regular and reliable access to a computer with high-speed internet. Forty-one percent (41%) of participants cite this as a challenge to participating in on-line training opportunities. While many share that they have internet access and the skills to complete training and further their education online, reliable access to necessary technology remains a noteworthy barrier.

Would participating in trainings on-line at your house on your computer be a challenge either because you lack a private and quiet place to do the trainings or lack regular access to a computer with high speed internet?



These results suggest the need for varied options for workforce training to ensure that those without computer literacy skills as well as unreliable access to reliable high-speed internet and technology have alternative training modalities available. Equipping these community members with necessary technology such as computers is essential. Furthermore, support to provide those interested in training with a private and quiet place (whether that is in the form of childcare or office space) will also be key in enabling people to take training.

Desire for Increased Training in Growth Industries and Manufacturing

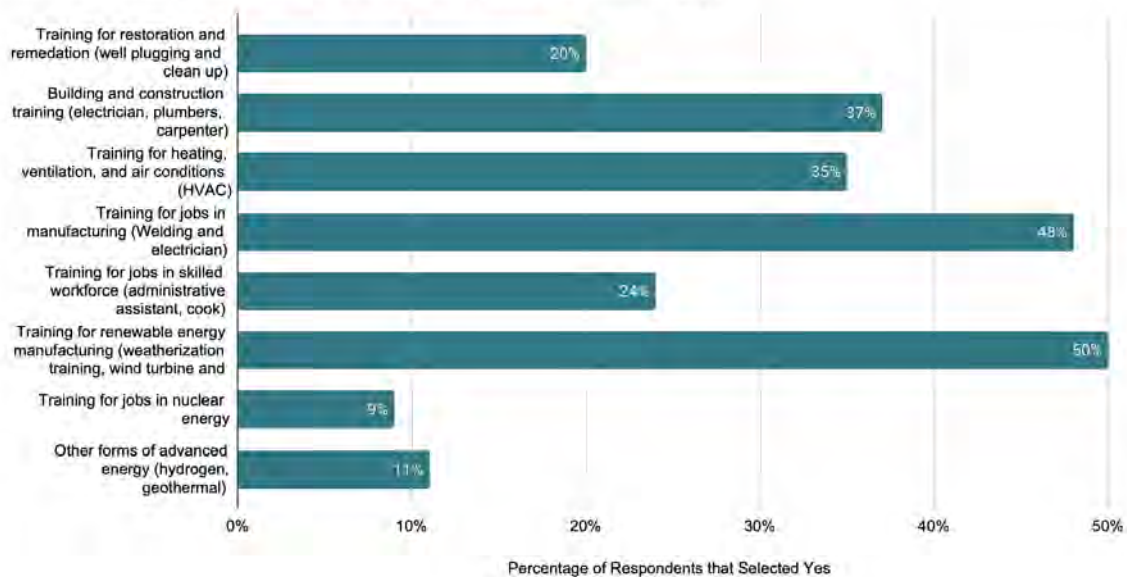
Community members expressed interest in a variety of training programs for growth industries. Training for renewable energy manufacturing including the ability to make weatherization materials and wind turbines received the most interest (50%). Training for jobs in welding and electrical related to manufacturing are also of high interest to the oil and gas workforce. This is followed by building and construction job training, such as electrical, plumbing, and carpentry work. There is also high interest in HVAC training to allow workers to enter the heating and cooling industry upon completion of training. These are all valuable skills that would allow the workforce to transition toward sectors that will be needed to develop clean energy capacity in the region.

Conversely, jobs in the nuclear, geothermal, and hydrogen energy fields received the least amount of interest from respondents. This, we believe, speaks to the overall lack of knowledge and experience with these industries that are perceived to be more dangerous

than renewable or clean energy. Given the goals of the state to explore these alternative energy sources, it will be important to work on communicating the safety of working in these other sectors to the wider community. It should also be noted that while many were apprehensive about nuclear, geothermal, and hydrogen forms of energy, others were open to the fields so long as they were provided with safe working conditions and brought jobs to the region.

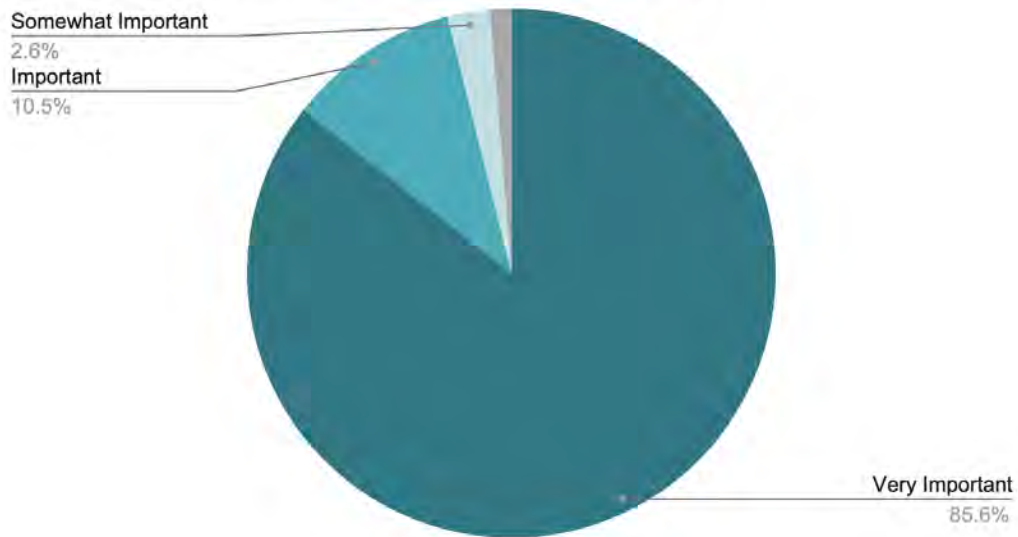
“Nuclear power, I mean, there’s going to be a plant here. **Anything that brings work is fine**, if the oil runs out here, then we go there.” - Focus group participant, Artesia, New Mexico

What new programs or services can workforce partners introduce to help train the workforce for the growing industries in the region? (Select all that apply)



Overall, participants see job training for clean energy as very important (86%). Both focus group and survey participants also stressed that focused training for clean energy job skills should be paired with other basic educational training as well as training to work in other industries. Focus group participants commonly said that they would like to see more regionalized training centers that aimed towards the underlying needs of immigrant families to develop concrete vocational skills, literacy, and English. One female participant from Artesia envisioned a place-based center where families could choose from a menu of trainings and where they could bring their children to participate. Others expressed the need for regional centers that offer a mix of virtual and classroom based training.

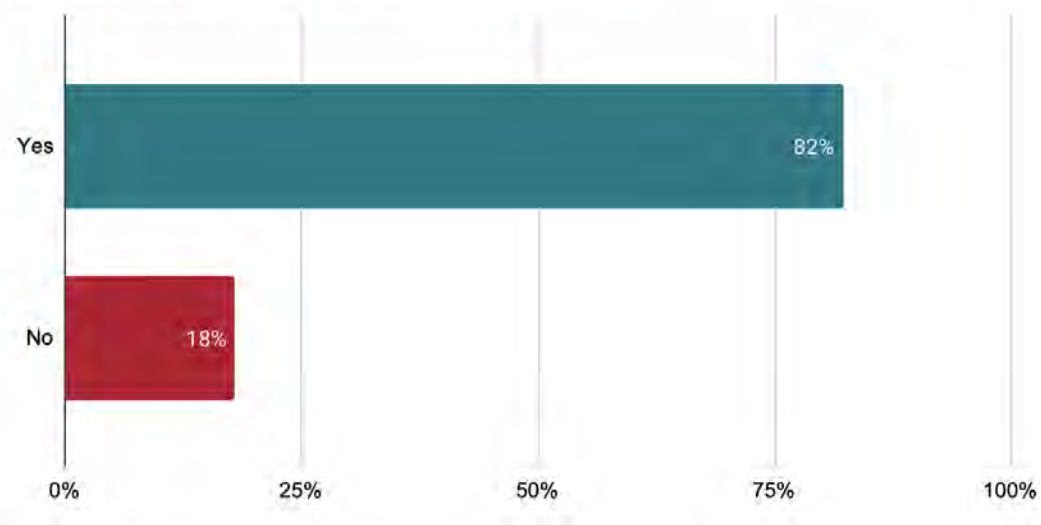
Importance of Job Training for Clean Energy



Workers are Willing to Participate in Training Away from Home if Compensated

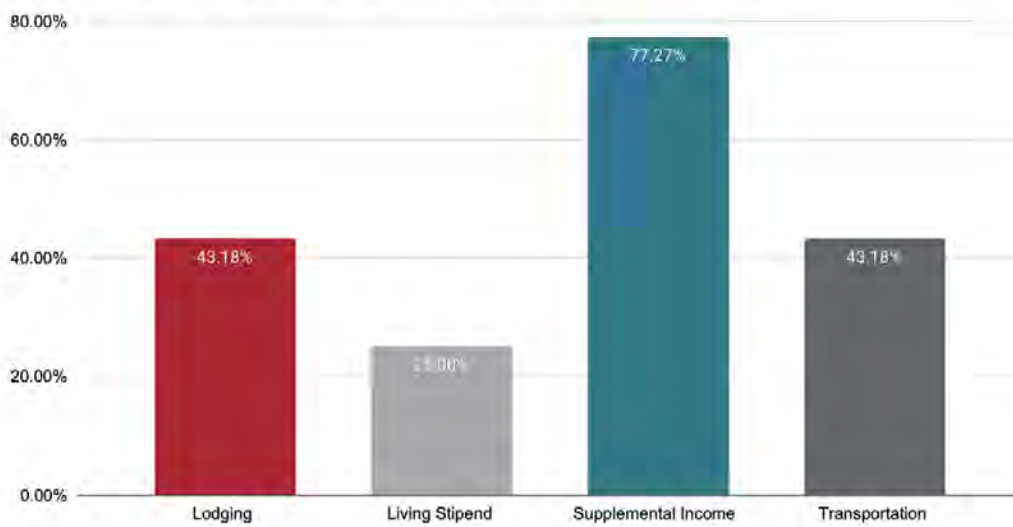
Finally, participants were also clear that they are open to participating in vocational training opportunities outside of their local communities to further their career advancement. Over 80% of survey respondents say that they would even be willing to travel away from their homes and families for training outside of the southeastern quadrant of the state if the training opportunities were compensated. Focus group participants explained their willingness to travel because they have spent years traveling long distances to and from work. They consistently shared that they would be more than willing to travel from home to obtain training if it meant that they could gain skills for better, more stable employment. This is an important finding, as it may be more efficient for the state to provide compensation to workers interested in attending training located in Las Cruces, Albuquerque or other urban areas than to provide those training opportunities in all areas of the state. There is also high demand for childcare among our study's participants, as 79% of the survey participants indicated that they would take advantage of childcare if it were available to them.

Willingness to Participate in Paid Training Outside of Southeastern New Mexico



The survey provides the state and other stakeholders with information on the range of support resources that may be required to see high participation in workforce training. Consistent with the other data from the study, 77% of respondents identified supplemental income as a support service required to participate in short term job training in other counties of the state. Transportation and lodging are also resources that a large segment of the workforce will need to take advantage of training away from their homes-noted by 43% of respondents in both cases. Finally, 25% of respondents identified living stipends to offset the costs of having to leave home for training as a need when traveling to other counties to receive training.

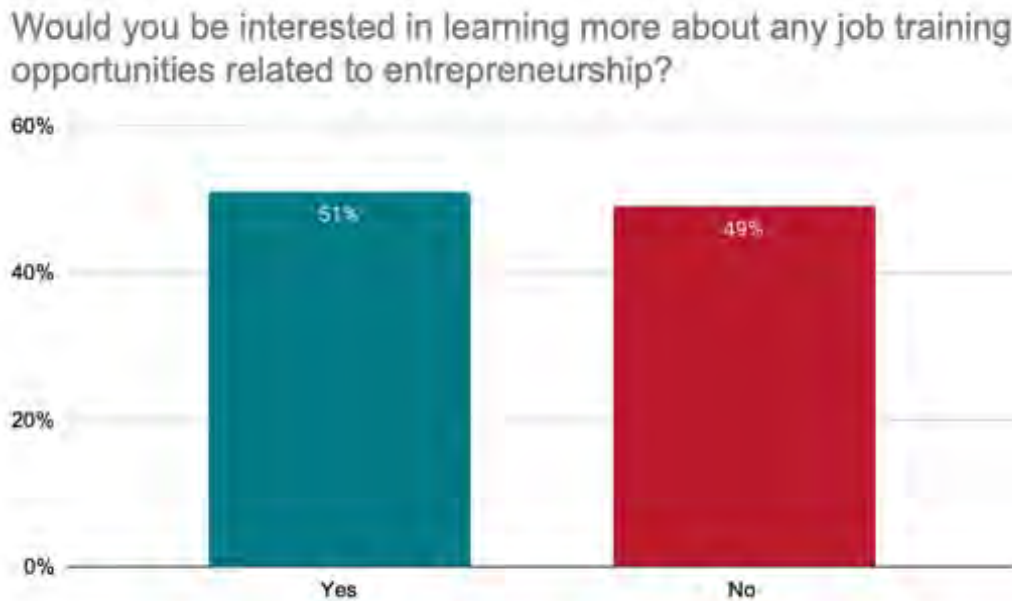
What support services would you need in order to participate in short term job training in another county? - Selected Choice



Similar to previous sections, this highlights workers willingness to undergo training but in order for this to happen, adequate accommodations are needed. Especially training that requires travel is costly for workers who may have to take unpaid time off for several days or need to hire babysitters or caregivers to watch their children while they are gone. Therefore, for training opportunities that require travel for oil and gas workers and community members living in the southeastern region of the state, paying these workers and covering their costs to attend these trainings will be crucial to ensure success.

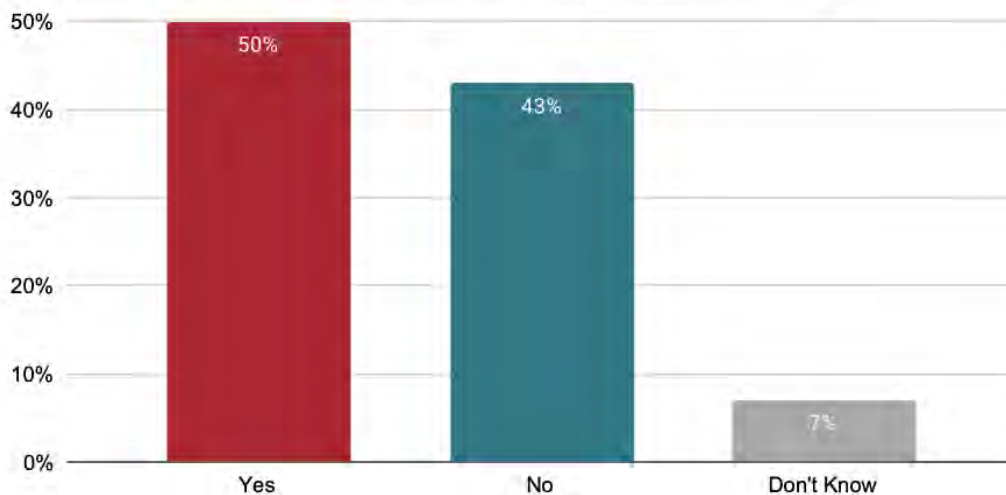
Young Adults Want Training in Growth Industries and Entrepreneurship

Young adults, who along with women make up for the majority of the underemployed population of southeastern New Mexico, share that their interests lie in learning more about business entrepreneurship and work in growth industries. We reference the UNM Anderson/BSP Research survey to look specifically at the views of the young adult population in Southeastern New Mexico. Just over half (51%) of young adult survey respondents share that they are interested in job training opportunities related to entrepreneurship. Similarly, 50% of respondents also report that they are interested in internship opportunities related to a career in a growth industry, including clean energy. These are positive trends, as there will be opportunities to generate new businesses that are connected to the transition to clean energy for entrepreneurs who are able to capitalize on them.



Source: BSP Research/UNM Anderson Young Adult New Mexico Survey (n=1,600-Feb-March, 2022)

Would you be interested in learning about internship opportunities related to a career in a growth industry?



Source: BSP Research/UNM Anderson Young Adult New Mexico Survey (n=1,600-Feb-March, 2022)

Although there is high interest among young adults to acquire training and internships that will allow them to stay in New Mexico's rural areas, there is high concern that growth industry jobs will not materialize in the region and allow them to do so. Over 60% of young adult respondents report being somewhat concerned or very concerned that:

- All of the growth industry jobs will go to people who are not from New Mexico.
- All training opportunities for growth industry jobs will only be available in urban areas of the state, making it hard for people in rural areas to get training.
- All growth industry jobs will go to people with advanced education, with only a few jobs for New Mexicans who only have a high school education.
- All growth industry jobs will go to people who live in Albuquerque and Santa Fe, giving unequal access to New Mexicans who live in rural areas.

As our team's landscape analysis in a prior report for the Department of Workforce Solutions notes, most of these concerns are unsubstantiated by hard data on the clean energy industry. For example, jobs associated with wind energy production will be located in rural areas of the state, and there will be many jobs for lower education level employees that pay much higher wages than in other industries.⁹ With the interest of youth to engage in these clean energy solutions, it is important for the state to encourage this group to stay and to provide them with opportunities to build and grow businesses. Especially given that there is much unwarranted concern about these jobs or opportunities not being available to the youth, assuring them and encouraging them will be crucial to keep them in the region.

⁹ See the following report for a more full discussion: https://www.dws.state.nm.us/Portals/0/DM/LMI/NM_Clean_Energy_Workforce_Report.pdf

Women are Interested in Child Care Certification and Training that Allows Them to Work from Home

Women are particularly interested in jobs that provide flexible working schedules to accommodate their childcare needs. Many women said that they would like to pursue careers that can be done inside of their homes including cosmetology, childcare, and catering. Lack of training and licensure currently prevents women from doing such work.

“I say be flexible with school schedules, because many times **we don't have the freedom to leave work.**” - Female, Hobbs

“**We want to work from home.** Those who do have a salon are not threatening a salon either, because they already have one...**Hair and all. That's what we're interested in.**”
- Female, Artesia.

In addition to gaining concrete vocational skills in areas such as childcare certification, women expressed a desire to improve their entrepreneurial skills to develop and expand home businesses. The majority of female focus group respondents articulated a strong desire for local towns to offer integrated training in spaces that would bring people together to strengthen both their basic educational and vocational skills.

Training and Education Barriers that Need Remedies and Solutions

The majority of residents of southeastern New Mexico possess both the digital resources and the skills to access training and further their education. However, there are barriers that pose challenges for oil and gas workers to do so. This includes the combination of language barriers and challenges in immigration status.

“It's okay that it's a course at the same time but there's many that don't know the language.”- Focus group participant when asked about Integrated Education, Hobbs, New Mexico.

“So it's federally funded so undocumented people aren't able to partake.”- Another participant in response to the same question, Hobbs, New Mexico.

The importance of providing compensation for job or basic skills training is another intervention identified in the survey and focus group data. It is important to note that most of these workers are the sole financial providers for their families, making it impossible for them to participate in lengthy training opportunities if they are not compensated. Furthermore, poor and strenuous working conditions leave workers physically and mentally exhausted making training and education impossible while working full hours. Workers share that leaving work, even for hour-long trainings, is simply impossible. Choosing to attend training instead of work often means that workers will be replaced, losing out on work entirely. This is further substantiated by the following quotes from our focus groups:

“Do you think that after working 14 hours leaving at 6:00 p.m. you're going to want to go to class when you have to wake up at four in the morning? **There is not enough time in the day if you work.**”- Male, Hobbs

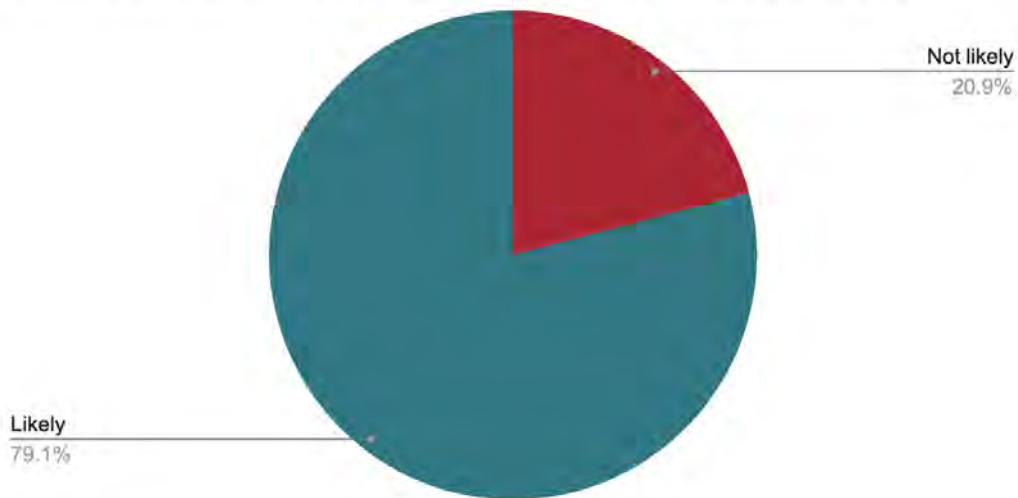
“That's what we're telling them, **that there's no time to study, but if they pay you to study, that's fine.**” - Female, Artesia

“It would be great for other companies to come here, but what about the people that have been working in oil and gas all their lives? That’s all they know. They need some sort of training, so they know how to do a new job. ***Paid trainings would be fantastic.***”- Male, Hobbs

“I mean, they have to choose, right? **In this job, if you don’t like something, there’s the door and the next day someone comes.**” - Focus group participant, Hobbs, New Mexico.

Another existing barrier, as we have mentioned throughout this report, is childcare. Most respondents in our sample have children, which means that if they want to attend training, whether in person or online, they need some form of childcare to do so. Indeed, respondents would take advantage of childcare services if they were offered. As the pie graph below shows, when we asked how likely respondents were to use childcare services to attend training if they were made available to them, nearly 80% responded that they would. This finding motivated our team to explore the availability of childcare in existing programming offered in the region in the section that follows.

How likely would you use childcare provider services to attend these training/services if they were made available to you?



Structural Barriers for Integrated Training and Education

The analysis of the workforce-training infrastructure in the Permian Basin is the final component of our analysis. Our team contacted departments and programs that provide vital resources for their communities, including courses and workshops. Our goal was to evaluate whether the current infrastructure is capable of serving the needs of oil and gas workers and their families who the survey and qualitative data suggest are interested in acquiring support. The focus of our discussions was to determine if some of the potential barriers to accessing training we heard about in focus group discussions were warranted given the state of training opportunities available in the region.

In summary, we did find evidence that there are several structural challenges facing service providers looking to provide training to residents of the region that should be remedied, including lack of:

- Child care for participants
- Adequate funding to meet the current demand for training in the region
- Access to federally funded training programs for immigrants
- Accessible transportation for community members
- Flexibility in training program schedules
- Knowledge in the community about the resources available to them
- Bilingual staffing who can serve Spanish speaking members of the community
- Renewable energy training programs

GED and ESL Courses are Currently Available, but Lack Flexibility for Residents

This aspect of our report identifies that there are some positive areas in the existing capacity in the region. For example, GED preparation is widely available for those interested in this resource in the Permian Basin based on our calls exploring availability of this specific job skills training. Current GED requirements in the state allow for courses and the exam to be completed online, making this a great option for those who have access to high-speed internet. In-person classes are free for enrolled students and cover the cost of materials and up to two attempts of the GED exam, if the GED exam is taken at a testing facility. However, if taken online, the New Mexico GED test costs \$36 per subtest and \$144 in total. Currently, students do have the option of having the cost of GED testing fully covered via the Free HSE Voucher program through the New Mexico Department of Higher Education. Eligible candidates can apply for these vouchers on the New Mexico Higher Education Department website.

The programs that we spoke with that offer Spanish language options for GED preparation also tend to offer ESL courses. Some program directors we spoke with explained that they often require ESL completion before participants interested in GED enrollment are able to do so. In summary, the current infrastructure appears to be able to meet current demand for both GED preparation and ESL training.

Access to Childcare is Limited

We included in our discussions regarding workforce-training infrastructure by asking if there was childcare available for working parents who may not be able to participate in training without bringing their children with them. A majority of program leaders reinforced the findings from our research, noting that they do receive many requests for childcare from many community members who are not able to attend the courses offered to them without it.

Unfortunately, this is not a widely available resource across the programs we spoke with as very few had childcare services on their campus or in their offices, and those that did were unable to provide those services free of cost to participants. Program leaders also said that the region lacks certified childcare providers.

Representatives from the two programs that do have childcare services available on the same campus as their GED prep courses mostly refer their students to the Early Childhood Education and Care Department to offset the costs for care. This program requires an application to cover some or all of the costs for childcare services depending on whether the parents or guardians of the child are engaging in a qualifying activity, which includes going to school. While this is a great resource, expansion is necessary to better cover the projected demand as the oil and gas industry begins to decrease in employment across the region.

Additionally, it is important that service providers learn more about this program so they can refer this service to their clients to help offset the cost of care. Most representatives from the GED programs we spoke with did not know about this program with only a small minority noting that they actively refer their students to the application process for discounted childcare. Enhanced communication to community members about childcare funding will increase demand for this resource, and consequently, increase the number of working parents looking for childcare. Our investigation of the current availability of childcare identified that the number of spaces available for children at daycares has increased as parents are moving back to in-person work situations following the pandemic and many daycare centers are short staffed. There is currently a wait list for parents looking for childcare now, so there will need to be investment in this infrastructure in the region as the demand for childcare from oil and gas workers seeking workforce development training increases.

Language, Transportation and Digital Divide are Challenges

The landscape analysis reinforces the impact of transportation, lack of access to high-speed internet, and language barriers on access to workforce training. We heard from several program directors that they lack the funding needed to help support students who do not have access to the internet, including funding to help them pay for internet subscriptions or computers for those who do not have them at home. This has been an obstacle for some members of the community who have contacted service providers for training, and there is not currently anywhere to refer these residents to for help getting the resources needed to do training virtually.

Additionally, a common barrier across the region is the transportation challenges many community members face in their attempts to obtain training that is far from their homes. Limited public transportation available for community members makes getting to the center for adult education very difficult. We heard that many members of the community have asked for transportation support, noting that they do not have regular access to a car. This is of course a greater challenge in this rural area of the state where physical distance from training centers or universities can be significant. Transportation barriers are further compounded by the fact that providers are unable to transport undocumented immigrants due to federal funding restrictions that restrict who Workforce Innovation and Opportunity Act (WIOA) funds can reach.

More Outreach Needed to Increase Awareness of Existing Resources & More Resources are Needed

Another barrier that these programs faced was the lack of community awareness about their program(s). As noted, most representatives from the GED programs that we spoke with were unaware of any programs that exist to help offset childcare costs, suggesting doing some

outreach to service providers about the resources available for potential participants of workforce training in need of childcare would be valuable. As we speak to in more detail in the recommendations section that follows, enhanced collaboration and communication across service providers will help address this issue and improve efficiency.

A consistent theme across the departments we spoke with is the need for additional funding. Many program leaders and departments expressed concern that they will not be able to meet the increased demand for workforce training on the horizon. Their concern lies in that they do not have the resources needed to address the current needs of their communities let alone an expanding population in need of training. We also heard that limited funding affected the ability for adult education providers to hire more teachers, instructors, tutors, and translators for these programs. Additional funding is also needed to purchase materials for those working in adult education such as computers and technology needed by educators.

Title I and Title II WIOA Dollars Prohibit Undocumented Workers from Accessing Training and Other Support Services

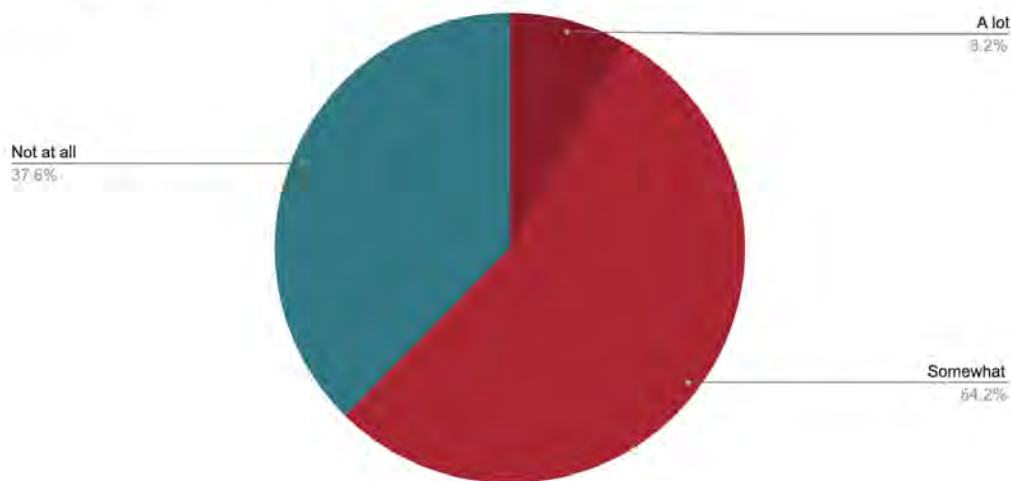
Finally, the single, largest structural barrier to training access among the immigrant workforce is that Federal WIOA dollars restrict undocumented immigrants from accessing valuable, federally funded training resources. As the results suggest, immigrant oil workers and their families are ready and willing to learn English, increase their vocational and adult education skills, and contribute to the long-term viability of their communities. For these reasons, augmenting federal dollars with state funding to support training for immigrant workers is an essential strategy to ensure the long-term viability and economic well-being of residents living in this rural region.

Policy Recommendations

The primary goal of this research is to help inform the just transition to clean energy in New Mexico by providing voice to the oil and gas workforce, the community to be most directly impacted. We had a specific focus within the Permian Basin, the driver of oil and gas production in New Mexico and home to a large concentration of the oil and gas workforce in the state. Our recruitment strategy focused on ensuring we had input from some of the most overlooked members of this community, including women, immigrants, and Spanish dominant workers.

The research helps address the perception among this community that they do not have much influence over the decision-making that will affect their futures. As reflected below, over a third (38%) of survey respondents reported that elected officials and local leaders do not include the opinions of oil and gas workers and their families at all in decisions about policy in Southeastern New Mexico. The following recommendations are based on the main findings from the study and will hopefully provide stakeholders with useful information as they begin to build the foundation for the clean energy workforce.

How much do you think elected officials and local leaders include the opinions of oil and gas workers and their families in decisions about policy in southeastern New Mexico?



Fortunately, many of our recommendations have already been built into the existing plans developed by the state’s Department of Workforce solutions who have been valuable partners in this research and who are looking for data to inform their decisions. For example, the Economic Development Department’s 2021 multi-year strategic plan and DWS’s updated Workforce Innovation and Opportunity Act (WIOA) State Plan have great innovative skills training programs in green energy, infrastructure, and other growth sectors identified in their goals and objectives.

Our focus on sub-groups of the larger workforce often defined as being “difficult-to-reach” provided valuable insights into the nuances of what this community will need to make a successful transition. This included learning that although many of the workers we spoke with do make high wages, a sizable segment earn \$25,000 or less each year and with very limited benefits. Furthermore, those that do well financially pay a high cost—often working 12 hour work days with dangerous working conditions. Ensuring that jobs in emerging industries improve in these areas will improve the economic well-being of the region.

We also learned that workforce re-training for these workers will need to include English language training and basic computer skills. These are skills that are necessary to take more focused workforce training. The workforce training available now in the region has many strengths, including access to GED and ESL classes. However, stronger coordination across this network of service providers and increased investment in the infrastructure can ensure that there will be capacity to meet the increased demand for services that will come with the movement away from fossil fuels.

Coordination and collaboration is also needed across the full economic development ecosystem in the region. We suggest creating working partnerships with community colleges, labor unions, industry representatives, training or service providers, and community-based and worker organizations to offer support for the transition away from fossil fuel extraction. Since oil and gas has been the dominant economic base for the Permian Basin, moving away from that foundation will require many stakeholders to work together.

Local boards currently lack sufficient funding to develop these meaningful sectoral partnerships with community-based organizations that support disadvantaged workers. When federal funding is available, these boards lack the necessary capacity to apply and administer the funds. A specific example lies in funds from New Mexico's Division of Higher Education (NMHED). Currently, NMHED funds are distributed based on a strict funding formula that does not allow for creative regional and/or sectoral approaches. This is particularly detrimental in the southeastern region of New Mexico as data shows that workers need and want integrated training models that provide support services to ensure their ability to find work in the region, especially as clean energy industries begin to replace their oil and gas counterparts.

The updated WIOA state plan outlined a four-year strategy that included a goal to increase collaboration with employers, state agencies, education institutions, and community organizations to expand the workforce that supports the safety, health and wellbeing of New Mexican families. Our research identified that the oil and gas workers face challenging work environments where accidents are far too common and many workers lack benefits. Through positive collaboration across these sectors, the emerging clean energy system can ensure that future workers have improved conditions and stronger supports.

We recognize that these suggestions will require significant investment. Fortunately, there are large pools of federal resources available for infrastructure. We suggest that the state build capacity in the regional boards and provide them with support needed to apply for workforce development grants from the federal Inflation Reduction Act (IRA), the Bipartisan Infrastructure Law (BIL) and the CHIPS & Science Act (CHIPS). Finally, the search for infrastructure funding must include resources to be directed at making the major roads in the region safer. The dangerous driving conditions are well known and with the combination of resources in the region and federal funding this should be a high priority moving forward.

There will need to be braided funding to supplement the gaps in federal funds with state resources. For example, the federal Workforce Innovation and Opportunity Act (WIOA) that funds many of these programs is highly restrictive, effectively excluding many New Mexicans from these opportunities. A particular hindrance caused by WIOA regulations is that undocumented immigrants are barred from accessing them. Consequently, they are unable to access support services including childcare, transportation, and stipends to support living expenses for members of the workforce who need to travel to acquire training. Beyond its exclusivity and limitations, this funding fluctuates based on congressional appropriation making funding unreliable and variable.

Utilizing a combination of state and federal funds that are more flexible could provide funding to regional boards to engage community-based and worker-based organizations for a targeted outreach campaign to inform members of the workforce of available programs and forthcoming workforce development opportunities. Funds could also be used to hire and train grant writers to pursue external funding to support workforce development.

Given the projected peak of the oil and gas industry over the next 15-20 years, it is of utmost importance that policy makers prioritize investing in training for workers to equip them with necessary skills and resources in the face of a transition away from the state's reliance on oil and gas. Policy solutions must not leave behind undocumented workers, women, and adjacent industry workers. These solutions must also aim to improve the working conditions and safety nets of these vital workers that New Mexico's economy relies upon. This will require creative and careful execution to ensure that state resources are strategically leveraged to offset deficiencies in federal funding.

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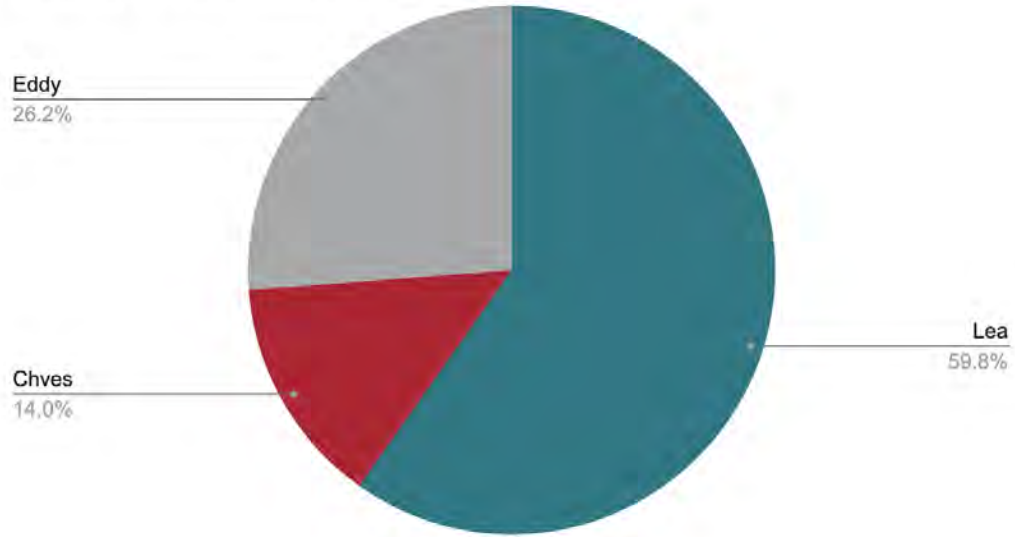
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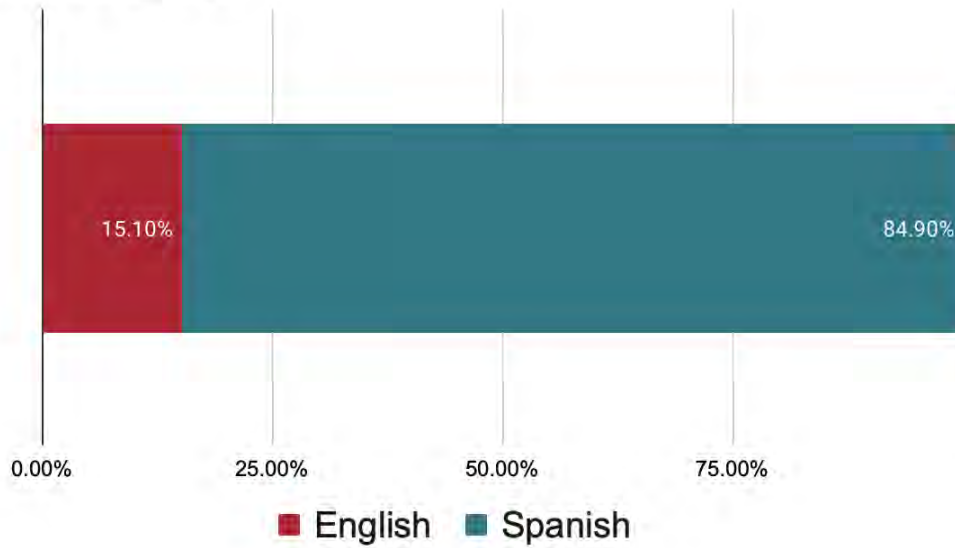
The authors also thank **Jordin Tafoya** and **Constance Stella Youngman** for their technical assistance.

Appendices

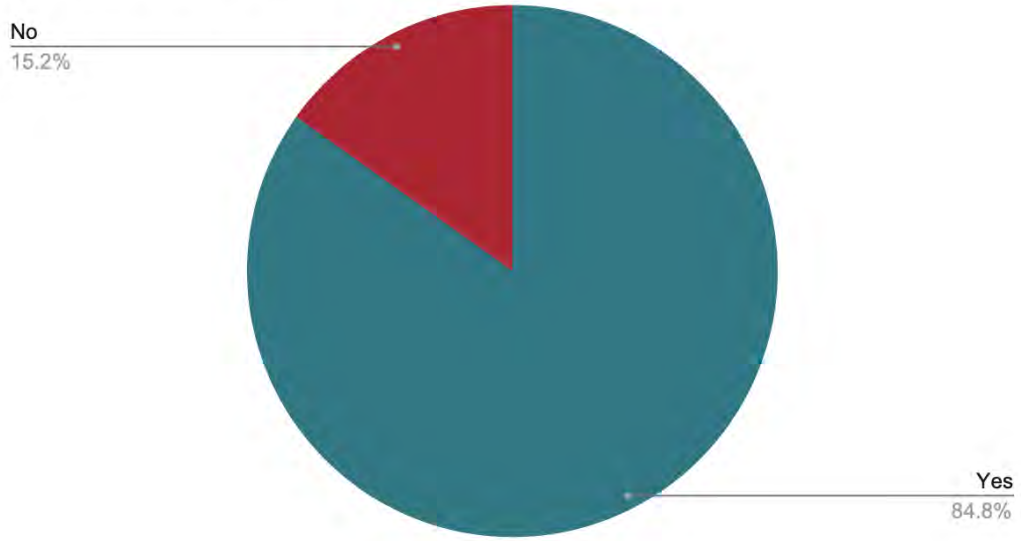
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Survey Language



Respondents with Children



Languages Spoken at Home

