STEM and the Future of the Workforce

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Executive Director
Science is US is a foundation-supported effort that brings together a diverse group of science, engineering, industry, higher education and labor organizations to galvanize a broad, bipartisan political base of support for science and technology.
We wanted to get a better sense of how STEM contributes to the U.S. economy. And we wanted to understand who STEM professionals were.
STEM Employment in the U.S. Workforce

Direct STEM employment accounts for 33% of U.S. jobs

- STEM Jobs
- Non-STEM Jobs

33%
67%
Impact of STEM on U.S. GDP

39% of GDP is directly attributable to STEM

Direct STEM Impact on U.S. GDP
Total STEM Contributions

When considering the full impact of STEM on the U.S. economy—direct, indirect and induced contributions—we found an outsized impact with STEM supporting:

2/3 of U.S. jobs

69% of state tax revenue

69% of GDP
Six in ten U.S. STEM jobs are held by individuals with less than a bachelor’s degree.

- Bachelor’s Degree or Higher: 41%
- Less Than a Bachelor’s Degree: 59%
<table>
<thead>
<tr>
<th>Biochemists</th>
<th>Architects</th>
<th>Logisticians</th>
</tr>
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<tbody>
<tr>
<td>Mechanics</td>
<td>Nurses</td>
<td>Math teachers</td>
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<tr>
<td>Pharmacists</td>
<td>Electricians</td>
<td>Policy analysts</td>
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<td>Anthropologists</td>
<td>Coders</td>
<td>Bookkeepers</td>
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<tr>
<td>Mental health counselors</td>
<td>Museum technicians</td>
<td>Radio operators</td>
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How can STEM lead us forward?

Mitigating the pandemic

• Discovering a vaccine and therapeutics
• Contact tracing and epidemiology
• IT systems, logistics

Building the future

• Opportunity regardless of educational attainment
• Higher salaries
• Innovation – opportunity feedback loop
How can we ensure that science can thrive?

We believe policy has a role to play in advancing science and technology.

Sound government policy—at all levels—that supports and nurtures science and engineering provides an environment that allows science and engineering to thrive.

And when STEM fields thrive, the country thrives.
What can policymakers do?

- Increase support for career and technical education
- Facilitate closer industry/academic partnerships
- Streamline apprenticeships and workforce development programs
- Increase data collection and reporting
- Increase outreach and communication on possibilities
Thank you