



# Debunking the False Claims of Environmental Review Opponents

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Talk is cheap and infrastructure projects are expensive. This helps explain why as a candidate, Donald Trump repeatedly called for spending \$1 trillion to rebuild U.S. infrastructure, but as president, he has flipped to pushing state and local governments to “maximize leverage”—in other words, take on extremely expensive private equity capital through public-private partnerships.<sup>1</sup>

It turns out that the hardest part about infrastructure spending is the spending. And in Washington, D.C., when a campaign promise falters, the best thing to do is blame an old standby: regulation. With near religious zeal, the Trump administration has taken to dismantling decades of hard-fought regulatory progress. The latest regulation to come under heavy fire is the National Environmental Policy Act, or NEPA.

Congress enacted NEPA in 1969 following years of growing public concern and political pressure to address the social and ecological damage caused by infrastructure projects and other forms of economic development. NEPA requires state and local project sponsors to engage in an environmental review intended to discover any significant impacts prior to starting construction.<sup>2</sup> These impacts could include anything from the loss of wetlands and a decrease in soil quality to the destruction of historic buildings and damage to the socio-cultural character of a neighborhood.<sup>3</sup> In other words, NEPA defines the term “environment” to include both natural and human environments.

The overall goals of NEPA are to empower local communities through greater transparency and to provide a framework for informed governmental decision-making.<sup>4</sup> NEPA requires project sponsors to carry out significant public outreach, allowing residents to voice their concerns about how the project could result in social or ecological harm. Where possible, the project sponsor must adopt changes to the design or operation of the facility in order to mitigate the identified negative impacts. In effect, NEPA transforms the theoretical idea of public engagement into a substantive reality. If the project sponsor does not follow NEPA’s procedural requirements, residents may seek legal remedy.

At its core, NEPA is a procedural statute that helps coordinate all environmental review and permitting requirements mandated by federal law. In the absence of NEPA, project sponsors would still have to comply with underlying environmental statutes, such as the Endangered Species Act and Clean Water Act, among others. The difference is that the process would become disjointed, as project sponsors would have to apply separately to each agency asserting jurisdiction.<sup>5</sup>

Like any complex administrative process, NEPA is not perfect. The most recent surface transportation authorization bill—Fixing America’s Surface Transportation, or FAST, Act—included an entire title dedicated to reforming NEPA.<sup>6</sup> These changes—often controversial—built on prior reforms to NEPA included in other transportation bills, as well as executive orders signed by the Obama administration. The major reforms included in the FAST Act, along with the executive orders of the previous administration, require time for full implementation and study to determine their overall effectiveness at expediting project approvals while ensuring substantive protection of the environment.

With that said, the massive budget and staff cuts that the Trump administration has proposed for the Environmental Protection Agency as well as other departments reveal that any talk of NEPA reform is a hollow gesture on the way to evisceration.<sup>7</sup> Unfortunately, gutting environmental review will do little to improve the state of our infrastructure but will lead to more projects that unnecessarily harm our human and ecological environments. For two powerful examples of past harms, see “Build First, Ask Questions Later: How Weakening Environmental Review Will Hurt Our Communities and Natural Habitats.”<sup>8</sup>

In support of the idea that NEPA saddles state and local governments with an overly burdensome administrative requirement, the Trump administration has pointed to a recent report by Common Good titled “Two Years Not Ten: Redesigning Infrastructure Approvals.”<sup>9</sup> The report makes wildly inaccurate and often unsubstantiated claims about the costs associated with environmental review. In fact, the assumptions that inform the calculations of projected savings from rolling back NEPA are so shoddy that they undermine the overall validity of the report and its conclusions.

Before addressing the specific claims of the Common Good report, it’s helpful to lay out two crucial facts about environmental review. First, the average project review is far shorter than opponents lead the public to believe. According to the Government Accountability Office, the average time to complete a full environmental impact statement, or EIS, is 4.6 years.<sup>10</sup>

Second, the principal restraint facing state and local governments contemplating megaprojects is money, not environmental review. In fact, state and local governments often begin environmental review with the hope that this will help build the political

momentum necessary to secure the funding for construction. For example, the Gateway Project is a series of interrelated major rail improvements, including two new tunnels under the Hudson River connecting Weehawken, New Jersey, to Lower Manhattan. The preliminary estimated total cost is more than \$23 billion.<sup>11</sup> The political challenges of securing this much money are daunting. Environmental review is not the obstacle preventing completion.

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## Assessing the claims of Common Good

**Claim:** “No legitimate public goal is served by years of delays.”

**Truth:** This claim is troubling on both a practical and a philosophical level. On a practical level, major projects require extensive study due to their scale and complexity. The Common Good report arbitrarily defines delay as any review that takes more than two years. This artificial, one-size-fits-all deadline is completely disconnected from the reality of complex projects. For example, should the federal government issue a permit to construct a novel nuclear reactor design in two years regardless of unanswered questions? The answer is clearly no; the government should take the time necessary to ensure public safety and security.

On a philosophical level, this claim demonstrates that hardcore opponents of environmental review consider federal laws that protect the environment fundamentally illegitimate even if those laws are the result of decades of Americans expressing their collective political will.

**Claim:** Lawsuits should be “limited to legal violations, not policy decisions.”

**Truth:** NEPA does not permit lawsuits on policy grounds. NEPA is a procedural statute. And when a state or local government does not follow basic procedural requirements, including conducting a substantive alternatives analysis or appropriately scoping the environmental review, then it has violated the law.

**Claim:** “The Federal Highway Administration estimated that the average time for approval of major highway projects was over six years.”

**Truth:** This claim is based on projects that completed an environmental impact statement and received a record of decision from the Federal Highway Administration, or FHWA, between fiscal year 1999 and FY 2011.<sup>12</sup> For projects that completed the EIS process between FY 2012 and FY 2016, the average review time has fallen to 3.6 years.<sup>13</sup> This substantial improvement is due to NEPA reforms passed by Congress, beginning with the 2005 surface transportation bill—the Safe, Accountable, Flexible, Efficient Transportation Equity Act—and subsequent transportation reauthorization measures.<sup>14</sup>

Beyond using outdated numbers, the report gives readers the impression that lengthy review is the norm. In reality, only 4 percent of highway projects—typically major new construction or expansion—require an EIS.<sup>15</sup> Yet most of the work that states undertake is maintenance and incremental improvements within the existing right of way. These projects either qualify for a categorical exclusion or a much simpler environmental assessment, or EA. For example, data from Ohio show that large-scale projects are not the norm. Of the 1,657 highway projects included in the current Statewide Transportation Improvement Program, only two have a total cost of more than \$1 billion, with another six projects costing more than \$200 million.<sup>16</sup> These projects represent less than half of 1 percent of Ohio's total. The average project cost is \$9.2 million.<sup>17</sup>

**Claim:** “Delay prolongs bottlenecks which waste time and energy, causing America to lag behind global competitors.” Additionally, the report claims that the total savings from eliminating six years of delay in building roads and bridges is \$427.8 billion.

**Truth:** Highway congestion reduces America's productivity and adds uncertainty to supply chains. However, the estimates in the second section of the report rely on many questionable assumptions. First, the report points out that approximately 45 percent of all highway congestion and delay is recurrent—meaning due to excess travel demand as opposed to an accident or inclement weather. Without any basis in fact, the report assumes that speeding up environmental review would eliminate all recurrent congestion. According to the FHWA's 2015 Conditions and Performance Report, even a substantial increase in highway spending would improve average vehicle speeds from 43.9 mph to 44.3 mph—an increase of just 1.4 mph, or 3 percent.<sup>18</sup>

**TABLE 1**  
Average EIS completion time for highway projects receiving a record of decision, FY 2012 to FY 2016

Fiscal year	Median completion time, in months
2012	41
2013	42
2014	46
2015	45
2016	44
<b>Average</b>	<b>43.6</b>

Sources: Results provided by the House Committee on Transportation and Infrastructure based on data from the Federal Highway Administration, for additional information on the permit length, see Amy Phillips, “Key House Democrats Blame Infrastructure Woes on Funding, Not Permits,” Bloomberg BNA, April 6, 2017.

**TABLE 2**  
Actual savings from artificially shortening environmental review, in billions

Category	Claim	Truth
Congestion costs of delay	\$270.00	\$4.80
Environmental losses	\$6.00	\$0.11
Increase in rebuilding costs	\$151.80	\$8.90
<b>Total</b>	<b>\$427.80</b>	<b>\$13.80</b>

Sources: Results based on author's calculations from Federal Highway Administration and Federal Transit Administration, 2015 *Status of the Nation's Highways, Bridges, and Transit: Conditions & Performance* (U.S. Department of Transportation, 2016), available at <https://www.fhwa.dot.gov/policy/2015cp/pdfs/2015cp.pdf>; Amy Phillips, “Key House Democrats Blame Infrastructure Woes on Funding, Not Permits,” Bloomberg BNA, April 6, 2017; Federal Highway Administration, “National Highway Construction Cost Index (NHCCI),” available at <https://www.fhwa.dot.gov/policy-information/whiccupr.cfm> (last accessed April 2017); Economic Policy Institute, “Nominal Wage Tracker,” available at <http://www.epi.org/nominal-wage-tracker/> (last accessed April 2017).

Second, the report assumes that all highway projects other than basic repair would require state and local governments to undertake a full EIS. As previously noted, only 4 percent of highway projects require a full EIS. Furthermore, the report assumes that these projects would have a review that lasts at least eight years. Yet recent data from the FHWA shows that the actual average for a full highway EIS is 44 months, or 3.6 years.<sup>19</sup> Thus, at the outside most, 4 percent of highway projects could save 1.6 years.

Third, the report assumes 5.1 percent annual cost inflation for materials and labor. Without providing a citation, the report claims that the cost of materials accounts for 70 percent of total project costs, with a 3 percent increase each year, while labor accounts for 30 percent of costs and rises at 10 percent each year. Data from the federal government show otherwise. According to the FHWA's National Highway Construction Cost Index, prices for highway materials in March 2016 increased 7.3 percent from the baseline in March 2003. This translates to an average annual cost increase of half of 1 percent.<sup>20</sup> Data from the U.S. Bureau of Labor Statistics show that nonfarm wages have been rising at a nominal rate of approximately 2.5 percent per year.<sup>21</sup> Thus, a more accurate inflation number is 1.1 percent.

Fourth, the congestion savings put forward by the report assume static travel demand. In other words, the report assumes that after the state expands highway capacity, drivers would take the same number of trips and experience dramatically less congestion and delay. In reality, most highway congestion occurs in large metropolitan regions with a high degree of latent demand. This means that because roadways are often heavily congested, drivers choose to take fewer trips. Highway capacity expansions only temporarily provide congestion relief as drivers begin taking additional trips. As a result, congestion rises until it reaches a point of equilibrium roughly equivalent to the pre-expansion level.<sup>22</sup>

Using assumptions based on federal data, the actual value of savings from artificially shortening environmental review drops from \$427.8 billion to \$13.8 billion.

**Claim:** "Freight bottlenecks resulting from insufficient rail capacity cost the economy over \$200 billion a year, according to the ASCE [American Society of Civil Engineers]."

**Truth:** While freight bottlenecks cause delay, this claim omits the important fact that freight railroad infrastructure is owned and financed by private rail companies—excluding the Northeast Corridor, which is owned by Amtrak. The National Environmental Policy Act only applies to significant federal actions, which federal law defines as "projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies."<sup>23</sup> For many infrastructure projects, using federal funding triggers the application of NEPA. Aside from a very few exceptions, the freight rail industry is responsible for financing infrastructure improvements without relying on federal grants, loans, or loan guarantees.

Importantly, funding is not the only trigger for an environmental review. A rail infrastructure project may require an EIS due to the need to secure certain federal permits. Yet the Common Good report provides no data on the percentage of freight rail projects that require an EIS or on the average length of those reviews. This lack of data does not stop the report from making calculations on the assumption that all capital projects require an EIS that lasts eight years. Furthermore, the report assumes—also in the absence of any data—that all delay caused by bottlenecks would be eliminated by shortening environmental review. These assumptions are simply not credible.

**Claim:** “Total costs of six-year delay in rebuilding transmission and distribution networks: \$819 billion.”

**Truth:** The estimates in the section rely on numerous questionable assumptions. First, the report states that at current market prices, the value of lost electricity due to inefficiency is \$25 billion annually. Without providing any citation, the report assumes that electricity transmission and distribution modernization projects require environmental review lasting at least eight years. Yet under current regulations, many of the repair, rehabilitation, and construction activities required to upgrade electricity transmission and distribution systems qualify for a categorical exclusion.<sup>24</sup> Specifically, federal regulations list the following exclusions: upgrading and rebuilding existing powerlines; construction of powerlines; and electric power substations and interconnection facilities, among others.<sup>25</sup> This means that companies could modernize a substantial share of the 642,000 miles of transmission lines and 6.3 million miles of distribution lines without undertaking an environmental review.<sup>26</sup>

Second, the report argues that enhancing transmission and distribution efficiency would result in the closure of coal-fired power plants, but this argument obscures several important aspects of the U.S. electricity market. The growth rate in electricity demand has fallen each decade since the 1950s, and the architecture of the grid is changing rapidly as more distributed generation and advanced management models enter operation.<sup>27</sup> These changes, along with other market forces, affect the generation mix to a greater degree than transmission and distribution efficiencies. For these reasons, there is no guarantee that efficiency gains would lead to the replacement of coal-fired generation.

Third, the report assumes that all the electricity lost due to transmission and distribution inefficiencies comes from coal. This is an odd assumption to make, since America’s energy mix is not a mystery. According to the U.S. Energy Information Administration, only 30 percent of electricity production comes from burning coal.<sup>28</sup> This substantially reduces the social and environmental cost from emissions generated by electricity production. Generally, transmission and distribution planning, as well as siting, account for reliability, demand, and generation type. Thus, increasing the efficiency of existing—or constructing new—transmission and distribution infrastructure does not guarantee the retirement or addition of one power source over another.

Fourth, the report assumes that 75 percent of the total cost of rebuilding transmission and distribution infrastructure “would be directly affected by environmental review.” The report provides no citation to support this claim. As previously noted, existing federal regulations contain a broad list of categorical exclusions. Additionally, the report uses an unsubstantiated assumption of 5 percent annual cost inflation and then assumes that projects would have their environmental review shortened by six years.

Fifth, the underlying premise of the electricity section is that grid modernization is the most effective means of reducing electricity losses due to inefficiency. While modernization is important, the 2015 Quadrennial Energy Review and 2015 Quadrennial Technology Review by the U.S. Department of Energy reveal that the most effective way to improve energy efficiency is by adopting higher-performing end-use technologies, such as LED lighting; increasing the installation of distributed generation along with additional energy storage to avoid hub-and-spoke grid architecture; and adopting smart grid management techniques and technologies that enable better insight into grid functioning and allow for more sophisticated demand management, reducing the number and severity of disruptions. Importantly, these types of investments often reduce the need for new electric lines altogether.<sup>29</sup>

Taken together, the numerous baseless assumptions in this section of the Common Good report call into question the validity of the cost savings assumed from weakening environmental review.

**Claim:** “In 2009, America had the money (over \$800 billion in the economic stimulus package) but few permits. In its five-year report on the stimulus, released in February 2014, the White House revealed that a grand total of \$30 billion (3.6 percent of the stimulus) had been spent on transportation infrastructure.”

**Truth:** This is perhaps the most disingenuous claim in the report, as it makes it seem as though Congress enacted \$800 billion for infrastructure but only a small fraction had been spent. In reality, the stimulus act contained only \$48 billion for transportation infrastructure—meaning that state and local governments spent 63 percent of transportation funds within five years.<sup>30</sup> This share may seem low, but it’s worth remembering that in response to a massive drop in tax revenues due to the Great Recession, state and local governments furloughed thousands of public employees at the same time the federal government was pushing them to plan and implement an even larger volume of infrastructure projects.<sup>31</sup>

**Claim:** “Upwards of two million jobs can be created.”

**Truth:** This calculation only has validity if all the underlying assumptions throughout the report are accurate, which they are not.

**Claim:** “Environmental review has become a litigation quagmire, as supporters and opponents argue over thousands of pages of details.”

**Truth:** Each year, approximately 50,000 major federal actions require an EA, and another roughly 500 projects require full environmental impact statements.<sup>32</sup> Yet only around 100 NEPA cases are filed.<sup>33</sup> This means that only two-tenths of 1 percent of federal actions are subject to litigation.

**Claim:** “To cut the Gordian knot of multiple permits, the White House needs authority to resolve disputes among bickering agencies.”

**Truth:** Once again, the report fails to accurately represent basic aspects of environmental law and regulations. Under Code of Federal Regulations, 40, 1504, the Council on Environmental Quality and the president of the United States have the authority to resolve interagency disputes regarding a proposed federal action.<sup>34</sup>

**Claim:** “Without desalination plants, the aquifers in California will be further depleted.”

**Truth:** Statements such as this show the critical value of NEPA and the alternatives analysis requirement. California faces real water challenges. Local, regional, and state water authorities have the responsibility to ensure that residents and businesses have clean, reliable water. However, desalination is only one of many possible options for meeting water demand. For example, Southern California faces spreading contamination within the San Fernando Groundwater Basin, or SFB, aquifer, which serves as a major source of groundwater.<sup>35</sup> Additionally, spring rains can cause the Los Angeles River to discharge vast quantities of fresh water into the Pacific Ocean. It may be the case that decontaminating the SFB aquifer and capturing, storing, and treating stormwater and wastewater are more cost-effective and less environmentally harmful than desalination. The only way for government officials and the public to engage on such a complex set of choices is through the detailed study required by environmental review.

**Claim:** “Law is supposed to be the framework for a free society, not an impediment.”

**Truth:** It is unclear if there is a dictionary that defines a dirty environment and communities torn apart by poorly designed infrastructure facilities as “freedom.”



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## Conclusion

The hard work of rebuilding America does not have any shortcuts. Imposing artificial deadlines for completion of environmental review will save the country little while substantially increasing the likelihood that state and local governments as well as the private sector will construct major facilities that cause unnecessary harms—potentially requiring hundreds of millions or billions of dollars in remediation later.

The United States needs to make major investments in infrastructure based on smart policies that ensure federal funds are targeted to projects that increase access to opportunity, provide support for communities most in need, protect the environment, and improve economic competitiveness. National progress and protecting the environment are not mutually exclusive. By engaging in thoughtful planning based on robust community outreach, project sponsors can deliver needed facilities with minimal impact on natural habitats and local communities.

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## Endnotes

1. Office of Management and Budget, *America First: A Budget Blueprint to Make America Great Again* (Executive Office of the President, 2017), available at [https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/2018\\_blueprint.pdf](https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/2018_blueprint.pdf).
2. Council on Environmental Quality, *Regulations For Implementing The Procedural Provisions Of The National Environmental Policy Act* (Executive Office of the President, 2006), available at [https://energy.gov/sites/prod/files/NEPA-40CFR1500\\_1508.pdf](https://energy.gov/sites/prod/files/NEPA-40CFR1500_1508.pdf).
3. Council on Environmental Quality, *Considering Cumulative Effects Under the National Environmental Policy Act* (Executive Office of the President, 1997), available at [https://energy.gov/sites/prod/files/nepapub/nepa\\_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf](https://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf).
4. Linda Luther, "The National Environmental Policy Act: Background and Implementation" (Washington: Congressional Research Service, 2008), available at <https://fas.org/sgp/crs/misc/RL3152.pdf>.
5. Linda Luther, "The Role of the Environmental Review Process in Federally Funded Highway Projects: Background and Issues for Congress" (Washington: Congressional Research Service, 2012), available at [http://environment.transportation.org/pdf/proj\\_delivery\\_stream/crs\\_report\\_envrev.pdf](http://environment.transportation.org/pdf/proj_delivery_stream/crs_report_envrev.pdf).
6. Federal Highway Administration, "Fixing America's Surface Transportation Act or 'FAST Act,'" available at <https://www.fhwa.dot.gov/fastact/legislation.cfm> (last accessed April 2017).
7. Office of Management and Budget, *America First: A Budget Blueprint to Make America Great Again*.
8. Poorly planned projects produce harms that result in large remediation costs. For example, the restoration of the Kissimmee River in Florida will cost more than \$1 billion. Similarly, reconfiguring a portion of the Inner Loop in Rochester, New York, to an at-grade boulevard that reconnects the surrounding community to downtown will cost \$23.6 million. See Kevin DeGood, "Build First, Ask Questions Later: How Weakening Environmental Review Will Hurt Our Communities and Natural Habitats" (Washington: Center for American Progress, 2017), available at <https://www.americanprogress.org/?p=430668>.
9. Philip K. Howard, "Two Years Not Ten: Redesigning Infrastructure Approvals" (New York: Common Good, 2015), available at [http://commongood.3cdn.net/c613b4cfd4258a5fcb\\_e8m6b513x.pdf](http://commongood.3cdn.net/c613b4cfd4258a5fcb_e8m6b513x.pdf).
10. Government Accountability Office, "National Environmental Policy Act: Little Information Exists on NEPA Analyses," GAO-14-369, Report to Congressional Requesters, April 2014, available at <http://www.gao.gov/assets/670/662543.pdf>.
11. Larry Higgs, "Group starts funding effort for new Hudson River tunnels," NJ.com, January 12, 2017, available at [http://www.nj.com/traffic/index.ssf/2017/01/gateway\\_tunnel\\_financing\\_group\\_sets\\_stage\\_for\\_gett.html](http://www.nj.com/traffic/index.ssf/2017/01/gateway_tunnel_financing_group_sets_stage_for_gett.html).
12. Federal Highway Administration, "Estimated Time Required to Complete the NEPA Process," available at <https://www.environment.fhwa.dot.gov/stmring/nepatime.asp> (last accessed April 2017).
13. Data provided by the House Committee on Transportation and Infrastructure based on information from the Federal Highway Administration. Additional reference to improved environmental review completion times may be found at Amy Phillips, "Key House Democrats Blame Infrastructure Woes on Funding, Not Permits," Bloomberg BNA, April 6, 2017; (see Table 1).
14. *Safe, Accountable, Flexible, Efficient Transportation Equity Act*, Public Law 59, 109th Cong., 1st sess. (August 10, 2005), available at [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109\\_cong\\_public\\_laws&docid=f:publ059.109.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ059.109.pdf).
15. Luther, "The Role of the Environmental Review Process in Federally Funded Highway Projects: Background and Issues for Congress."
16. Ohio Department of Transportation, "2016-2019 STIP Project List as of 04/12/2017," available at <https://www.dot.state.oh.us/Divisions/Planning/STIP/Current%20STIP%20Project%20List/Current%20Project%20List%20STIP.xlsx> (last accessed April 2017).
17. Result is based on author's calculation from Ibid.
18. Federal Highway Administration and Federal Transit Administration, *2015 Status of the Nation's Highway, Bridges, and Transit: Conditions and Performance* (U.S. Department of Transportation, 2016), available at <https://www.fhwa.dot.gov/policy/2015cpr/pdfs/2015cpr.pdf>.
19. Phillips, "Key House Democrats Blame Infrastructure Woes on Funding, Not Permits."
20. Result is based on author's calculation from Office of Highway Policy Information, "National Highway Construction Cost Index (NHCCI)," available at <https://www.fhwa.dot.gov/policyinformation/nhcci/pi1.cfm> (last accessed April 2017).
21. Results are based on author's calculation from Economic Policy Institute, "Nominal Wage Tracker," available at <http://www.epi.org/nominal-wage-tracker/> (last accessed April 2016).
22. Federal Highway Administration, "HERS-ST Highway Economic Requirements System - State Version: Technical Report - Appendix B: Induced Traffic and Induced Demand," available at <https://www.fhwa.dot.gov/asset/herst/pubs/tech/tech10.cfm> (last accessed April 2017).
23. Cornell University Law School Legal Information Institute, "40 CFR 1508.18 - Major Federal action," available at <https://www.law.cornell.edu/cfr/text/40/1508.18> (last accessed April 2017).
24. Cornell University Law School Legal Information Institute, "40 CFR Part 1021 National Environmental Policy Act Implementing Procedures," available at <https://www.law.cornell.edu/cfr/text/40/part-1021> (last accessed April 2017).
25. Ibid.
26. U.S. Department of Energy, *Quadrennial Energy Review: Energy Transmission, Storage, and Distribution Infrastructure* (2015), available at [https://energy.gov/sites/prod/files/2015/07/124/QER%20Full%20Report\\_TS%26D%20April%202015\\_0.pdf](https://energy.gov/sites/prod/files/2015/07/124/QER%20Full%20Report_TS%26D%20April%202015_0.pdf).
27. U.S. Department of Energy, *Quadrennial Energy Review: Transforming the Nation's Electricity System: The Second Installment of the QER* (2017), available at <https://energy.gov/sites/prod/files/2017/02/134/Quadrennial%20Energy%20Review--Second%20Installment%20Full%20Report%29.pdf>.
28. U.S. Energy Information Administration, "Frequently Asked Questions," available at <https://www.eia.gov/tools/faqs/faq.php?id=427&t=3> (last accessed April 2017).
29. U.S. Department of Energy, *Quadrennial Energy Review: U.S. Department of Energy, Quadrennial Technology Review: An Assessment of Energy Technologies and Research Opportunities* (2015), available at [https://energy.gov/sites/prod/files/2017/03/134/quadrennial-technology-review-2015\\_1.pdf](https://energy.gov/sites/prod/files/2017/03/134/quadrennial-technology-review-2015_1.pdf).

- 30 Result is based on author's calculation from Michael Gräbell and Christopher Weaver, "The Stimulus Plan: A Detailed List of Spending," ProPublica, February 13, 2009, available at [https://www.propublica.org/special/the-stimulus-plan-a-detailed-list-of-spending#stim\\_transportation](https://www.propublica.org/special/the-stimulus-plan-a-detailed-list-of-spending#stim_transportation).
- 31 Adam Looney and Michael Greenstone, "A Record Decline in Government Jobs: Implications for the Economy and America's Workforce," Brookings on Job Numbers, August 3, 2012, available at <https://www.brookings.edu/blog/jobs/2012/08/03/a-record-decline-in-government-jobs-implications-for-the-economy-and-americas-workforce/>.
- 32 Council on Environmental Quality, *Environmental Quality: The Twenty-fifth Anniversary Report of the Council on Environmental Quality* (Executive Office of the President, 1996), available at <https://ceq.doe.gov/docs/ceq-reports/ceq-25th-annual-report.pdf>.
- 33 Government Accountability Office, "National Environmental Policy Act: Little Information Exists on NEPA Analyses."
- 34 Cornell University Legal Information Institute, "40 CFR Part 1504 - Predecision Referrals to the Council of Proposed Federal Actions Determined to be Environmentally Unsatisfactory," available at <https://www.law.cornell.edu/cfr/text/40/part-1504> (last accessed April 2017).
- 35 Los Angeles Department of Water and Power, "Program Summary: San Fernando Groundwater Basin Remediation Program" (2017), available at [https://www.ladwp.com/cs/ldcplg?ldcService=GET\\_FILE&ldcDocName=OPLADWPCCB550407&RevisionSelectionMethod=LatestReleased](https://www.ladwp.com/cs/ldcplg?ldcService=GET_FILE&ldcDocName=OPLADWPCCB550407&RevisionSelectionMethod=LatestReleased).

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