Science and Technology Workforce Strategy

- Analysis of high-demand occupations and opportunities for the skilled technical workforce
- Identification of career pathways and skills with the greatest transferability to new occupations
- Assessment of strengths and gaps in educational and training programs

SRI designs workforce development strategies that provide regions and states a blueprint for a strong, industry-aligned workforce. SRI uses a mixed-methods approach to recommend specific and measurable initiatives, often with a focus on the skilled technical workforce, or those with less than a bachelor’s degree and with technical skills in science, technology, engineering, and mathematics (STEM) fields. This subset of the STEM workforce is increasingly vital for the success and growth of innovation fueled economies and presents lower barriers to entry for a diverse workforce.

SRI uses novel machine learning approaches to define and understand occupations in critical industries, especially in emerging technical fields that are poorly defined, and to identify the most common workforce skills required for these occupations. SRI maps these skills onto the curriculum of regional education and workforce training programs to assess the capacity of relevant workforce institutions and to flag the gaps in that capacity where they exist. These insights ultimately inform a roadmap for workforce and ecosystem investments to bolster the talent pipeline.

SRI’s services in this practice area include:

- Identification of skills in demand by regional employers
- Career and opportunity pathway identification for upward mobility
- Curriculum mapping and gap analysis for educational institutions and training programs
- Identification of chronic worker shortages
- Impact assessment of existing workforce programs and initiatives on labor and wage growth
- Recommendation and evaluation framework development