

# What Policies Promote Abundance?

Taylor Barkley  
Jennifer Morales  
Josh T. Smith

**October 2022**  
**Research in Focus**

## What Is Abundance?

There is reason to be deeply optimistic about the future of the US economy. At the moment, Americans face many headwinds—shortages in labor,<sup>1</sup> housing,<sup>2</sup> medicine, gasoline, fertilizer,<sup>3</sup> baby formula, and microprocessors continue to linger; yet at the same time, the rapid development of vaccines, the resiliency of digital technology and communications, and a history of innovation all point to a bright future.

The lesson of these shortages in post-COVID world is simple: Americans need to build and to create abundance. Abundance means greater economic growth, higher quality of life, and greater environmental sustainability—all at cheaper prices. A future of abundance is not guaranteed, but there is cause for conditional optimism. Meaning that if Congress takes the right steps in important areas, then abundance is within reach.<sup>4</sup> With the right policies in place, America can, and will, succeed.

Americans believe in their ability to achieve abundance. According to the CGO Abundance Poll, Americans generally believe in the power of innovation to achieve big goals.<sup>5</sup> They also believe that governments both facilitate and impede helpful technologies. Three-quarters of Americans believe technology and innovation are good for society, and 39 percent believe technology and innovation will be the primary means through which America will solve the problems of the next 100 years.

However, Americans are also unsure whether the future will be better than the present. A quarter of the American public believes right now is the best time to be alive. Only 16 percent believe it will be better 200 years in the future, and 42 percent are not sure. This means there is an opportunity to cast a better vision for the future.

According to the Abundance Poll, Americans say that Congress (59 percent) and the president (47 percent) are hurting our opportunities for a prosperous future. The most helpful institutions are businesses (38 percent) and colleges and universities (37 percent).

This paper outlines steps that Congress could take in technology, environmental, and immigration policies to promote abundance. Each section provides concrete recommendations Congress could enact today. These areas warrant specific attention because they undergird most economic activity and because the relevant reforms would improve the quality of life for all Americans.

## Technology and Abundance

### Encourage Competitive Tech Markets

Software companies, including Big Tech, remain key economic drivers, sources for private research and development, and platforms that benefit consumers. They should remain empowered to drive economic growth and provide value to consumers. The economy needs a competitive environment to prevent incumbent organizations from regulating away startups, but Americans are skeptical that a bureaucratic agency can do a better job of regulating online content than platforms themselves. Over half believe social media companies are justified in their content moderation decisions of all kinds, and less than half want the government involved in regulating them.

### Improve FDA Approval Processes

Cheap, accessible, effective, and safe medical technologies and services are key markers of abundance anywhere. The Food and Drug Administration (FDA) controls access to vibrant sectors of the US economy while keeping consumers safe. According to the Abundance Poll, more than half of Americans want safety to be a focus for the government. They also believe the FDA should conduct safety reviews independently and not accept safety reviews from other countries. This indicates confidence in the FDA when compared with international equivalents.

The FDA has also been slow to act. It is receiving more drug approval submissions than ever, and approval times are taking longer and longer. Shortening approval times while maintaining safety standards would save lives and boost economic productivity. To achieve these goals, CGO researchers recommend the following policy changes for the FDA:

- The FDA can shorten review times by allowing post-launch monitoring of drugs. This would permit the FDA to continue to monitor safety after approving new drugs.
- Instead of releasing information only on approved drugs, the FDA should also provide information on drugs that were not approved.<sup>6</sup>
- The FDA should be required to estimate costs of time delays in approval processes. For example, the FDA was slower than other countries in approving rapid COVID tests. This policy recommendation would likely alleviate that problem as well as other delays.
- To improve approval speeds, the FDA should prioritize safety and reconsider its role in efficacy testing given safe off-label use of many approved drugs.<sup>7</sup>
- Congress should consider amending the Emergency Use Authorization (EUA) process. Section 4 of Public Law 108–276, where the EUA legislation resides, should include directives on how decisions should be made at the FDA to grant an EUA. Increased clarity on the process would eliminate delays when quick, safe deployment of medical technology is necessary.

### Make Broadband a Reality for All Americans

Broadband, both wired and wireless, will continue to serve an outsized role in economic growth. It could be both cheaper and ubiquitous without additional government investment. Therefore, affordable and accessible high-speed internet connections should be available for all who want them. To this end, CGO researchers recommend the following:

- The National Telecommunications and Information Administration (NTIA) should create a formal process for the government to engage in commercial spectrum transfers. At present no such process exists.<sup>8</sup>
- Congress should structure a series of hearings to understand how permitting has been expedited in broadband, the gaps that still remain, and the lessons that can be applied to other industries.<sup>9</sup>
- The FCC should study what would be needed to make the transition toward a voucher system for low-income households.<sup>10</sup>

### Remove Barriers to Transportation Innovation

Transportation speeds have been stagnant since 1958 for both passenger and cargo. Rapid, affordable transportation of people and cargo are core to achieving an abundant economy. The following are ways Congress can spur increased cargo efficiencies and remove barriers to faster passenger travel:

- Create deadlines for the FAA to integrate drones into the airspace.
- To allow supersonic travel once again, Congress could tell the FAA that until it develops a categorical exclusion

from NEPA for supersonic flight, it cannot require special authorization for flights exceeding Mach 1 if the aircraft is being operated by its developer and flown between 7 a.m. and 7 p.m.

- Moreover, Congress could require the FAA to allow civil supersonic flights over the United States if their cruise sonic boom is shown to be less than 90 PLdB.

### Expand Employment Flexibility

Gig work provides flexibility during uncertain times in the economy. Historical tax data show a trend toward more work in the gig economy between 2010 and 2020, but this has contracted. Congress should ensure that policies are agnostic and do not favor particular industries. The following policies would allow greater expansion in the gig economy:

- Maintain the incentive for traditional employers to offer health insurance plans to their workers and create that same incentive for employers working with independent contractors in the gig economy.<sup>11</sup>
- Remove the provision of benefits as criteria for classifying workers as employees or independent contractors.
- Reduce or cap the subsidies to employer-sponsored insurance.<sup>12</sup>

### Environmental Stewardship and Abundance

Environmental debates often pit economic growth against environmental health. However, both are essential to provide the quality of life Americans desire. Economic growth can promote environmental health when policies are enacted that encourage innovation and prioritize cooperation over conflict.

The policies outlined below aim to move the United States toward a future of abundant, clean energy and flourishing natural resources. Americans' confidence in that future is uncertain. According to CGO polling, 54 percent of Americans do not think affordable energy production is likely in the next 50 years. Permitting reforms and electrical grid updates will help enable that future, as will better management of natural resources through proactive wildfire management and collaboration with private conservation actors.

### Faster Clean Energy Development Is Possible with Procedural Tweaks

One of the biggest impediments to the clean energy transition is the presence of unnecessary delays due to the National Environmental Policy Act (NEPA). The act was intended to ensure that the government considers environmental consequences before undertaking a project.<sup>13</sup> It applies to all major federal actions, including permits, policies, regulations, licensing, and grants.

However, a law intended to ensure government projects promote environmental health has become a critical bottleneck in developing clean energy projects. Most of the delays from NEPA are caused by Environmental Assessments (EA) rather than Environmental Impact Statements (EIS), but both are intended to determine the environmental impact of a proposed project. EISs

take longer to complete, but there are many fewer of them. On average, about 200 EISs are done each year, while there are nearly 12,000 EAs per year.<sup>14</sup> Most regulatory delays can then be dealt with by limiting the need for EAs, which are a regulatory invention and were not included in NEPA's statutory language.<sup>15</sup>

An EA is a concise public document prepared by a federal agency with the purpose of aiding the agency's compliance with NEPA. It is used to support the agency in determining between two outcomes, an EIS or a Finding of No Significant Impact (FONSI). If the following rules were changed, the agency could determine whether an EA was necessary to make a FONSI, meaning many delays could be prevented before they emerge. The following two changes would allow an agency to issue a FONSI without going through an EA if it believes there is truly no significant environmental impact:

- "40 CFR 1501.5(a) shall have no force or effect." This section of NEPA requires agencies to prepare an EA even for "a proposed action that is not likely to have significant effects."<sup>16</sup> Removing that requirement would still leave in place 1501.5(b), which says that an agency may prepare an EA any time it feels it would be helpful.
- Striking the words "based on the environmental assessment" in 40 CFR 1501.6(a). This allows the agency to prepare a FONSI without first conducting an EA.<sup>17</sup>

These changes would leave NEPA intact, ensuring the government considers environmental impacts in its planning while making it easier for projects to be completed without unnecessary delays and uncertainty.

An even simpler procedural shift could catalyze the development of clean energy on federal land. Categorical exclusions under the Energy Policy Act enable certain oil and gas projects to bypass the NEPA permitting process. This lowers the cost of exploration and development, enabling faster permitting and exploration. If we want to transition to energy from cleaner sources, we should expand these categorical exclusions to give cleaner technologies, like geothermal, the same advantages. Geothermal is a cleaner alternative to oil and gas that in some cases can use the very same wells and has significant skill overlap, providing clean energy jobs for oil and gas workers needing to transition.<sup>18</sup>

### Resilient Grids Enable Secure and Affordable Access to Electricity

Investing in the electrical grid is essential to provide Americans with abundant, affordable energy, and to be prepared for the increased electrical demand as more things become electrified.

Much of the existing electrical infrastructure is like having dial-up in an age of broadband. The way we price electricity and monitor energy use has not changed significantly in the last century.

A system built to move electricity in one direction must become multidirectional,<sup>19</sup> in part because rooftop solar turns consumers into producers who can sell power to the electrical grid.<sup>20</sup>

Alongside changes in supply, electricity demand has also changed. Smart thermostats make coordination between electricity users automatic and simple. Today, consumers can be called upon to consume less through demand-side programs that adjust a home's electricity consumption during moments of stress on the electrical grid.<sup>21</sup>

Two changes would bring the electrical grid closer to a modern system reflecting today's energy generation and consumption capabilities:

- Legislators and utility regulators should work to expand alternatives to state-granted monopolies on electricity provision. As a guide for first steps, regulators can first quarantine the monopoly to the platform on which electricity providers compete.<sup>22</sup>
- Second, the wholesale and retail markets for electricity should be brought together.

Together, these steps will move more of the country toward retail choice. Choice offers more options for consumers and better reflects the realities of electricity provision.<sup>23</sup>

### Proactive Wildfire Management Can Improve Human and Environmental Health

Effective management of wildfires will be crucial to maintaining both economic prosperity and ecological resilience in the coming decades as more people move into areas at risk of wildfire damage.<sup>24</sup>

Preventative measures such as prescribed burns and mechanical thinning are essential forest management tools that can help reduce the intensity of and damage from wildfires. Quicker and more effective fire management can be achieved by shortening the environmental review process and partnering effectively with non-federal stakeholders including tribes and private groups. The following are specific suggestions:

- Add preventative fire projects to the list of actions categorically excluded from NEPA. Fire prevention projects are subject to NEPA and the review process generally takes between three and a half to seven-plus years to complete.<sup>25</sup>

Such lengthy procedural requirements often mean that destructive wildfires occur in the areas considered while federal agents wait for an analysis of the environmental impacts of a much smaller, controlled burn.

- Allow Native American tribes to use funds from the Reforming the Reserved Treaty Rights Land (RTRL) program—which currently provides funds to conduct preventative measures on lands adjacent to tribal lands—to also address prevention needs on tribal lands.
- Increase the value of working as a prescribed firefighter by improving job quality for fire crews and reducing unnecessary regulatory barriers that put would-be firefighters out of jobs.

- Provide increased job security to seasonal wildland firefighters by assigning them to established prescribed burn crews in the off-season.
- Work with states that have inmate-supported fire crews to remove licensing or other barriers that may prevent them from continuing to work as wildland firefighters after they have served their sentence.

### Partner with Private Actors to Promote Conservation across All Land Types

The federal government owns less than one third of land in the United States. In order to protect endangered species, promote healthy ecosystems, and maintain migratory corridors, the government needs to work alongside private landowners.

The myriad conservation responsibilities of the federal government must be enacted across a vast geographic range on both public and private land. To avoid patchwork conservation and unnecessary litigation, policymakers should take advantage of private conservation by establishing common standards and expanding cooperative programs that engage private landowners.

- Allow private land that meets qualifications to be counted toward the 30x30 initiative.<sup>26</sup> Conservation easements are a common private conservation method that can help achieve federal conservation goals if properly managed.
  - Eliminate syndicated conservation easements or provide clear and sufficiently strict conservation criteria that easements must meet in order to get a tax deduction.
  - Establish a federal database to share information about the conservation easement market and metrics on whether easements are meeting their conservation goals.
- Expand partnerships with non-federal partners through the Conservation Reserve Enhancement Program and Working Lands for Wildlife, which rely on state and local governments and private conservation groups to engage landowners in positive conservation.<sup>27</sup>
- Limit liability under the Clean Water Act for private groups who want to help clean up abandoned mines. Congress could authorize “Good Samaritan permits” that would limit liability to violating the permit terms or making the cleanup site worse.<sup>28</sup>

### Immigration and Abundance

US immigration policy is often controversial, but immigration research consistently shows wide benefits from even small increases in immigration.<sup>29</sup> Federal policymakers interested in raising incomes and ensuring the future prosperity of America should see immigration policy as a powerful tool.

Immigration promotes abundance by expanding entrepreneurship and innovation that provide new jobs for natives as well as new experiences, goods, and services for the world. This culmi-

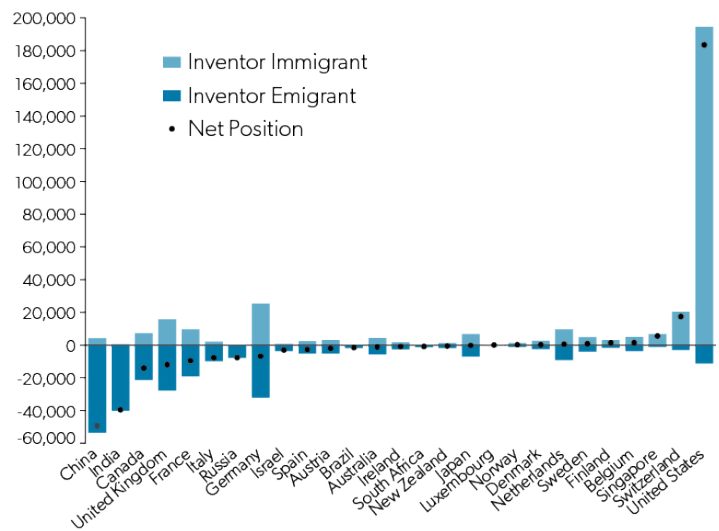
nates in higher per capita income for Americans. Three promising immigration tools to promote abundance are:

- Treating US degrees as work visas for foreign students,
- Expanding the H-1B visa program, and
- Using immigration-generated fees to promote STEM education and retraining for US natives.

### Expand Immigration to Boost Entrepreneurship and Innovation

The United States has been a major beneficiary of the talents of people from across the globe. William Kerr’s research shows that from 2000 to 2010, the United States took in many more inventors than the rest of the world. Kerr’s findings are illustrated in figure 1.<sup>30</sup>

Figure 1. Global Inventor Migration from 2000 to 2010<sup>31</sup>



The data show that the United States has long been a place that many want to come to in order to grow their ideas into businesses or as basic research. For example, a team of four economists showed that from 1976 to 2012, immigrant inventors produced 23 percent of all patents in the United States. This is an outsized proportion as immigrant inventors are just 16 percent of all US inventors.<sup>32</sup>

Part of this effect is because of immigrant students. Economists studying the connections between immigration and innovation show that a one percentage point increase in the population of immigrant college graduates increases patents per capita by between 9 and 18 percent.<sup>33</sup> The researchers conclude that a college graduate immigrant will patent twice as much as their native counterpart.

Immigrants are also more likely to start businesses than US natives. In fact, they start more small, medium, and large businesses than natives. This extends all the way to the largest companies in the country, the Fortune 500. About half of America’s startups valued at over \$1 billion were founded by immigrants.<sup>34</sup> The jobs created also pay slightly more than jobs at native-founded firms.<sup>35</sup>

Because immigration increases innovation, it improves the living standard of all Americans. Immigration economists estimate that because immigrants increased the number of people working in science, technology, engineering, and math (STEM) fields, immigration is responsible for about one-third of America's economic growth between 1990 and 2010.<sup>36</sup>

To put immigration's effect on economic growth into concrete terms, without these immigrants, the native per capita income would have been around 10 percent less in 2010.<sup>37</sup> Immigrants enrich the lives of natives. This 10 percent estimate is larger than other estimates, but the assertion that immigration boosts per capita GDP is a common finding.<sup>38</sup> Another study shows that a one percentage point increase in the immigrant population share raises income per person by about 6 percent.<sup>39</sup>

### Build a Better Pathway for Skilled Immigration to the United States

Members of Congress interested in using immigration policy to promote abundance have a variety of options. These include:

- Treating US degrees as work visas for foreign students,
- Expanding the H-1B visa program, and
- Using immigration-generated fees to promote STEM education and retraining for US natives.

On the first, the United States makes it difficult for immigrant students to transition to work.<sup>40</sup> Two primary skilled immigrant programs, Optional Practical Training (OPT) and the H-1B visa are too limited. Foreign students wanting to start a company face either a lottery in the case of the H-1B system or a short timeline of just a few years with OPT. An easy solution to this is to change student visas so that they provide work authorization once a student successfully graduates from a US-based university.

Expanding the H-1B program can also promote prosperity in the United States. The number of annual H-1B visas (85,000) has not kept pace with the US economy. In 2004, the last year the program was adjusted, the US economy was a little more than \$12 trillion. In 2021, the US economy was almost twice that size, at \$22 trillion.<sup>41</sup> The United States has effectively cut H-1B visas by almost half, relative to the size of the economy.<sup>42</sup>

Expanding the H-1B program can be done by simply raising the current cap of 85,000, perhaps doubling or tripling it as members of Congress have already proposed. Or it could be indexed so that it grows as the economy does. An analysis of expanding the H-1B program found that, in particular, low-wage workers benefited because the additional immigration spurred additional job creation. That represented more opportunities for these workers.<sup>43</sup>

Another option is to remove the cap entirely and apply a labor market test instead. This would replace the cap by emphasizing two existing requirements of the H-1B program: first, that employers look for natives before hiring immigrant workers, and second, that employers continue paying higher wages to immigrant workers.<sup>44</sup> This would set a merit-based standard rather than a regula-

tory ceiling that limits US companies' growth. Research already shows that employers turn to H-1B visas when they are unable to find Americans to fill open positions<sup>45</sup> and that immigrants are more expensive than natives to hire.<sup>46</sup>

Expanding the H-1B system also directly supports US natives pursuing STEM. The United States already uses fees related to H-1B visa processing to promote STEM education. From fiscal years 1999 to 2018, H-1B fees were almost \$5 billion.<sup>47</sup> That is about \$250,000,000 each year. In February of 2020, the Department of Labor gave \$100 million in grants to retrain natives.<sup>48</sup> American can continue to do this and do more of it by expanding immigration.

A promising option was proposed by Lindsay Milliken and Doug Rand. They propose raising H-1B application fees to account for inflation and using the funds to expand the American Competitiveness and Workforce Improvement fund that promotes research fellowships and training for US workers.<sup>49</sup> The Department of Labor and the National Science Foundation receive these funds to support STEM education and research by US natives.

Any of these three policies will promote the economic success of the United States. Expanded skilled immigration will promote America's place as the global leader in technological advancements. It will promote higher per capita incomes and expand job opportunities for the entire country.

### Conclusion

The goal of reforming environmental, immigration, and technology policies is to ensure that the future is brighter than today. In a world of abundance, Americans have access to the resources and technology they need to live thriving economic lives. The right reforms move the country toward a future in which clean energy is abundant and affordable, all Americans have reliable access to the internet and life-saving drugs, and economic growth promotes flourishing communities and ecosystems.

A majority of Americans are not convinced that someone born in the future will have a better life than US citizens do right now. But no country in the world is better poised than the United States to push forward innovations that will improve life for future generations. The policies listed above will help create an abundant society, one in which Americans can trust that their grandchildren will live a better life.

*Taylor Barkley is the Tech and Innovation Director at The Center for Growth and Opportunity at Utah State University.*

*Jennifer Morales is a research manager at The Center for Growth and Opportunity at Utah State University. She focuses on environmental stewardship research.*

*Josh T. Smith is a research manager at The Center for Growth and Opportunity at Utah State University. He focuses on immigration research.*

---

The Center for Growth and Opportunity at Utah State University is a university-based academic research center that explores the scientific foundations of the interaction between individuals, business, and government.

We support research that explores a variety of topics from diverse perspectives. Research In Focus pieces are published to stimulate timely discussion on topics of central importance in economic policy and provide more accessible analysis of public policy issues.

The views expressed in this paper are those of the authors and do not necessarily reflect the views of The Center for Growth and Opportunity at Utah State University or the views of Utah State University.

## Endnotes

- 1 Josh T. Smith, "Immigration as One Tool to Fight Inflation," *The Benchmark*, The Center for Growth and Opportunity, June 14, 2022, <https://www.thecgo.org/benchmark/immigration-as-one-tool-to-fight-inflation/>.
- 2 Salim Furth and Emily Hamilton, "Housing Reform in the States: A Menu of Options for 2023," Mercatus Center at George Mason University, July 2022, <https://www.mercatus.org/publications/urban-economics/housing-reform-states-menu-options-2023>.
- 3 Frank K. Nti, "Impacts and Repercussions of Price Increases on the Global Fertilizer Market," USDA Foreign Agricultural Service, June 2, 2022, <https://www.fas.usda.gov/data/impacts-and-repercussions-price-increases-global-fertilizer-market>.
- 4 We take the term from Paul Romer. Paul Romer, "Conditional Optimism," October 8, 2018, <https://paulromer.net/conditional-optimism-technology-and-climate/>.
- 5 Taylor Barkley and Jennifer Morales, "Abundance Poll," The Center for Growth and Opportunity at Utah State University, <https://www.thecgo.org/research/abundance-poll/>.
- 6 Anna Chorniy, James Bailey, and Emma Blair, "FDA Drug Review Reforms," Mercatus Center at George Mason University, January 9, 2020, <https://www.mercatus.org/publications/healthcare/fda-drug-review-reforms>.
- 7 Daniel B. Klein and Alexander Tabarrok, "Do Off-Label Drug Practices Argue against FDA Efficacy Requirements? A Critical Analysis of Physicians' Argumentation for Initial Efficacy Requirements," *American Journal of Economics and Sociology* 67, no. 5 (November 2008): 743F775, <https://doi.org/10.1111/j.1536-7150.2008.00597.x>.
- 8 US Government Accountability Office, "Spectrum Management: NTIA Should Improve Spectrum Reallocation Planning and Assess Its Workforce," January 27, 2022, <https://www.gao.gov/products/gao-22-104537>.
- 9 William Rinehart, "Vetocracy, the Costs of Vetoes and Inaction," *The Benchmark*, The Center for Growth and Opportunity, March 24, 2022, <https://www.thecgo.org/benchmark/vetocracy-the-costs-of-vetoes-and-inaction/#telecom-broadband>.
- 10 Brent Skorup and Michael Kotrous, "Narrowing the Rural Digital Divide with Consumer Vouchers," Mercatus Center at George Mason University, October 13, 2020, <https://www.mercatus.org/publications/technology-and-innovation/narrowing-rural-digital-divide-consumer-vouchers>.
- 11 Megan E. Jenkins, Brain Isom, and Chris Koopman, "Tech-Enabled Gig Jobs: Policy Solutions for the Future of Work," The Center for Growth and Opportunity at Utah State University, April 23, 2021, <https://www.thecgo.org/research/tech-enabled-gig-jobs-policy-solutions-for-the-future-of-work/>.
- 12 Liya Palagashvili, "Barriers to Portable Benefits Solutions for Gig Workers," The Center for Growth and Opportunity at Utah State University, October 21, 2020, <https://www.thecgo.org/research/barriers-to-portable-benefits-solutions-for-gig-economy-workers/>.
- 13 US Environmental Protection Agency, "Summary of the National Environmental Policy Act," February 22, 2013, <https://www.epa.gov/laws-regulations/summary-national-environmental-policy-act#:~:text=NEPA>.
- 14 Eli Dourado, "Why Are We So Slow Today?" *The Benchmark*, The Center for Growth and Opportunity, March 12, 2020, <https://www.thecgo.org/benchmark/why-are-we-so-slow-today/>.
- 15 National Environmental Policy Act, 42 U.S.C. (1970), § 4321 et seq. [https://www.energy.gov/sites/default/files/nepapub/nepa\\_documents/RedDont/Req-NEPA.pdf](https://www.energy.gov/sites/default/files/nepapub/nepa_documents/RedDont/Req-NEPA.pdf).
- 16 Findings of No Significant Impact, 40 C.F.R. § 1501.6. <https://www.law.cornell.edu/cfr/text/40/1501.6>.
- 17 Environmental Assessments, 40 C.F.R. § 1501.5. <https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A/part-1501/section-1501.5>.
- 18 Aletta Leitch, Brendan Haley, and Sara Hastings-Simon, "Can the Oil and Gas Sector Enable Geothermal Technologies? Socio-Technical Opportunities and Complementarity Failures in Alberta, Canada," *Energy Policy* 125 (February 1, 2019): 384–95, <https://doi.org/10.1016/j.enpol.2018.10.046>.
- 19 Lynne Kiesling, "Innovations and Decentralized Energy Markets," The Center for Growth and Opportunity at Utah State University, March 23, 2020, <https://www.thecgo.org/research/innovations-and-decentralized-energy-markets/>.
- 20 Grant Patty, Josh Smith, and Katie Colton, "Net Metering in the States," The Center for Growth and Opportunity at Utah State University, July 31, 2018, <https://www.thecgo.org/research/net-metering-in-the-states/>.
- 21 US Department of Energy, "Demand Response," accessed August 1, 2022, [www.energy.gov/oe/activities/technology-development/grid-modernization-and-smart-grid/demand-response](http://www.energy.gov/oe/activities/technology-development/grid-modernization-and-smart-grid/demand-response); L. Lynne Kiesling, "Promoting Innovation in the Electricity Industry," *Economic Affairs* 30, no. 2 (June 2010): 6–12; Lynne Kiesling and Vernon Smith, "How Texas Electricity Regulators Can Use Markets to Make the Grid More Reliable," *Dallas News*, February 28, 2021, <https://www.dallasnews.com/opinion/commentary/2021/02/28/how-texas-electricity-regulators-can-use-markets-to-make-the-grid-more-reliable/>.
- 22 Michael Giberson and L. Lynne Kiesling, "Governance for Networks: Regulation by Networks in Electric Power Markets in Texas," in *Regulation and Economic Opportunity: Blueprints for Reform*, eds. Adam Hoffer and Todd Nesbit (Logan, UT: The Center for Growth and Opportunity, 2020), 361, [https://www.thecgo.org/wp-content/uploads/2021/04/Regulation\\_and\\_Economic\\_Opportunity\\_Blueprints\\_for\\_Reform.pdf](https://www.thecgo.org/wp-content/uploads/2021/04/Regulation_and_Economic_Opportunity_Blueprints_for_Reform.pdf) - page=361.
- 23 Jerry Ellig, "Retail Electric Competition and Natural Monopoly: The Shocking Truth," in *Regulation and Economic Opportunity: Blueprints for Reform*, eds. Adam Hoffer and Todd Nesbit (Logan, UT: The Center for Growth and Opportunity, 2020), 277–302, [https://www.thecgo.org/wp-content/uploads/2021/04/Regulation\\_and\\_Economic\\_Opportunity\\_Blueprints\\_for\\_Reform.pdf#page=304&zoom=100,0,0](https://www.thecgo.org/wp-content/uploads/2021/04/Regulation_and_Economic_Opportunity_Blueprints_for_Reform.pdf#page=304&zoom=100,0,0).
- 24 Insurance Information Institute, "Facts + Statistics: Wildfires," accessed August 3, 2022, <https://www.iii.org/fact-statistic/facts-statistics-wildfires>; Daoping Wang, Dabo Guan, Shupeng Zhu, Michael Mac Kinnon, Guannan Geng, Qiang Zhang, Heran Zheng, Tianyang Lei, Shuai Shao, Peng Gong, and Steven J. Davis, "Economic Footprint of California Wildfires in 2018," *Nature Sustainability* 4, no. 3 (March 2021): 252–60, <https://www.nature.com/articles/s41893-020-00646-7>.

- 25 Eric Edwards and Sarah Sutherland, "Does Environmental Review Worsen the Wildfire Crisis," Property and Environment Research Center, June 2022, <https://www.perc.org/wp-content/uploads/2022/06/PERC-PolicyBrief-NEPA-Web.pdf>.
- 26 Megan E. Jenkins and Harrison Naftel, "Making Private Lands Count for Conservation: Policy Improvements toward 30x30," The Center for Growth and Opportunity at Utah State University, August 4, 2022, <https://www.thecgo.org/research/making-private-lands-count-for-conservation/>.
- 27 Megan E. Jenkins, Jennifer Morales, Rebekah Yeagley, and Sarah Bennett, "Cooperative Conservation: Determinants of Landowner Engagement in Conserving Endangered Species," The Center for Growth and Opportunity at Utah State University, August 4, 2022, <https://www.thecgo.org/research/cooperative-conservation-determinants-of-landowner-engagement-in-conserving-endangered-species/>.
- 28 Jonathan Wood, "Prospecting for Pollution: The Need for Better Incentives to Clean Up Abandoned Mines," PERC Public Lands Report, Property and Environment Research Center, February 11, 2020, <https://www.perc.org/2020/02/11/prospecting-for-pollution-the-need-for-better-incentives-to-clean-up-abandoned-mines/>; Joe Davis, "Perfection Getting in the Way of Progress," *The Benchmark*, The Center for Growth and Opportunity, March 3, 2022, <https://www.thecgo.org/benchmark/perfection-getting-in-the-way-of-progress/>.
- 29 Christian Dustmann and Ian P. Preston, "Free Movement, Open Borders, and the Global Gains from Labor Mobility," *Annual Review of Economics* 11, no. 1 (August 2019): 793–94, 805. <http://doi.org/10.1146/annurev-economics-080218-025843>.
- 30 William R. Kerr, *The Gift of Global Talent: How Migration Shapes Business, Economy, and Society* (Stanford, CA: Stanford University Press, 2019); William R. Kerr, "Students, Skilled Immigration, and Our Path to Recovery," in *Immigration and Economic Recovery after COVID-19*, ed. Josh T. Smith (Logan, UT: The Center for Growth and Opportunity, at Utah State University, 2021).
- 31 Graphic adapted from William Kerr's research.
- 32 Shai Bernstein, Rebecca Diamond, Timothy James McQuade, and Beatriz Pousada, "The Contribution of High-Skilled Immigrants to Innovation in the United States," Working Paper No. 3748, Stanford Graduate School of Business, July 11, 2019, 76.
- 33 Jennifer Hunt and Marjolaine Gauthier-Loiselle, "How Much Does Immigration Boost Innovation?" *American Economic Journal: Macroeconomics* 2, no. 2 (April 2010): 31–56, <https://doi.org/10.1257/mac.2.2.31>.
- 34 Stuart Anderson, "Immigrant Entrepreneurs and US Billion-Dollar Companies," National Foundation for American Policy, July 2022, <https://nfap.com/wp-content/uploads/2022/07/2022-BILLION-DOLLAR-STARTUPS.NFAP-Policy-Brief.2022.pdf>.
- 35 Pierre Azoulay, Benjamin F. Jones, J. Daniel Kim, and Javier Miranda, "Immigration and Entrepreneurship in the United States," *American Economic Review: Insights* 4, no. 1 (March 2022): 71–88, <https://doi.org/10.1257/aeri.20200588>.
- 36 Giovanni Peri, Kevin Shih, and Chad Sparber, "How Highly Educated Immigrants Raise Native Wages," *VoxEU*, May 29, 2014, <https://voxeu.org/article/how-highly-educated-immigrants-raise-native-wages>; Giovanni Peri, Kevin Shih, and Chad Sparber, "STEM Workers, H-1B Visas, and Productivity in US Cities," *Journal of Labor Economics* 33, no. S1 (July 2015): 252, <https://doi.org/10.1086/679061>.
- 37 Peri, Shih, and Sparber, "How Highly Educated Immigrants Raise Native Wages."
- 38 Francesc Ortega and Giovanni Peri, "Openness and Income: The Roles of Trade and Migration," *Journal of International Economics* 92, no. 2 (March 2014): 231–51, <https://doi.org/10.1016/j.jinteco.2013.11.008>; Hunt and Gauthier-Loiselle, "How Much Does Immigration Boost Innovation?" 52.
- 39 Ortega and Peri, "Openness and Income," 248.
- 40 Sadikshya Nepal, "The Challenging Transition from an International Student Visa to an H-1B: A Primer," Bipartisan Policy Center, July 15, 2020, <https://bipartisanpolicy.org/blog/the-challenging-transition-from-an-international-student-visa-to-an-h-1b-a-primer/>.
- 41 US Bureau of Economic Analysis, Gross Domestic Product [GDP], retrieved from FRED, Federal Reserve Bank of St. Louis, March 23, 2022, <https://fred.stlouisfed.org/series/GDP>.
- 42 Josh T. Smith, "Competing for People," *The Benchmark*, The Center for Growth and Opportunity at Utah State University, May 25, 2021, <https://www.thecgo.org/benchmark/competing-for-people/>.
- 43 Michael E. Waugh, "Firm Dynamics and Immigration: The Case of High-Skilled Immigration," in *High-Skilled Migration to the United States and Its Economic Consequences*, eds. Gordon H. Hanson, William R. Kerr, and Sarah Turner (Chicago: University of Chicago Press, 2017), 205–38, <https://www.nber.org/books-and-chapters/high-skilled-migration-united-states-and-its-economic-consequences/firm-dynamics-and-immigration-case-high-skilled-immigration>.
- 44 This adapts a proposal from the Hoover Institution's Tim Kane. Tim Kane, *The Immigrant Superpower: How Brains, Brawn, and Bravery Make America Stronger* (New York: Oxford University Press, 2022), 248.
- 45 Morgan Raux, "Looking for the 'Best and Brightest': Hiring Difficulties and High-Skilled Foreign Workers," Working Paper, The Center for Growth and Opportunity at Utah State University, February 2, 2021, <https://www.thecgo.org/research/looking-for-the-best-and-brightest/>.
- 46 Omid Bagheri, "Are College Graduate Immigrants on Work Visas Cheaper than Natives?" Working Paper, The Center for Growth and Opportunity at Utah State University, March 30, 2021; David J. Bier, "H-1B Wages Surge to the Top 10% of All Wages in the US," *Cato at Liberty*, Cato Institute, April 7, 2022, <https://www.cato.org/blog/h-1b-wages-surge-top-10-all-wages-us>.
- 47 "Employer-Paid H-1B Visa Fees for College Scholarships and Job Training," National Foundation for American Policy, April 2019, <https://nfap.com/wp-content/uploads/2019/04/Employer-Paid-H-1B-Visa-Fees.NFAP-Policy-Brief-April-2019-2.pdf>.
- 48 US Department of Labor, "H-1B Skills Training Grants," accessed March 29, 2022, <https://www.dol.gov/agencies/eta/skills-grants/h1-b-skills-training>.
- 49 Lindsay Milliken and Doug Rand, "Building an Evergreen \$1 Billion Fund for Science and Technology Career Advancement," Day One Project, June 2021, 24.