

**TWO YEARS  
NOT TEN YEARS**  
**REDESIGNING  
INFRASTRUCTURE  
APPROVALS**

PHILIP K. HOWARD



## **ABOUT THIS REPORT**

This report was written by Philip K. Howard, Chair of Common Good, with the help of Common Good staff members Matt Brown, Alex Keller, and Andrew Park.

Covington & Burling LLP provided the pro bono legal advice of E. Donald Elliott and Gary Guzy, each a former General Counsel of the Environmental Protection Agency.

James Maxeiner, a leading comparative international law scholar at the University of Baltimore School of Law, contributed important material as well.

## **ABOUT COMMON GOOD**

Common Good is a nonpartisan reform coalition which believes individual responsibility, not mindless bureaucracy, must be the organizing principle of government. We present proposals to radically simplify government and restore the ability of officials and citizens alike to use common sense in daily decisions.

Common Good was founded in 2002 by Philip K. Howard. Our Advisory Board includes leaders from many areas of society, including former Senators Bill Bradley and Alan Simpson, former Governor Tom Kean, former Speaker Newt Gingrich, and Salk Institute President William Brody.



One Metrotech Center, Suite 1703, Brooklyn, NY 11201

Phone 212.681.8199

[www.commongood.org](http://www.commongood.org)

Email [commongood@commongood.org](mailto:commongood@commongood.org)

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**2 YEARS**



**NOT  
10 YEARS**

## EXECUTIVE SUMMARY

Rebuilding America's decrepit infrastructure requires a new permitting system. Approvals today can take a decade, sometimes longer. Delay dramatically adds to costs, and prevents projects from getting off the drawing board. Delay prolongs bottlenecks which waste time and energy, causing America to lag behind global competitors. Obsolete facilities continue to spew carbon into the air and waste into our waters.

Red tape is not the price of good government; it is the enemy of good government. Time is money: America could modernize its infrastructure, at half the cost, while dramatically enhancing environmental benefits, with a two-year approval process. Our analysis shows that a six-year delay in starting construction on public projects costs the nation over \$3.7 trillion, including the costs of prolonged inefficiencies and unnecessary pollution. This is more than double the \$1.7 trillion needed through the end of this decade to modernize America's infrastructure.

No one deliberately designed America's infrastructure approvals system. It is an accident of legal accretion over the past 50 years. Environmental review was supposed to highlight major issues, in 300 pages or less on complex projects, so that officials could make an informed decision. As practiced today, environmental review often harms the environment. America's antiquated power grid, for example, wastes the equivalent of 200 coal-burning power plants.

**OUR ANALYSIS SHOWS THAT A SIX-YEAR DELAY IN STARTING CONSTRUCTION ON PUBLIC PROJECTS COSTS THE NATION OVER \$3.7 TRILLION, INCLUDING THE COSTS OF PROLONGED INEFFICIENCIES AND UNNECESSARY POLLUTION. THIS IS MORE THAN DOUBLE THE \$1.7 TRILLION NEEDED THROUGH THE END OF THIS DECADE TO MODERNIZE AMERICA'S INFRASTRUCTURE.**

We propose a dramatic reduction of red tape so that infrastructure can be approved in two years or less, not, often, ten years. This can be accomplished by consolidating decisions within a simplified framework with deadlines and clear lines of accountability. The White House Council on Environmental Quality, for example, should have authority to draw lines on the scope of environmental review. To cut the Gordian knot of multiple permits, the White House needs authority to resolve disputes among bickering agencies.

The upside of rebuilding infrastructure is as rosy as the downside of delay is dire. America can enhance its competitiveness and achieve a greener footprint—with renewable power, modern transmission lines, new water treatment plants and pipes, updated ports, inland waterways, and air traffic control, and elimination of rail and highway bottlenecks. Upwards of two million jobs can be created. Public safety is enhanced. Economic and environmental benefits from modernized infrastructure will dramatically exceed the costs.

No one argues for leaving our nation's infrastructure in its current state of disrepair—typically 50- to 100-years-old and dangerously decrepit. Law is supposed to be the framework for a free society, not an impediment. To rebuild its infrastructure, America must first rebuild its legal infrastructure so that vital projects can move forward.



## TWO YEARS, NOT TEN YEARS: REDESIGNING INFRASTRUCTURE APPROVALS

Modernizing America's aging infrastructure is vital to our nation's future.

There are two components to this initiative: money and permits. This report focuses on America's paralytic permitting system. We propose a dramatic reduction of red tape so that infrastructure can be approved in two years or less, not, often, ten years. This can be accomplished by consolidating decisions within a simplified framework with deadlines and clear lines of accountability.

No one argues for leaving our nation's infrastructure in its current state of disrepair—typically 50- to 100-years-old and dangerously decrepit. Bottlenecks waste time and energy, causing America to lag behind global competitors. Unsafe bridges and flawed flood control systems risk lives. Obsolete facilities spew carbon into the air and waste into our waters.

The upside of rebuilding infrastructure is as rosy as the downside of delay is dire. Updating America's infrastructure offers transformational benefits. America can enhance its competitiveness and achieve a greener footprint—with renewable power, modern transmission lines, new water treatment plants and pipes, updated ports, inland waterways, and air traffic control, and elimination of rail and highway bottlenecks. Upwards of two million jobs can be created. Public safety is enhanced. Economic and environmental benefits from modernized infrastructure dramatically exceed the costs.

Delay is destructive, because it dramatically adds to costs and harms. Each year of delay perpetuates the bottlenecks and inefficiencies that impede competitiveness and cause pollution. Delays create uncertainties that drive up financing and construction costs, and sometimes prevent projects from getting off the drawing board. Multi-year approval processes are not the price of good government; they are the enemy of good government. Time is money: America could rebuild this infrastructure at about half the total cost, while dramatically enhancing environmental benefits, with a two-year approval process.

Funding is obviously critical for new infrastructure, but it's not sufficient. Even fully-funded projects have trouble moving forward.

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. No official, in the current legal quagmire, has authority to approve projects—not even the President. As he put it, “there's no such thing as shovel-ready projects.” Even projects to repair or update existing infrastructure require years of process

**MULTI-YEAR APPROVAL PROCESSES ARE NOT THE PRICE OF GOOD GOVERNMENT; THEY ARE THE ENEMY OF GOOD GOVERNMENT.**

from multiple agencies. Decisions on new infrastructure, such as solar fields, wind farms, and transmission lines, sometimes require a decade for approval. Permitting the desalination plant in San Diego began in 2003 and was completed, after 14 legal challenges, in 2012. It will start producing fresh water this year—12 years later.

In some projects, the causes of delay border on the absurd. Raising the roadway of the Bayonne Bridge—a project that avoids the \$3 billion of extra expense and the construction nightmare of building a new bridge or tunnel—was a boon both to neighbors and to the economic vitality of the region. Instead, the project had to trudge through a five-year process, with a 10,000-page environmental assessment, and an additional 10,000 pages of required permitting and regulatory materials.

Environmental review should be focused on material effects and alternatives, not diluted by a tidal wave of marginal detail. Many important projects have serious impacts that should be reviewed and mitigated before a final decision. It is useful, at the beginning of a project, to get input on both its desirability and possible alternatives. Spending five or ten years arguing about the details, however, rarely makes the project better—and never makes it cheaper. Large public works often get bogged down in micromanagement, driving up costs and giving undue influence to opponents whose agenda does not align with the broader public good.

Input from stakeholders and the public usually improves a project. But striving for consensus is futile, causes delays, and skews decisions towards the squeaky wheel instead of the public good. New infrastructure is unavoidably controversial. There is always an impact, and always a group that is affected more than others. A wind farm or transmission line spoils the view of nature and can affect bird populations. A desalination plant produces a briny byproduct. Modernizing a port will disturb the ocean floor and may increase traffic in nearby neighborhoods.

**THERE ARE NO CLEAR LINES OF AUTHORITY TO MAKE NEEDED DECISIONS—NO OVERARCHING AGENCY WHICH CAN BALANCE THE DEMANDS OF DIFFERENT REGULATORS SO A PROJECT CAN MOVE FORWARD.**

But not building new infrastructure, or failing to rehabilitate or replace existing infrastructure, can have far worse impacts. Transmission lines in America waste six percent of the electricity they transmit—the equivalent of 200 average-sized coal-burning power plants. Without desalination plants, the aquifers in California will be further depleted. An inefficient port reduces competitiveness and drives shipping elsewhere, requiring goods to be trucked longer distances.

How, then, can government make decisions to move forward? Today, permitting decisions are balkanized among dozens of different departments, at different levels of government. Environmental review has become a litigation quagmire, as supporters and opponents argue over thousands of pages of details. Opponents must be mollified—often by monetary payments having little to do with environmental effects of the project. Meanwhile, years go by and costs multiply.

What's missing in infrastructure approvals is basic: There are no clear lines of authority to make needed decisions—no overarching agency which can balance the demands of different regulators so a project can move forward. Instead, decisions are often a function of bureaucratic durability, as officials from multiple agencies eventually grow weary of the repetitive hearings and meetings, and collapse into an agreement that favors whoever is left standing. Environmental review is exhausting, with final decisions made by judges instead of responsible officials. This bureaucratic and judicial endurance contest is why infrastructure approvals can take a decade or longer.

No one deliberately designed America's infrastructure approvals system. It is an accident of legal accretion over the past 50 years. Environmental review was supposed to highlight major issues, in 300 pages or less on complex projects, so that officials could make an informed decision. Congress created no right to litigate, much less to transform review into a multi-year legal ordeal.

Multiple permits are similarly an accident of the growth of government. As government got bigger, it naturally organized itself into discrete silos, each with its own rules and territorial instincts. Overlapping jurisdiction by three or more levels of government further complicated the balkanization of authority. No one stopped to consider the implications of giving veto authority to any one of dozens of government departments.



No legitimate public goal is served by years of delays. We need new transmission lines, water treatment plants, renewable energy sources, port and river projects, and new bridges, roads, tunnels, and rail lines. Every dollar wasted as a result of delay is a dollar not available for other projects or public goods. Every ton of carbon released by aging infrastructure contributes to unnecessary pollution. See Section 2 below.

Competing countries in the global economy do not bog down projects in years of red tape. This competitive advantage of timely approvals is enjoyed not just by authoritarian countries such as China and Singapore, but by western democracies such as Germany and Canada, which generally grant permits for major infrastructure in two years or less, including environmental review. These competing western democracies can build infrastructure at a fraction of our cost.

Marginal improvements to America's infrastructure approvals system—say, reducing the process from ten years to eight years—should not be the goal. America's goal here is modernized infrastructure, not lots of legal hearings. Accomplishing our national needs requires remaking America's infrastructure approval procedures.

## 1. REDEFINING THE REGULATORY GOAL: TWO YEARS, NOT TEN YEARS

How long should a rational approval process take? America's goal should be to keep pace with countries that do it quicker while protecting the environment, such as Germany and Canada. To keep up, America needs to invent a timeline that can conduct environmental review, make decisions, and issue permits within two years.

How do Germany and Canada achieve this? They have clear lines of authority, with consolidated decision-making on both environmental review and permitting. Lawsuits must be brought and resolved quickly, with jurisdiction limited to legal violations, not policy decisions. See Section 4 below.

What would be the benefits of a two-year process? Including opportunity costs of improved efficiency, reducing approval time from eight years to two years would reduce direct costs in power projects by 30 percent and achieve efficiency and environmental benefits that often exceed the total project cost. See Section 2 below.

How can America invent a two-year permitting process? Our suggestion is this:

- i. For environmental review, an environmental official, such as a politically accountable official at EPA or the Council on Environmental Quality (CEQ), should have responsibility to decide the scope and adequacy of review. The general principles for review should be disclosure of material facts sufficient to make a considered decision, with a focus on overall environmental impact of the project. The official should be accountable to the President, who should have the authority to step in, stop the delays, and get the project off dead center.
- ii. For permits, one agency should have overriding permitting authority, with the obligation to balance the concerns of other agencies and departments. Any disagreements should be heard by the White House or a department designated by it. Interstate projects should generally be approved by a federal agency; intrastate projects by a state agency. Lawsuits should be limited to claims of illegality, not generally quality of review, with expedited timetables. Instilling focus and time deadlines for environmental review can be achieved in large part by administrative and executive action. Standards for judicial review can also be clarified by executive order. See

Section 6 below. Creating a “one-stop shop” for permits on interstate projects, including state and local permits, could be addressed either by consent from states in exchange for federal funding consideration, or by other congressional action. See Section 6 below.

Consolidated decision-making on infrastructure has one political drawback: Each participant must give up its effective veto of projects. Today, any government department or NGO can unilaterally slow projects to a crawl. Just the prospect of a lawsuit has created a culture of focusing on immaterial detail and a lengthy quest for consensus among dozens of interested stakeholders. Striving to get approval from every agency and stakeholder is the main source of years of delay. All this time and detail does not generally improve projects; often projects are compromised in ways that satisfy one group over the common good. Delay itself is destructive of the common good—harming the environment and driving up costs, as set forth below.

Our society is confronted with a bureaucratic version of the tragedy of the commons: Only by creating a gatekeeper for approvals can we avoid destroying the common interest through each stakeholder’s demands. The harm caused by bureaucratic delay far exceeds any conceivable benefits. Instead of ensuring better decisions, the current approval process generally guarantees bad decisions—causing waste and inefficiency and prolonging environmental damage.

## 2. COSTS OF DELAY IN MODERNIZING INFRASTRUCTURE

The costs of delay include the direct costs (legal, administrative, and overhead), the opportunity costs of lost efficiencies during the years of delay, and the environmental costs of antiquated infrastructure during the delay. The uncertainties caused by delay raise financing costs, and can derail projects altogether. For large public projects, delay beyond election cycles can remove political incentives for large financial commitments. When withdrawing funding from a new rail tunnel under the Hudson River, Gov. Chris Christie reportedly quipped that the tunnel had been announced by a predecessor and would be opened by a successor.

Estimating these costs of delay is, at best, an exercise in approximating orders of magnitude. The simplest variable—how many years of delay—requires assumptions on actual delays, which is highly variable from project to project, and on how long approvals should take. Unless

**THE HARM CAUSED BY BUREAUCRATIC DELAY FAR EXCEEDS ANY CONCEIVABLE BENEFITS.**

stated otherwise, the following estimates assume that review and approvals should generally take no more than two years—the timeframe that reflects best practice in other western countries. Although large projects often take a decade or longer to permit, we assume that the avoidable delay on major projects is six years. There is ample anecdotal evidence of actual years of delay in the US for different types of infrastructure projects, but little cumulative data. The Federal Highway Administration estimated that the average time for approval of major highway projects was over six years.<sup>1</sup> Five to ten years is a common timeframe for interstate transmission lines, and for wind farms and solar fields on federal lands on either coast. Texas has expedited permitting of wind farms, with the result that it now enjoys over 12 MW of wind generation, more than double the wind capacity in California, where permitting is more difficult. Even replacement-in-kind infrastructure projects are negatively impacted by extensive regulatory delays.

Estimating the delay costs attributable to continued inefficiencies and environmental damage can be done using studies by government agencies and industry groups. Estimating the increase in direct construction costs is more difficult. Project developers conservatively budget three percent inflation in “hard” construction costs and ten percent added overhead cost for each year of delay. As a rule of thumb, construction represents 70 percent of project costs and overhead 30 percent. Thus, we assume here that the total increase in direct cost from delay is five percent per year (70 percent times three percent = 2.1 percent, plus 30 percent times ten percent = three percent, for a total delay cost of 5.1 percent per year).

Caveat: These estimates are rough, and are readily adjustable with a change of assumptions. They are intended to provide a general order of magnitude of costs and lost efficiencies from delay.

### **A. Electricity transmission.**

Approximately six percent of all energy generated for public consumption is wasted due to inefficiencies within the power grid.<sup>2</sup> That’s nearly 240 billion kWh of the four trillion produced in 2014<sup>3</sup>—the output of 200 average-sized coal-burning power plants.<sup>4</sup> At an average price of 10.39 cents per kWh in 2015,<sup>5</sup> \$25 billion is wasted every year by antiquated transmission and distribution infrastructure.<sup>6</sup>

The environmental costs of delay in modernizing transmission and distribution are correspondingly large. Six percent transmission and distribution loss equals 16 percent of total current coal power generation. Assuming that a modernized transmission grid would permit closure of that coal generation, the effect would be to avoid about 240 million tons of carbon dioxide emissions annually.<sup>7</sup> Federal agencies, including EPA, use a complicated modeling system to determine the social cost of carbon dioxide emissions.<sup>8</sup> Using the high-end estimate for 2015, a per-ton cost of \$116, modernizing our transmission and distribution infrastructure would generate environmental savings of \$27.8 billion per year. In addition, more dangerous byproducts of traditional power generation like mercury and arsenic would no longer be leached into our water.

The unreliability of America’s antiquated power grid also causes disruptions, with attendant business and social costs. The US experiences 285 percent more blackouts annually than it did in 1985, with over 300 “significant” power interruptions in 2011.<sup>9</sup> The Department of Energy estimates that these interruptions cost businesses around \$150 billion per year in lost productivity.<sup>10</sup> These blackouts are attributable in part to our aging power grid, according to a recent National Electric Manufacturers Association report, and in part to unreliable and insufficient generation infrastructure.<sup>11</sup> We assume here that half that lost productivity is attributable to the frailty of our power grid.

The delay in rebuilding transmission infrastructure also increases the cost of construction. The American Society of Civil Engineers (ASCE) estimates the total cost of rebuilding transmission and distribution infrastructure at \$231.5 billion.<sup>12</sup> To estimate the cost of delay, we assume that 75 percent of transmission- and distribution-related infrastructure spending would be directly affected by environmental review or complex permitting requirements, meaning \$173.6 billion of the total rebuilding cost is vulnerable to the direct costs of delay. As noted above, a general rule of thumb, which we apply here and below, is that delay will add a total of five percent per year to overall construction costs.

*Approximate costs of delay in rebuilding/upgrading transmission and distribution infrastructure:*

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**Electricity losses:** \$25 billion x six years = \$150 billion

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**Environmental losses:** Six percent lost electricity (assuming all from coal plants) = 240 million tons of CO<sub>2</sub> x \$116 x six years = \$167 billion

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**Disruption losses:** 50 percent of \$150 billion x six years = \$450 billion

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**Increase in rebuilding costs from six-year delay:** \$173.6 billion x 30 percent = \$52 billion

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

## **B. Power generation.**

Power generation in the US produced over two billion tons of carbon dioxide emissions in 2014,<sup>13</sup> at a social cost of \$232 billion. Coal and natural gas, which account for two-thirds of total power generation,<sup>14</sup> are responsible for 98 percent of energy-related emissions in the US.<sup>15</sup> Renewable energy sources like solar and wind, which generate negligible amounts of carbon dioxide,<sup>16</sup> comprise seven percent of America's total energy production portfolio.<sup>17</sup> Of the remaining "low-carbon" power sources, hydroelectric comprised an additional six percent, and nuclear 19 percent.<sup>18</sup> Germany, by contrast, produced nearly 23 percent of its power via renewable sources (not including hydroelectric or nuclear) in 2014.<sup>19</sup>

Recently, several nearly identical Senate bills, endorsed by environmental groups,<sup>20</sup> have attempted to establish a yearly federal renewable energy benchmark that would require US renewable energy production to reach 25 percent of total production by 2025.<sup>21</sup> In ten years, America would need to add enough capacity to provide another 18 percent of total power production. To the extent this is wind power, it is likely to be concentrated on the Great Plains of the Midwest, and require long distance power transmission lines to urban areas.

If these projects were initiated today, we assume that environmental review and permitting for these renewable sources and transmission lines would average eight years, or a six-year lag in meeting our renewables goal. Based on replacing a proportionate share of each carbon-emitting power source, delaying an additional six years the added 18 percent of renewable power results in 367 million tons of carbon dioxide released in each of those years—assuming the renewable sources replaced non-renewable sources in proportion to their current share of production.<sup>22</sup>

As noted above, power disruption losses are attributable to both inadequate generation as well as the antiquated grid, and total \$150 billion per year. We assume here that half of those business disruption losses come from obsolete generation.

Delaying approvals by six years also increases construction costs of improving generation capacity by 30 percent. The total cost to update generation capacity through 2020 is \$189 billion,<sup>23</sup> not including any additional potential costs imposed by adding an increased proportion of renewable energy sources to overall production. Here we assume that all new generation-related projects will require environmental review and complex permitting.

*Approximate costs of delay in introducing renewable energy sources and modernizing generation:*

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**Environmental losses:** 367 million tons of CO<sub>2</sub> x \$116/ton x six years = \$255 billion

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**Disruption losses:** 50 percent x \$150 billion x six years = \$450 billion

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**Increase in rebuilding costs from six-year delay:** \$189 billion x 30 percent = \$56.7 billion

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**Total costs of six-year delay in rebuilding and expanding generation:** \$760 billion

### **C. Inland waterways.**

America's outdated system of inland freight shipping networks, comprising thousands of miles of rivers and canals, and thousands of dams and locks, experienced 52 delays per day in 2009, and a total of 25 years worth of delay time in 2011.<sup>24</sup> A 2012 ASCE report estimated the cost of this delay at \$33 billion in 2010, and speculated that this cost would increase to nearly \$49 billion annually by 2020.<sup>25</sup>

These delays cause far more losses than the costs of new and rehabilitated infrastructure. A 2012 National Waterways Foundation study concluded that each year of construction delay for new projects resulted in lost efficiencies amounting to 37 cents for every dollar in the ultimate investment; six years of delay effectively triples the cost of the investment.<sup>26</sup>

The total cost to fully modernize and rehabilitate our inland waterways network is \$18 billion.<sup>27</sup> Here we assume that the project mix, which primarily involves dredging and lock replacement or expansion, would involve environmental review or complex permitting requirements in nearly every case.

*Approximate costs of delay in rebuilding inland waterways:*

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**Direct costs of delay:** \$33+ billion per year x six years = \$222 billion<sup>28</sup>

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**Increase in rebuilding costs from six-year delay:** \$18 billion x 30 percent = \$5.4 billion

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**Total costs of six-year delay in rehabilitating inland waterways:** \$227.4 billion

### **D. Roads and bridges.**

The ASCE's 2013 Infrastructure Report Card estimates that congestion on US roads costs motorists \$101 billion annually from lost time and wasted fuel.<sup>29</sup> Of that, 45 percent is attributable to "recurrent" congestion sources, including inadequate capacity and poor signaling design that stem from infrastructure deficiencies.<sup>30</sup>

The degradation of America's bridge inventory is reaching a crisis point: Over ten percent of US bridges are structurally deficient, and nearly one in seven are functionally obsolete.<sup>31</sup> The average American bridge is 43-years-old, with a 50-year service life.<sup>32</sup> Delay in rebuilding bridges is dangerous, and further deterioration drives up costs. Because of decades of neglect and delay, the cost of repairing the Williamsburg Bridge in New York City ballooned tenfold to \$800 million.

The fuel wasted by congestion imposes additional environmental costs. A 2012 Treasury Department report found that traffic congestion wasted 1.9 billion gallons of gasoline yearly.<sup>33</sup> At approximately 20 pounds of carbon dioxide per gallon,<sup>34</sup> 38 billion pounds of carbon dioxide (19 million tons) is emitted due to congestion, at a social cost of \$2 billion annually.<sup>35</sup> As above, we assume 45 percent of this congestion-related pollution is due to deficient infrastructure.

Delay also increases direct construction costs. The Port Authority of New York and New Jersey concluded that five years of delay in replacing the Goethals Bridge could require \$200 to \$700 million in additional costs due to the need for interim deck repairs. To avoid these interim repairs, the Port Authority is rebuilding the Goethals Bridge with a private partner who is financing the project with its own equity, and a combination of low-interest TIFIA loans and Private Activity Bonds; the Port Authority will not begin paying the private partner until the bridge is near substantial completion, while accelerating construction of a new replacement bridge.<sup>36</sup>

The American Association of State Highway and Transportation Officials estimates an annual cost of \$162 billion through 2020 to improve American roads to an acceptable level.<sup>37</sup> However, of that figure, \$85 billion annually is required merely to repair the physical condition of existing roads<sup>38</sup>; these projects rarely implicate environmental review or complex permitting concerns, and are not counted here. The total cost to repair all needed bridges in the US is estimated at \$121 billion.<sup>39</sup>

*Approximate costs of delay in rebuilding roads and bridges:*

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**Congestion costs of delay:** 45 percent x \$101 billion x six years = \$270 billion

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**Environmental losses:** 19 million tons of CO<sub>2</sub> x 45 percent x six years x \$116 = \$6 billion

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**Increase in rebuilding costs from six-year delay:** \$385 billion (roads) + \$121 billion (bridges) x 30 percent = \$151.8 billion

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**Total costs of six-year delay in rebuilding roads and bridges:** \$427.8 billion

## **E. Rail.**

Freight bottlenecks resulting from insufficient rail capacity cost the economy over \$200 billion a year, according to the ASCE.<sup>40</sup> These costs will only increase as more freight is moved over US railways, and the Department of Transportation projects a 32 percent increase in rail-based freight tonnage by 2040.<sup>41</sup> Inadequate infrastructure compounds these problems in denser areas like Chicago, where the average freight train requires 30 hours to traverse the city.<sup>42</sup> Bottlenecks create a cascading effect of systemic slowdowns, further exacerbating the costs. According to a report from the Center for American Progress:

Due to these inefficiencies, larger and larger numbers of trucks are forced to haul freight that rail cannot accommodate, producing ever-increasing congestion on a highway system that already robs American drivers of 4.8 billion hours in wasted time every year. Inadequate rail infrastructure forces passenger vehicles to share congested roads with 39,000 trucks from the ports of Los Angeles and Long Beach on a daily basis, while in New York City, port container traffic results in 13,000 truck trips per day on the highways in and around the city.<sup>43</sup>

Rail-based freight transportation is over four times as fuel efficient as truck-based transport, meaning these bottlenecks, and the diversion to trucks that they necessitate, create significant environmental impacts as well.<sup>44</sup>

Experts estimate the total cost of repairing America's rail infrastructure at \$100 billion through 2020.<sup>45</sup> Here, we assume that 75 percent of projects, including adding extra rail lines, bridge rehabilitation, tunnel expansion, and port railyard improvements, would potentially involve environmental review and permitting delays.

*Approximate costs of delay in rebuilding rail infrastructure:*

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**Congestion costs of delay:** \$200 billion x six years = \$1.2 trillion

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**Environmental losses:** not readily calculable

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**Increase in rebuilding costs from six-year delay:** \$75 billion x 30 percent = \$22.5 billion

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**Total costs of six-year delay in rebuilding rail infrastructure:** \$1.22 trillion

## **F. Water.**

America's water infrastructure, comprising both drinking water and wastewater, is collectively nearing the end of its service life. The majority of pipes currently in service were installed during population booms in the late 1800s, the 1920s, and the era immediately following World War II.<sup>46</sup> A report by the American Water Works Association put the total cost to replace and expand our water infrastructure at around \$1.7 trillion between now and 2050.<sup>47</sup>

The costs of waiting are hard to quantify but potentially vast. Deteriorating water mains are subject to increased breaks and interruptions, which threaten public health (by compromising water quality), safety (by reducing firefighting flows), and property (by causing flooding and sinkholes).<sup>48</sup> A 2013 report by the Center for Neighborhood Technology estimated that leaky pipes and water mains waste as much as 2.1 trillion gallons of water per year.<sup>49</sup> On average, tap water costs around \$2 per 1,000 gallons in the US,<sup>50</sup> meaning the yearly cost of wasted tap water alone is approximately \$4.2 billion.

Water contamination represents another significant yearly cost. The CDC estimates that waterborne illnesses like cryptosporidiosis, which can enter the drinking water supply through deteriorated infrastructure,<sup>51</sup> cost the economy \$500 million per year.<sup>52</sup> From a 2002 CBO report:

Dramatic incidents in recent years have called attention to the importance of water infrastructure. In 1993, contamination of the Milwaukee water supply by cryptosporidium caused 400,000 cases of gastrointestinal illness and an estimated 50 to 100 deaths.... According to EPA's data, 880 publicly owned treatment works receive flows from 'combined sewer systems' which commingle storm water with household and industrial wastewater and frequently overload during heavy rain or snowmelt. EPA estimates that such overflows discharge 1.2 trillion gallons of stormwater and untreated sewage every year. Even 'sanitary' systems with separate sewers for wastewater can overflow or leak because of pipe blockages, pump failures, inadequate maintenance, or excessive demands. According to a draft EPA report, overflows from sanitary sewers alone result in a million illnesses each year.<sup>53</sup>

In a 2009 report, EPA found that large percentages of the waterways they surveyed were unfit for either human or wildlife use due to wastewater contamination cause by overflows like those described above.<sup>54</sup> Though the environmental effects of inadequate sewer infrastructure are extensive, we are not aware of any calculation of the dollar value of this damage.

A 2013 EPA report estimated that America's drinking water infrastructure would require \$384.2 billion in replacement and rehabilitation expenditures to render it fully safe and functional.<sup>55</sup> However, of that cost, 64 percent involved projects related to transmission and distribution (primarily pipe and main replacement) which we here assume do not implicate significant environmental review or permitting concerns. This leaves \$136.7 billion in drinking water-related construction costs that are vulnerable to review and permitting delay. For wastewater

infrastructure, EPA estimates \$298.2 billion is required to fully restore and modernize our disposal systems nationwide.<sup>56</sup> However, of that, \$82.7 billion is dedicated to pipe repair and replacement, which we do not count here.

*Approximate costs of delay in rebuilding water infrastructure:*

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**Water losses:** \$4.2 billion x six years = \$25.2 billion

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**Health losses:** \$500 million x six years = \$3 billion

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**Environmental losses from wastewater overflow:** N/A but orders of magnitude greater than direct costs

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**Increase in rebuilding costs from six-year delay:** \$136.7 billion (drinking water) + \$215.5 billion (wastewater) x 30 percent = \$105.6 billion

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**Total costs of six-year delay in rebuilding drinking water and wastewater systems:** N/A

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### **G. Total costs of delay on these infrastructure sectors.**

These estimates of six-year delay costs total over \$3.7 trillion. The total cost of modernizing these categories of infrastructure, according to the ASCE, is \$1.7 trillion over the next five years.<sup>57</sup> As a general order of magnitude, bureaucratic delays cause harms and increase costs in an amount that exceeds the total cost of modernizing America's infrastructure. These costs can be adjusted down by a factor of two or three without altering the conclusion that bureaucratic delay is irresponsibly costly, and, indeed, so environmentally harmful as to implicate questions of public morality.

### **3. RETHINKING LEGAL HURDLES TO INFRASTRUCTURE APPROVALS**

The convoluted legal apparatus to permit infrastructure projects has evolved over the last 50 years. Most of the legal requirements, viewed in isolation, are reasonable. Often, however, they are immaterial in the particular situation or actually conflict with other regulatory goals. Typically, they involve many different government departments, at federal, state, and local levels, each of which considers itself the keeper of the flame. In total, they are sometimes so onerous that they discourage projects altogether—a wind farm developer, for example, must decide whether to commit tens of millions of dollars with no assurance that the project will be approved.

There are two broad categories of permitting requirements, which are highly variable from project to project: i) environmental review; and ii) permits from relevant government departments—ranging from the Army Corps of Engineers to the Fish and Wildlife Service to local fire departments. Duplicative environmental reviews and permits are often required on the same project by federal, state, and local governments. A builder of infrastructure must seek approval not from “the government,” but from a dozen or more different arms of the government.

**AS A GENERAL ORDER OF MAGNITUDE, BUREAUCRATIC DELAYS CAUSE HARMS AND INCREASE COSTS IN AN AMOUNT THAT EXCEEDS THE TOTAL COST OF MODERNIZING AMERICA'S INFRASTRUCTURE**

Rationalizing the infrastructure approval process requires new mechanisms to focus decisions on the ultimate public goals and avoid delay.



### A. Focusing environmental review on key impacts.

The federal National Environmental Policy Act (NEPA) requires “agencies to undertake an assessment of the environmental effects of their proposed actions prior to making decisions.”<sup>58</sup> The statute tasks agencies to use “all practicable means, consistent with other essential considerations of national policy, to...improve and coordinate Federal plans” so that “the Nation may...fulfill the responsibilities of each generation as trustee of the environment for succeeding generations...[and] achieve a balance between population and resource use[.]”<sup>59</sup> The statute created CEQ as an arm of the White House tasked with overseeing NEPA and resolving interagency disputes.

**IN PRACTICE, ENVIRONMENTAL REVIEW STATEMENTS OFTEN RUN A THOUSAND PAGES OR MORE. EVEN THE SHORT-FORM “ENVIRONMENTAL ASSESSMENT” CAN RUN TO SEVERAL THOUSAND PAGES.**

NEPA anticipated disclosure of major impacts, not dense academic analyses.

One historian of NEPA reports that “[t]he earliest [environmental impact statements (EISs)] were less than ten typewritten pages in length. They were submitted to the Congress and went unchallenged.”<sup>60</sup> CEQ regulations currently in effect contemplate that environmental reviews will be 150 pages, perhaps up to 300 pages for more complex projects.<sup>61</sup>

In practice, environmental review statements often run a thousand pages or more. Even the short-form “environmental assessment” (EA) can run to several thousand pages. Raising the roadway of the Bayonne Bridge, a project with virtually no environmental impact (it uses existing foundations and right-of-way), resulted in a 10,000-page EA.<sup>62</sup> Thousands more pages were required for the Bayonne Bridge by New York State’s “Smart Growth” requirements, and by New York City’s separate environmental review requirements. In total, including exhibits, the environmental reviews for raising the roadway of the Bayonne Bridge comprised about 20,000 pages.

There was no contemplation in the legislative history of NEPA that environmental review would significantly increase the time and costs of projects.<sup>63</sup> As it has evolved, however, environmental review often consumes five to ten years, and for controversial projects, even longer. The Bayonne Bridge permitting process, as noted, consumed five years. The Cape Wind project was subjected to two full environmental reviews, totaling seven years of work (not counting years of lawsuits that followed).<sup>64</sup> Dredging at the Port of Savannah has been stalled for almost 30 years; the environmental review alone took 14 years.<sup>65</sup>

The length and time of reviews have become progressively longer; a recent study calculated that every year, unsupplemented EISs take a month longer to complete than they did the previous year, while supplemented EIS completion time grows by an average of 110 days each year.<sup>66</sup> Few argue that the dense detail helps decision-making. In most projects, the environmental tradeoffs can be described in simpler analyses that can be completed in a year or less.

The detail and sluggish process of environmental review are driven by three factors.

- i. **Fear of litigation.** Former EPA General Counsel E. Donald Elliott estimates that 90 percent of the detail in environmental review statements is prompted by a desire to cover any issue anyone may complain about. The effect is similar to “defensive medicine”—any conceivable issue that might be raised in litigation is covered in the EIS. A 2006 Congressional report found that “agency concern regarding the threat of litigation still has an effect on the NEPA

process, particularly for complex or controversial projects. A project sponsor may be mindful of previous judicial interpretation when preparing NEPA documentation in an attempt to prepare a ‘litigation-proof’ EIS.”<sup>67</sup> Voluminous detail doesn’t seem to deter litigation, however, because the objectors are typically opposed to the project itself, whatever the quality of review. A lawsuit challenging approval of the Bayonne Bridge argues that review was inadequate, notwithstanding the 10,000-page federal EA. Objections to the quality of review are usually a surrogate for trying to stop the project or for exacting a concession, generally a monetary payment. For the proponent, paying off the objectors is generally less expensive than spending years needed to get to final judgment. Regulators sometimes encourage such payments, in the name of mitigation, to avoid further conflict.<sup>68</sup>

The power of a lawsuit challenging environmental review generally stems not from the merits of the claim but from the uncertainty caused by ongoing litigation—disrupting financing and schedules and putting the project in limbo. The mere possibility of a lawsuit can have that effect. The six-year statute of limitations (for challenges to regulatory decisions under the Administrative Procedure Act) hangs over projects like a sword of Damocles. Project proponents sometimes initiate litigation themselves, just to get the clock started.<sup>69</sup>

- ii. **No decisionmaker.** The second factor contributing to lengthy environmental review is the void of authority: No environmental official has the job of deciding the scope and adequacy of review, or resolving other issues around review. In the case of the Bayonne Bridge project, picking the “lead agency” to conduct environmental review took six months.<sup>70</sup> Scoping meetings at the beginning of a project—to get ideas on what issues should be studied—took the better part of a year.<sup>71</sup> Because no one has authority to draw the line, decisions tend to descend to the lowest common denominator—any idea gets included in the environmental review.
- iii. Finally, the **accretion of regulatory requirements** in every subdivision of government also contributes to lengthy review. In the case of the Bayonne Bridge, because of a state law, the EA included a study of possible effects on historic buildings—even though the project used the existing right-of-way and did not touch any private property or homes.<sup>72</sup> Often these regulatory requirements encompass issues that have immaterial impact in the particular project, but still must be studied. In the case of building replacements for the Tappan Zee and Bayonne Bridges, for example, the reviews had to include extensive traffic impact studies even though a bridge already exists and traffic will not materially change.<sup>73</sup>

Lack of focus on materiality is a core defect in the current practice of environmental review. Years are consumed overturning every pebble because of concerns about litigation, the void of anyone in charge, and the accumulation of regulatory requirements. It is true that environmental review as practiced today can be effective to kill a bad project, but it also delays (and sometimes kills) good projects.

America today, facing a crisis of crumbling infrastructure, needs to restore focus of environmental review to important effects, and not let arguments over details delay important projects.

For example, New York has a rail chokepoint coming into Penn Station from New Jersey, with two century-old rail tunnels. These Trans-Hudson tunnels are the only access for all Amtrak and NJ Transit trains into New York City, and provide service for approximately 25 trains per hour during peak periods. A third tunnel is needed to improve reliability and speed of train service. There’s an

urgency to building this third tunnel because one of the existing rail tunnels under the Hudson was severely damaged by Hurricane Sandy and must be closed for repairs within a decade or so. Without the new tunnel, congestion will be horrific when the damaged tunnel is closed for repairs, costing untold billions in delays and extra pollution. The environmental benefits of getting the new tunnel approved and built will far exceed any negative impacts. Situations like these require giving an environmental official authority to focus and expedite environmental review. The goal is to do what's right for the environment, not to harm the environment by wallowing for years in immaterial details.

## **B. Multiple permitting.**

With the growth of government to oversee common choices in a crowded society it is natural that many agencies and departments will have jurisdiction over some aspect of an infrastructure project. In the federal government, environmental protection, surface transportation, aviation, the corps of engineers, fish and wildlife, forest service, coast guard, energy, and communications are just examples of areas of an interconnected regulatory framework. Each of these areas has its own regulations, typically highly prescriptive, and leaving little room for balancing other regulatory concerns.

State and local governments have similar structures, with many jurisdictional subdivisions, each with its own highly prescriptive requirements. Some are unique to state and local government, such as fire codes and certain historic preservation laws. Often they are duplicative of federal requirements—for example, state and local decisions on the desirability of the project. An interstate transmission line carrying power from wind farms in Wyoming to the Pacific Northwest was required to get approval from each county in Idaho which it traverses. Sometimes there are dueling, duplicative environmental reviews. The Savannah River dredging project involved not only multiple federal reviews, but state reviews by both Georgia and South Carolina; after an adverse court ruling in South Carolina,<sup>74</sup> the Army Corps of Engineers had to appeal to the White House and Congress to try to avoid that state's review from scuttling the project.<sup>75</sup>

The overlay of multiple regulatory regimes makes compliance difficult, and sometimes impossible. In one apocryphal incident, a wetlands official suggested that a proposed road go through a nearby forest, while the forestry official suggested the road go through the wetlands. For a transmission line running from Minnesota to Iowa, Iowa insists that land be purchased *before* approvals will be granted, while Minnesota requires upfront approvals before land acquisition. This creates the very real possibility that a project proponent will be trapped by one state into choosing a path for a new line, only to find out that a neighboring state will not approve that path.

Viewed in isolation, most regulatory requirements seem reasonable, or at least plausible. The more detailed they are, however, the more likely it is that specific requirements will conflict with other requirements, or will impede the public interest in some way that could not have been anticipated when the regulation was created. The steady accretion of regulatory requirements means that getting a permit becomes progressively more difficult.<sup>76</sup>

What's missing is a coherent hierarchy of authority in which accountable officials can balance different regulatory interests. Whether to build a certain project ultimately requires a judgment on behalf of the public good. It makes no sense to block or delay an otherwise worthwhile infrastructure project because of noncompliance with a relatively insignificant requirement by one agency.

As will be described, other countries give one agency authority to issue a final permit. This responsibility includes a concept of balancing different regulatory interests. Just as it is impossible to satisfy every interest or concern, it is also virtually impossible to comply with thousands of detailed regulations that apply to a major infrastructure project. Here as well, the objective should be to satisfy major regulatory goals, not let regulatory flyspecking undermine the broader public purpose.

#### 4. COMPARISON OF PERMITTING IN OTHER COUNTRIES

America's competitiveness in a global economy depends on many factors, including the efficiency of its infrastructure. Delays raise costs, harming our ability to compete. Competitors with authoritarian governments such as China have been selectively effective at garnering a competitive advantage through advanced infrastructure. But America's democratic competitors, who similarly value the concept of public participation in governmental decision-making, are also gaining a competitive advantage by redesigning approval processes so that permits for new infrastructure can be approved in less than two years. Germany's approval process is both simple and effective to air issues and get to final decisions. Canada recently overhauled its rules, with a clear path to a two-year process for certain federal projects, and delegation to provinces for most others. Australia is working on an overhaul now.

##### A. Germany.

German environmental review incorporates several key features that promote expediency without sacrificing the quality of the review itself. Scoping and review decisions are concentrated in a single authority, which typically has around six months to complete its review. The review itself is incorporated into a broader "administrative act" which grants or denies the project's application in its entirety, meaning that environmental questions are *not* eligible for independent court review. To the extent that the administrative act itself can be challenged, courts are largely limited to reviewing issues surrounding the limits of agency authority, not specific conclusions reached by agencies.<sup>77</sup> Furthermore, challenges are limited by relatively narrow standing rules and a one-month statute of limitations,<sup>78</sup> and are seen by expert judges of higher administrative courts who engage in their own fact-finding, ensuring speedy resolution of claims.<sup>79</sup> While the right to intervene via lawsuit is relatively narrow, robust public participation is instead fostered through extensive public involvement in initial project development.<sup>80</sup>

The "administrative act" system concentrates the entirety of the infrastructure approval process in a single competent authority; this effectively creates a "one-stop shop" for major projects.<sup>81</sup> For instance, all off-shore wind projects are the sole permitting responsibility of the Federal Maritime and Hydrographic Agency.<sup>82</sup> The designated administrative agency has responsibility for all administrative decisions connected with the approval regardless of which bodies, be they federal or state, would otherwise have responsibility for an individual decision. However, those entities that typically would have authority over the decision have the right to formal hearings to voice their opinions and concerns to the designated authority in the event of disagreement. In this way, Germany promotes expedient, coherent permitting while ensuring that agency expertise is not shut out of the decision-making process.

## B. Canada.

In 2012, the Canadian government passed the Canadian Environmental Assessment Act, 2012 (CEAA),<sup>83</sup> a major reform to the country's federal environmental review regime. For certain projects, the new law shifted Canada to a consolidated model featuring rapid timelines (two years for most federal projects)<sup>84</sup> and ministerial control over ultimate approval.<sup>85</sup> It also significantly reduced the federal government's role in environmental review generally by narrowing the scope of impacts that trigger reviews in the first place. For projects not reviewed under the CEAA, the federal government merely adopts the environmental review (or decision to forgo review) of the relevant province. The new law also significantly narrowed the ability for public challenges to projects by limiting the right to intervene in regulatory hearings to parties "directly affected" by the proposed project.<sup>86</sup>

The federal government also passed reforms to the National Energy Board Act (NEB Act)<sup>87</sup> concurrently with its reforms to environmental review. These energy-permitting reforms vest exclusive federal permitting authority for pipeline projects in the National Energy Board (NEB), and allow the NEB to compel recalcitrant provincial and local jurisdictions to issue relevant permits for projects.<sup>88</sup> The NEB Act also grants federal ministers the authority to override the NEB's refusal to grant approval to projects.<sup>89</sup> These energy-related reforms were generally understood to stem in part from frustrations with the delay and costs surrounding pipeline projects like the Mackenzie Valley Gas Pipeline and the Northern Gateway Pipeline. Both projects required in excess of C\$500 million in permitting and review costs alone,<sup>90</sup> and both took so long to permit that underlying market conditions changed and the pipelines were never built.<sup>91</sup> Because pipeline projects are relatively infrequent, the first project to utilize the new permitting regime is currently wending its way through the system.<sup>92</sup>

The reforms to the CEAA, and in particular the narrowing of the federal role in environmental review for most projects, has been controversial.<sup>93</sup> Following the passage of the new environmental laws, over 3,000 pending federal environmental assessments were immediately canceled,<sup>94</sup> and federal assessment numbers have been reduced since the reforms took effect.<sup>95</sup> However, despite criticisms from some observers,<sup>96</sup> several commentators have concluded that the reforms have reduced bureaucratic delay while maintaining robust environmental protections.<sup>97</sup>

Several provinces have also experimented with consolidated permitting systems for sector-specific projects. For example, the provinces of British Columbia and Alberta have consolidated regulatory decision-making for energy projects, with a single regulatory agency in each province. Historically, energy developments in these provinces required: i) operating approvals from one regulatory agency; ii) environmental permits from another agency or government department (e.g., permits for air emissions, water use, impacts on wildlife, and tree clearing); and iii) land rights for government-owned land from another government department. These separate processes often created inefficiency, delay, and uncertainty when the decisions of different agencies conflicted. To address these concerns, all these permits for oil and gas developments (as well as coalmines in Alberta) are now obtained from a single agency—the Oil and Gas Commission in British Columbia and the Alberta Energy Regulator in Alberta.<sup>98</sup> This consolidation allows companies to make a single integrated application to one regulator to obtain all necessary approvals for a project. Similarly, Ontario established a "one-stop shop" permitting authority for renewable energy projects in 2009.<sup>99</sup>

Though major pipeline projects now utilize a consolidated permitting system, the system for permitting most infrastructure projects is still somewhat balkanized. New bridges and rail lines can expect to require approvals from several different permitting authorities at the federal, provincial, and local level.

### C. Australia.

Australia's Government Productivity Commission recently released a report on public infrastructure which examined, among other things, the role of regulation in the development and maintenance of infrastructure projects. The report concluded that environmental regulation and permitting regimes, while meant to advance worthy goals, were often "over-specified, duplicate existing requirements or are in other ways poorly designed, coordinated and/or administered."<sup>100</sup> According to one major developer, large projects sometimes have to navigate up to 100 approvals across three levels of government and "often have in excess of a thousand conditions."<sup>101</sup> The Port Philip channel-deepening project, for instance, had to comply with 79 federal and state approvals.<sup>102</sup> The project's developer estimated that the costs of environmental requirements have more than doubled since 2004, and that compliance related staffing expenses (not including the costs and price increases from delay) could account for as much as 11 percent of a project's overall cost.<sup>103</sup>

The Commission's many reform recommendations included: i) adopting a "one project, one assessment, one decision" system for environmental review and permitting; ii) increasing cooperation between federal and state/territorial agencies; iii) limiting the right of review of ministerial decisions; iv) establishing timelines for key decisions in the approval process; and v) requiring that agencies publish opinions justifying their approval decisions. As of December 2014, the Australian government indicated it would act on the Commission's report and begin introducing reforms to cut red tape and improve project delivery.<sup>104</sup>

## 5. REFORM ATTEMPTS IN THE US

Various efforts have been made to streamline US infrastructure permitting in the last two decades. With one exception—the MAP-21 law which exempted from review highway projects within existing rights-of-way—the reforms have had only marginal impact. Useful elements of these reforms include shortening the statute of limitations, creating dashboards with time schedules, and designating point people to try to resolve disputes.

Two critical elements are missing from all these streamlining reforms to date, in our view: i) time deadlines are neither firm nor ambitious—i.e., they end up being a marginal improvement from the current tectonic processes; and ii) there is no action-forcing mechanism in the reforms. If one agency decides to drag its heels, then the project will just have to wait. No official has authority to draw lines and keep things moving.

### A. Federal.

There have been numerous attempts since NEPA's passage to streamline both environmental review and federal infrastructure permitting processes.<sup>105</sup> Most, however, have addressed issues in isolation without attempting comprehensive reform.

In the specific arena of transportation infrastructure, three significant pieces of streamlining legislation were enacted in the last 20 years: the Transportation Equity Act for the 21st Century (TEA-21) in 1998; the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005; and the Moving Ahead for Progress in the 21st Century Act (MAP-21) in 2012.<sup>106</sup>

The thrust of TEA-21<sup>107</sup> (1998) was innovative project financing.<sup>108</sup> While it also promised to cut process time, studies show that the average time to complete an EIS increased dramatically in the years following the bill's passage<sup>109</sup> (from 1998 to 2006).<sup>110</sup>

SAFETEA-LU<sup>111</sup> (2005) narrowed the statute of limitations for transportation projects to 180 days from the earlier six-year litigation window, delegated categorical exclusion authority to the states for a limited subset of project types,<sup>112</sup> and created a pilot project wherein five states were granted discretionary authority to assume the Department of Transportation's environmental review powers for highway projects.<sup>113</sup> These reforms proved too narrow to meaningfully affect project delivery timelines; a 2012 Federal Highway Administration study concluded that overall transportation project delay was not meaningfully affected by this legislation.<sup>114</sup>

MAP-21 (2012) expanded categorical exclusion authority to a much broader category of projects, such as those built within existing rights-of-way.<sup>115</sup> Though statistical evidence of MAP-21's effect is limited because the law is relatively new, anecdotal evidence suggests that this particular reform has sped up the review process dramatically for projects within existing rights-of-way. According to the Texas Department of Transportation's Director of Environmental Affairs, Carlos Swonke:

A few years ago there was a project in Houston to widen an existing four-lane road to a six-lane road. No additional right-of-way was needed for the widening. At the time, a full NEPA analysis was needed and an Environmental Assessment was prepared. There were no unusual environmental circumstances about the project. There was no public opposition to the project. The Environmental Assessment took three years for review and approval. The cost to prepare the Environmental Assessment was \$100,000. Today that project could be approved with a Categorical Exclusion in a fraction of that time and at a fraction of that cost.<sup>116</sup>

MAP-21 also expanded SAFETEA-LU's discretionary pilot project to all states, making it a permanent program under which any state can apply to assume environmental review authority from the Department of Transportation for highway projects.<sup>117</sup>

In 2011, President Obama issued a presidential memorandum creating the Federal Infrastructure Project Permitting Dashboard, which monitored major projects selected for presidential fast-tracking and also created a permit and approval inventory.<sup>118</sup> According to the Administration, "Federal agencies have expedited the review and permitting of more than 50 selected infrastructure projects, including 11 energy projects. Thirty-two of these projects have completed the Federal review process, 29 remain under active Federal review, and one project was denied. Estimated time savings range from several months to several years in many cases."<sup>119</sup> This initiative gives the White House a role in putting pressure on recalcitrant agencies, and responded to the plea for streamlined permitting by the President's Council on Jobs and Competitiveness. But the initiative is limited in scope, and, as with the statutes above, it lacks the action-forcing authority needed to substantially reduce the time required for permitting.<sup>120</sup>

Two bills aimed at speeding up non-transportation infrastructure approvals have been introduced in Congress recently: the Responsibly and Professionally Invigorating Development Act (RAPID Act) in 2012 (re-introduced in the Senate in 2014) and the Federal Permitting Improvement Act (FPIA) introduced by Sens. Portman and McCaskill in 2015.<sup>121</sup>

The RAPID Act seeks to remedy delay in federal environmental review generally, by narrowing the scope of review, setting hard deadlines for completion of review (18 months for an EA and 36 months for an EIS), and changing the statute of limitations from six years to 180 days for projects not covered under MAP-21.<sup>122</sup> It also establishes a “get-in or get-out” rule, forcing interested parties to get involved early in a project’s review process to maintain standing to sue later on. Other useful ideas in the bill include allowing environmental reviews to adopt material from previously completed environmental reviews from the same geographic area. Somewhat controversially, the bill provides an action-forcing mechanism that deems a project approved if an agency has not acted within a definite timeframe. Most controversial is a provision that prohibits environmental review from considering the social costs of carbon dioxide emissions. The bill passed the House in March 2014 but has not moved forward beyond that.<sup>123</sup> President Obama has said he will veto the legislation.<sup>124</sup>

The Portman-McCaskill bill, which is supported by environmental and business groups and the White House, would lower the statute of limitations from six years to 150 days for all major projects across all sectors, and would additionally permit courts to consider economic harm in “weighing equitable considerations for injunctive relief.”<sup>125</sup> The bill also creates a Chief Permitting Officer (CPO), to be appointed by the President, who would serve as the head of a new 16-agency Federal Permitting Improvement Council. However, the CPO does not have any actual authority to move projects along, and the bill’s provisions regarding setting timelines and resolving disputes rely on complex processes that we believe are unlikely to significantly improve delivery timetables.

## **B. State reforms.**

Thirty-seven states have adopted formal environmental review requirements based at least in part on NEPA. Of those, 16 have comprehensive environmental review statutes which affect a broad swath of state actions,<sup>126</sup> and several of these states have sought to reform their respective statutes in recent years in an effort to reduce project costs and delivery timelines. Below are two recent reforms that shed light on ways in which reforms can harm as well as help building of new infrastructure.



## i. California

The California Environmental Quality Act (CEQA) mirrors NEPA's procedural requirements, but applies to a significantly larger swath of government actions, and adds a substantive component that requires full mitigation of significant project impacts, if feasible, regardless of whether mitigation would be required under any other environmental protection statute.<sup>127</sup> Its rigidity and complexity have made it a notorious tool for special interest groups to block disfavored projects, regardless of their value to the community as a whole.<sup>128</sup> A note in the *Stanford Law & Policy Review* explained that:

In the past few years, CEQA has come under sweeping scrutiny. Critics allege that CEQA has only exacerbated California's dramatic recession, turning the battle for 'jobs and economic growth...into an agonizing test' as businesses bypass California for states with less burdensome environmental regulations. In addition, CEQA has been employed superfluously and invidiously. For example, one lawsuit delayed San Francisco's painting of new bike lanes by alleging that the lanes 'could cause pollution,' while other CEQA challenges were brought to squeeze out competitors or undesirable projects based on reasons 'unrelated to environmental impacts.'<sup>129</sup>

A variety of reform proposals have been advanced over the years, each focusing on a distinct aspect of CEQA's many problematic aspects, but until recently, none have been successfully enacted.<sup>130</sup> However, when the National Basketball Association's Sacramento Kings franchise threatened to leave for Seattle, California enacted a law to facilitate stadium development in Sacramento which contained two important limitations on the CEQA process.<sup>131</sup> First, it requires that litigation under CEQA be entirely resolved, including appeals, within 270 days of its filing, and compels the state's judicial council to enact rules to guarantee this timeline. Second, it scales back CEQA by eliminating impacts on aesthetics (including "scenic vista[s]"<sup>132</sup>) and parking from consideration as environmental impacts.<sup>133</sup>

## ii. Washington

In 2012, the state of Washington passed a package of reforms aimed at modernizing its State Environmental Policy Act (SEPA). The statute<sup>134</sup> made a number of significant changes to the state's environmental review process, including creating flexible exemptions for small construction projects, full exemptions for projects whose purpose was environmental restoration, and several other concessions to flexibility and project-by-project process requirements. Moreover, the law grants significant authority to local governments to determine appropriate review levels on a per project basis. The law also created an advisory committee whose mandate is to advise the state's Department of Ecology on rulemaking related to SEPA, especially related to the creation of exemptions to the law.<sup>135</sup>

## 6. PROPOSALS TO CREATE A TWO-YEAR APPROVAL PROCESS IN THE US

To rebuild America's infrastructure on an efficient and timely basis, America must first rebuild its outmoded and tangled legal infrastructure. The process of coming up with a coherent and responsible legal approvals system presumably should reflect the same values we want for other public choices: A public goal, a proposal to accomplish it, public debate and input, decisions by responsible public institutions, and accountability mechanisms to safeguard against mistakes.

The goal of reform should not be to tweak the current system but to invent a new system which provides essential review and final approvals within a review period that avoids the economic and environmental harm caused by years-long delays. That period for review and permitting should be no more than two years, except in unusual circumstances.

We propose four major changes in approach:

- A. To improve decisions, including getting ideas for alternatives, public comment should be solicited even before formal plans are finalized, as well as throughout the process. Public input should be informal, and largely through written submissions and informal meetings, not a matter of formal hearings and “building the record.” The value should be in prompting broad public discussion to inform what ultimately should be politically accountable choices, not in providing procedural levers for special interests to delay decisions.
- B. The scope and adequacy of environmental review should be determined by a designated environmental official—probably at CEQ for federal projects. The flyspecking approach should be abandoned, so the review focuses on material issues of impact and possible alternatives, not details. Net overall impact should be the most important finding. Environmental review should generally be completed in no more than a year, and should not be longer than 300 pages, as set forth in current CEQ regulations. Some of these changes can be done by executive order. To avoid arguable jurisdictional conflicts with existing regulations, a new statute should clarify presidential authority over implementation of NEPA.
- C. It is also important to eliminate the fear of litigation that leads project proponents to practice a kind of “defensive medicine” that transforms EISs into multi-thousand page documents. These changes are best done by statute which would: i) require all claims challenging a project to be brought within 90 days of issuance of federal permits; ii) require credible allegations that the review is so inadequate as to be arbitrary or, for permits, that the project violates substantive law; and iii) require that impact be measured against the overall benefit of a project. By executive order, it is also possible to establish prudential guidelines for judicial review, boosting the presumption. Decisions on the wisdom of infrastructure should be made by the executive branch, not the judicial branch.

- D. Multiple permitting must be replaced by a “one-stop shop.” The current regulatory gauntlet at federal, state, and local levels drags approvals out for years and raises costs unnecessarily. Getting a permit from multiple agencies, often with conflicting goals, requires a process akin to negotiating an international treaty. Decisions about infrastructure require balancing of numerous regulatory considerations, and must be made on a timely basis to avoid social and economic harm. If America wants new infrastructure on a timely basis, approvals must be consolidated. This means that government entities must relinquish their veto power. A new statutory framework is required, comparable to the frameworks for federal projects in Germany and Canada. The new framework should preempt state law for interstate projects (similar to the Federal Energy Regulatory Commission’s authority over new gas pipelines), and give the White House authority to designate a single agency to balance regulatory concerns and issue permits for an interstate project.

**Pilot projects.**

Often the resistance to changes in law is fear of “opening the floodgates” in ways that can never be fully anticipated. Any of the proposals set forth above can be done as pilot projects, or for limited categories of projects. For example, the expedited approvals could be available for a period of time (say, five years) and only for projects that CEQ concludes are likely to have a net positive environmental impact.

## CONCLUSION

The status quo is unacceptable. Decrepit infrastructure is dangerous, costly, and environmentally destructive. It drags down the economy.

A new process to modernize America's infrastructure is needed to avoid these costs, stimulate vital sectors of the economy, and create employment for upwards of two million Americans.

The main barrier to an infrastructure initiative is not financing, but an absurdly complex and lengthy permitting system. The legal procedures are haphazard and balkanized, without any coherent lines of authority. Even with funding, modernizing infrastructure is very difficult to achieve under the current system. Any objector can unilaterally delay a project for years.

What is the public benefit of the current process? Do Americans want to pay twice as much for the same projects? Do Americans want to endure inefficient and unsafe infrastructure built by our great-grandparents? Does the current system move the nation forward—or does it leave it languishing in the past? Who, indeed, is accountable in this bureaucratic quagmire? Nobody.

This approvals bureaucracy must be rebuilt, not tweaked. The core goals of environmental review and public participation remain as important as ever. But they must be paired with practical realities of time limits and budgetary constraints, and fit within a structure with clear lines of authority so that decisions can be made and responsible officials held accountable. America needs modern infrastructure, not years of legal process and bickering.

Creating a new approvals system is not hard. Environmental review should focus on material effects. Elected officials must have authority to balance competing interests. Litigation should be limited to claims of illegality, not second-guessing tough choices. Time limits must be honored; otherwise officials will use process as an excuse to avoid responsibility.

Breaking free of the status quo is the hard part. Understandable fears of the unknown make it easy to organize opposition. We cling to the vague hope that years of review and litigation will dictate correct results. But all those years of process mainly produce paralysis.

Responsible officials must be given the authority to make decisions. Those decisions can be checked by other officials, but there must be a clear hierarchy of authority, not a bureaucratic scrum. A free society requires red lights and green lights. Otherwise, as today, we get gridlock.

## ENDNOTES

- 1 USA, Department of Transportation, Federal Highway Administration, *Estimated Time Required to Complete the NEPA Process*, <http://environment.fhwa.dot.gov/strmlng/nepatime.asp>.
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- 91 Mackenzie Valley was first proposed in the 1970s, but shelved until 2004, when the NEB began review. National Energy Board Hearing Order GH-1-2004. By the time the Certificate of Public Convenience and Necessity was issued, the collective cost of the permitting and review process was in excess of C\$500 million, natural gas prices had taken a dramatic dive due to rising shale gas production in the US, and the market had disappeared. Consequently, the project was no longer commercially viable. Northern Gateway faced 11 years of review and legal challenges before final signoff was granted in 2013; the project’s status remains uncertain, but there is widespread speculation that it will also not be built. See, e.g., Geoff Dembicki, “How First Nations Are Gearing Up for Legal Battle Against Gateway,” *The Tyee*, January 30, 2012, <http://thetyee.ca/News/2012/01/30/First-Nations-Gateway-Battle/> and Kai Nagata, “Is Northern Gateway Dead?” *The Tyee*, April 13, 2015, <http://thetyee.ca/Opinion/2015/04/13/Northern-Gateway-Dead/>. Prior to the CEAA’s passage, Joe Oliver, Canada’s Minister of Natural Resources, wrote a furious open letter in which he accused environmental groups of attempting to “hijack” the country’s natural resources by blocking projects like Northern Gateway (which he declined to mention by name in the letter). “An Open Letter from the Honourable Joe Oliver, Minister of Natural Resources, on Canada’s Commitment to Diversify Our Energy Markets and the Need to Further Streamline the Regulatory Process in Order to Advance Canada’s National Economic Interest,” letter from Joe Oliver, January 9, 2012, <http://www.nrcan.gc.ca/media-room/news-release/2012/1/1909>.
- 92 Kinder Morgan’s Trans Mountain Expansion Project, carrying oil from Edmonton, AB to Burnaby, BC. The project is a “designated project” under CEAA because it will require 40 KM of new pipeline. The NEB is, therefore, the responsible authority for carrying out the environmental review and regulatory review under the new rules. The project has proceeded relatively smoothly through the review process thus far. See, e.g., Kinder Morgan, *Trans Mountain: Regulatory Process*, accessed August 8, 2015, <http://www.transmountain.com/regulatory-process>. However, there has been some measure of controversy surrounding the opportunity for public comment. See, e.g., Eugene Kung, “Investors Ask: Is Trans Mountain Becoming the New Keystone?” *West Coast Environmental Law* (blog), May 21 2014, <http://wcel.org/resources/environmental-law-alert/investors-ask-kinder-morgan-transmountain-pipeline-new-keystone>.
- 93 Some commentators have suggested that the broad grant of discretion afforded the Environmental Assessment Agency under the CEAA will *increase* the overall amount of environmental litigation due to the uncertainty created by this new system. Robert B. Gibson, “In Full Retreat: The Canadian Government’s New Environmental Assessment Law Undoes Decades of Progress,” *Impact Assessment and Project Appraisal* 30, no.1 (2012): p. 179.
- 94 Dennis Kirchhoff and Leonard J.S. Tsuji, “Reading Between the Lines of the ‘Responsible Resource Development’ Rhetoric: The Use of Omnibus Bills to ‘Streamline’ Canadian Environmental Legislation,” *Impact Assessment and Project Appraisal* 32, no. 2 (2014): p. 110.

- 95 From over 5,500 assessments in 2011 to just 96 in 2014. See Canada, Environmental Assessment Agency, accessed August 5, 2015, <https://www.ceaa-acee.gc.ca/052/plus-eng.cfm>. Note that while total assessments have dropped precipitously, the bulk of the drop is comprised of preliminary screenings; full assessments, and assessments referred to expert panels or mediation, have decreased more modestly.
- 96 See Jeffery L. Barnes and John Boyle, “The Weak Link in EIA Effectiveness: Challenges in Process Administration,” presented at IAIA15: Impact Assessment in the Digital Era, Florence, Italy 2015.
- 97 See, e.g., Jeffery L. Barnes and George Hegmann, “It’s Not the End of EA in Canada!,” presented at IAIA13: Impact Assessment: The Next Generation, Calgary, Canada 2013.
- 98 See Canada, British Columbia Oil and Gas Commission, accessed August 5, 2015, <https://www.bcogc.ca> and Canada, Alberta Energy Regulator, accessed August 5, 2015, <https://www.aer.ca>.
- 99 See Canada, Ontario Ministry of Energy, Renewable Energy Facilitation Office, accessed August 5, 2015, <http://www.energy.gov.on.ca/en/renewable-energy-facilitation-office/>.
- 100 Australia, Productivity Commission, *Public Infrastructure: Inquiry Report Volume 1* (Canberra, 2014), [http://www.pc.gov.au/\\_data/assets/pdf\\_file/0003/137280/infrastructure-volume1.pdf](http://www.pc.gov.au/_data/assets/pdf_file/0003/137280/infrastructure-volume1.pdf).
- 101 Australia, Productivity Commission, *Public Infrastructure, Inquiry Report Volume 2* (Canberra, 2014), [http://www.pc.gov.au/\\_data/assets/pdf\\_file/0005/137282/infrastructure-volume2.pdf](http://www.pc.gov.au/_data/assets/pdf_file/0005/137282/infrastructure-volume2.pdf).
- 102 Ibid.
- 103 Ibid.
- 104 Australia, Minister for Infrastructure and Regional Development, “Fixing Australia’s Infrastructure System,” news release, December 1, 2014, [http://minister.infrastructure.gov.au/jb/releases/2014/December/jb130\\_2014.aspx](http://minister.infrastructure.gov.au/jb/releases/2014/December/jb130_2014.aspx).
- 105 As far back as 1979, EPA attempted to consolidate its permitting regulations. Tony Kish, “EPA Consolidation of Permits Proposal—Regulatory Workhorse or Bureaucratic Nightmare?” *Journal (Water Pollution Control Federation)* 52, no. 2 (February 01, 1980): pp. 229-234. By 1983, however, EPA pulled the plug on the reform, citing increased confusion. Karl S. Coplan, “Of Zombie Permits and Greenwash Renewal Strategies: Ten Years of New York’s So-Called Environmental Benefit Permitting Strategy,” *Pace Environmental Law Review* 22, no. 1 (Spring 2005): n. 63: “The major amendments to the EPA permitting procedures were adopted in 1979, when EPA sought to combine the regulations for permitting for Resource Conservation and Recovery Act, 42 U.S.C. § 6925 and the Underground Injection Control (UIC) program with those for Clean Water Act permits, See 44 Fed. Reg. 32,854 (June 7, 1979), and again in 1983, when EPA ‘deconsolidated’ these regulations based on the confusion caused by the consolidated regulations. See 48 Fed. Reg. 14,146 (Apr. 1, 1983).”
- 106 The Transportation Equity Act for the 21st Century, Pub. L. No. 105-178 (1998). Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, Pub. L. No. 109-159 (2005). Moving Ahead for Progress in the 21st Century Act, Pub. L. No. 112-141 (2012). See also USA, Department of Transportation, Federal Highway Administration, *Environmental Review Toolkit*, Program Overview, accessed April 2015, <http://environment.fhwa.dot.gov/strmlng/index.asp#history>.
- 107 USA, Department of Transportation, Federal Highway Administration, *Transportation Equity Act for the 21st Century*, April 5, 2011, A Summary—Protecting Our Environment, <http://www.fhwa.dot.gov/tea21/sumenvir.htm>.
- 108 TEA-21’s primary purpose was to establish new financing programs such as Direct Federal Credit to encourage the private sector to play a larger role in transportation infrastructure delivery. USA, Department of Transportation, Federal Highway Administration, *Transportation Equity Act for the 21st Century*, April 5, 2011, A Summary—Rebuilding America’s Infrastructure, <http://www.fhwa.dot.gov/tea21/suminfra.htm>.
- 109 American Council of Engineering Companies, “Engineers Praise the Successes of the Transportation Equity Act for the 21st Century (TEA-21),” news release, PR Newswire, <http://www.prnewswire.com/news-releases/engineers-praise-the-successes-of-the-transportation-equity-act-for-the-21st-century-tea-21-73990682.html?G1Ref>.
- 110 Piet DeWitt and Carole A. DeWitt, “How Long Does It Take to Prepare an Environmental Impact Statement?” *Environmental Practice* 10, no. 4 (December 2008): p. 164.
- 111 28 U.S.C. § 2401(a).
- 112 Examples including landscaping, noise barrier installation, and construction of bike lanes. 23 C.F.R. 771.117(c).
- 113 USA, Department of Transportation, Federal Highway Administration, *Fact Sheets on Highway Provisions*, Environmental Review Process, accessed July 7, 2015, <http://www.fhwa.dot.gov/safetealu/factsheets/enviroreview.htm>.

- 114 USA, Department of Transportation, Federal Highway Administration, *Estimated Time Required to Complete the NEPA Process*, <http://environment.fhwa.dot.gov/strmlng/nepatime.asp>.
- 115 USA, Department of Transportation, Federal Highway Administration, *Moving Ahead for Progress in the 21st Century*, July 17, 2012, Accelerating Project Delivery, <http://www.fhwa.dot.gov/map21/summaryinfo.cfm>: “One area in particular that MAP-21 focuses on to speed up project delivery is expanded authority for use of categorical exclusions (CEs). ‘Categorical exclusion’ describes a category of actions that do not typically result in individual or cumulative significant environmental impacts. CEs, when appropriate, allow Federal agencies to expedite the environmental review process for proposals that typically do not require more resource-intensive Environmental Assessments (EAs) or Environmental Impact Statements (EISs). In addition to those currently allowed, MAP-21 expands the usage of CEs to a variety of other types of projects, including multi-modal projects, projects to repair roads damaged in a declared disaster, projects within existing operational right-of-way, and projects receiving limited Federal assistance. To assess the impact of the above changes, the Secretary will compare completion times of CEs, EAs and EISs before and after implementation.”
- 116 Carlos Swonke, testimony before the House Subcommittee on Highways and Transit, *Case Studies of the Federal Environmental Review and Permit Process*. 113th Cong., 2nd sess., September 9, 2014, <http://docs.house.gov/meetings/PW/PW12/20140909/102613/HHRG-113-PW12-Wstate-SwonkeC-20140909.pdf>. Note, however, that in many urban areas, national environmental groups will strategically generate opposition to projects in an effort to obtain either precedent-setting court decisions or significant financial settlements, and the categorical exclusion review process is often avoided because it is more likely to generate grounds for environmental lawsuits than the fuller EA or EIS process. Interview with Joann Papageorgis, Program Director, Bayonne Bridge Navigational Clearance Program, The Port Authority of New York and New Jersey, June 2015.
- 117 USA, Department of Transportation, Federal Highway Administration, *Environmental Review Toolkit*, Highlights of Environmental Provisions, accessed July 7, 2015, [http://www.environment.fhwa.dot.gov/strmlng/es2safetealu.asp#sec\\_6005](http://www.environment.fhwa.dot.gov/strmlng/es2safetealu.asp#sec_6005). MAP-21’s other significant reforms focus on the environmental review process by facilitating earlier coordination between stakeholders and authorities, and allowing for certain planning documents to be adopted in to the final environmental review document to avoid duplication. USA, Department of Transportation, Federal Highway Administration, *Moving Ahead for Progress in the 21st Century*, July 17, 2012, Accelerating Project Delivery, <http://www.fhwa.dot.gov/map21/summaryinfo.cfm>. The latter process has been described as “very complex.” American Association of State Highway and Transport Officials, *Moving Ahead for Progress in the 21st Century Act*, MAP21: Accelerating Project Delivery, Report to the RSC, <http://map21.transportation.org/Pages/Analysis.aspx>. The legislation also creates mechanisms to set deadlines for decision-making within the process, and even creates a penalty structure for agencies which fail to adhere to the process; agencies can be fined tens of thousands of dollars per day for failing to render decisions within the established timeframes. American Association of State Highway and Transport Officials, *MAP-21: Overview of Project Delivery Provisions*, June 10 2014, [http://map21.transportation.org/Documents/MAP-21\\_Overview-06-10-2014\\_FINAL.pdf](http://map21.transportation.org/Documents/MAP-21_Overview-06-10-2014_FINAL.pdf). However, this provision is riddled with loopholes, and requires agencies to penalize themselves if they violate a deadline. Additionally, MAP-21 further reduced the statute of limitations imposed by SAFETEA-LU, from 180 days to 150 days.
- 118 USA, White House, *Federal Infrastructure Projects Permitting Dashboard*, Permit Inventory, accessed January 25, 2015, <http://www.permits.performance.gov/permit-inventory>.
- 119 USA, White House, *Presidential Memorandum—Speeding Infrastructure Development Through More Efficient and Effective Permitting and Environmental Review*, August 31, 2011, <https://www.whitehouse.gov/the-press-office/2011/08/31/presidential-memorandum-speeding-infrastructure-development-through-more>.
- 120 Other executive initiatives to improve siting and permitting include new pre-application procedures for onshore electric transmission lines. In addition, the Department of the Interior and Department of Agriculture are reviewing the Western energy rights-of-way corridors. Interior is also reviewing its mitigation procedures. Other agency initiatives include: “(1) NEPA node; (2) the Fish and Wildlife Service Information, Planning, and Conservation Tool; (3) the Environmental Protection Agency’s NEPA assist; (4) the Eastern Interconnection States Planning Council Energy Zones Mapping Tool; (5) the Army Corps’ Federal Support Toolbox; (6) the Western Governors’ Associations’ Crucial Habitat Assessment Tool; and (7) the National Oceanic and Atmospheric Administration’s Social Vulnerability Index.” USA, Department of Energy, Office of Energy Policy and Systems Analysis, *Quadrennial Energy Review: Energy Transmission, Storage, and Distribution Infrastructure*, April 2015, Chapter 9, [http://energy.gov/sites/prod/files/2015/05/f22/QRER%20Full%20Report\\_o.pdf](http://energy.gov/sites/prod/files/2015/05/f22/QRER%20Full%20Report_o.pdf).
- 121 Responsibly and Professionally Invigorating Development Act, H.R. Res. 4377, 112 Cong. (2012). Responsibly and Professionally Invigorating Development Act of 2014, S. 2641, 113 Cong. (2014). Regulatory Fairness Act of 2014, S. 2156, 113 Cong. (2014). Federal Permitting Improvement Act of 2015, S. 280, 114 Cong. (2015).

- 122 Responsibly and Professionally Invigorating Development Act of 2014, S. 2641, 113 Cong. (2014).
- 123 For a summary of the original legislation, see Office of US Rep. Dennis Ross, “Dennis Ross Supports a ‘Balanced Approach’” news release, April 18, 2012, <http://dennisross.house.gov/news/documentsingle.aspx?DocumentID=290656>.
- 124 USA, Executive Office of the President, Office of Management and Budget, *Statement of Administration Policy*, March 5, 2014, [https://www.whitehouse.gov/sites/default/files/omb/legislative/sap/113/saphr2641r\\_20140305.pdf](https://www.whitehouse.gov/sites/default/files/omb/legislative/sap/113/saphr2641r_20140305.pdf).
- 125 Office of US Sen. Rob Portman, “Portman and McCaskill Introduce Federal Permitting Improvement Act of 2015,” news release, January 28, 2015, <http://www.portman.senate.gov/public/index.cfm/2015/1/portman-and-mccaskill-introduce-federal-permitting-improvement-act-of-2015>.
- 126 USA, Executive Office of the President, Council on Environmental Quality, *State NEPA Contacts*, accessed July 15, 2015, [http://energy.gov/sites/prod/files/2013/09/f2/States\\_NEPA\\_Like\\_22June2013.pdf](http://energy.gov/sites/prod/files/2013/09/f2/States_NEPA_Like_22June2013.pdf). The remaining 21 states have environmental review requirements that are limited to specifically defined actions or project types.
- 127 Kevin T. Haroff, “California Revisits CEQA, the State’s Controversial Environmental Review Statute,” *Marten Law Newsletter*, January 28, 2013, <http://www.martenlaw.com/newsletter/20130128-california-ceqa-statute-revisited>.
- 128 Ibid.
- 129 Alexander J. Kasner, “Arena Development and Environmental Review Reform Under SB 743,” *Stanford Law & Policy Review* 25, no. 203 (April 28, 2014): p. 204, [http://journals.law.stanford.edu/sites/default/files/stanford-law-policy-review/print/2014/01/kasner\\_25\\_stan.\\_l.\\_poly\\_rev\\_203.pdf](http://journals.law.stanford.edu/sites/default/files/stanford-law-policy-review/print/2014/01/kasner_25_stan._l._poly_rev_203.pdf).
- 130 Gov. Jerry Brown famously described the political impossibility of CEQA reform, calling it “the Lord’s work.” *Supra* note 119. California *did* enact a statute (AB 900) granting fast-track review and litigation status to projects that were both environmentally sound and likely to create jobs, but a state judge ultimately ruled significant portions of the law unconstitutional. *Conservation League v. State of California*, No. RG1262904 (Alameda Sup. Ct. 2013).
- 131 Summer ParkerPerry, “Kings’ Local CEQA Bill Felt Statewide,” *Capitol Weekly*, October 31, 2013, <http://capitolweekly.net/kings-ceqa-transit-infill/>.
- 132 USA, California Resources Agency, *2012 California Environmental Quality Act: Statute and Guidelines*, January 1, 2012, Appendix G, [http://resources.ca.gov/ceqa/docs/CEQA\\_Handbook\\_2012\\_wo\\_covers.pdf](http://resources.ca.gov/ceqa/docs/CEQA_Handbook_2012_wo_covers.pdf).
- 133 Within weeks of the bill’s passage, California’s Office of Planning and Research identified over 100 projects statewide that would be eligible for SB 743’s streamlined CEQA process. *Supra* note 123. The city of San Francisco concluded that virtually every project within its borders would qualify. See *CEQA Update: Senate Bill 743 Summary—Aesthetics, Parking and Traffic*, Viktoriya Wise to San Francisco Planning Commission, November 26, 2013, [http://sfmea.sfplanning.org/CEQA\\_Update-SB\\_743\\_Summary.pdf](http://sfmea.sfplanning.org/CEQA_Update-SB_743_Summary.pdf).
- 134 Second Engrossed Substitute Senate Bill No. 6406 (chapter 1, Laws of 2012 1st sp. sess.), [http://lawfilesexternal.wa.gov/biennium/2011-12/Pdf/Bills/Senate\\_Passed\\_Legislature/6406-S.PL.pdf](http://lawfilesexternal.wa.gov/biennium/2011-12/Pdf/Bills/Senate_Passed_Legislature/6406-S.PL.pdf).
- 135 Ibid. There is very little commentary on or analysis of SB 6406’s impact within Washington since its passage. However, what little there is shows significant promise. For instance, Snohomish County recently prepared an internal report analyzing SB 6406’s grant of authority to local governments, and found that the law will “significantly reduce the duplication and administrative costs of environmental review while still providing protection of the environment and strong public participation during the permitting process.” *SEPA Code Update Project*, Alison Bridges to Snohomish County Planning Commission, May 13, 2015, <http://www.snohomishcountywa.gov/DocumentCenter/View/24814>. Since 1970, the state has employed a “one-stop shop” system for siting and permitting of energy projects, via its Energy Facility Site Evaluation Council. See USA, State of Washington, Energy Facility Site Evaluation Council, accessed July 28, 2015, <http://www.efsec.wa.gov/council.shtml>.

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## ABOUT THE AUTHOR

Philip K. Howard is a well-known leader of government and legal reform in America. His new book, *The Rule of Nobody*, has been praised by Fareed Zakaria as “an utterly compelling and persuasive book that, if followed, could change the way America works.” He is also author of the bestseller *The Death of Common Sense* and *Life Without Lawyers*. He is Chair of Common Good, Senior Counsel at Covington & Burling LLP, and has advised two presidents and numerous public officials on legal and regulatory reform.

His TED Talk has been widely watched and distributed, and he has appeared on, among other shows, *NewsHour* and *The Daily Show with Jon Stewart*. Howard became active in government reform through his many years as a civic leader in New York.



One Metrotech Center, Suite 1703, Brooklyn, NY 11201  
Phone 212.681.8199  
[www.commongood.org](http://www.commongood.org)  
Email [commongood@commongood.org](mailto:commongood@commongood.org)