



Final Report

From Vetocracy to Capacity: Rebalancing State Power and Stakeholder Interests in American Infrastructure Development

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16. Abstract Abstract This paper examines the institutional and regulatory factors driving excessive delays and cost overruns in American transportation infrastructure development. The United States faces a paradox: despite being one of the wealthiest nations globally, it has become increasingly unable to build critical infrastructure efficiently, with costs often two to three times higher than peer nations and timelines extending decades beyond initial projections. Through analysis of historical development paradigms and contemporary case studies, the report identifies four interconnected sources of dysfunction: an environmental review process that has evolved into a series of litigation-prone veto points, diminished state capacity leading to over-reliance on private consultants, procurement practices that incentivize underbidding and subsequent litigation, and a fractured institutional environment that fosters interagency conflict. The paper argues that these problems reflect a transition from the muscular state-led development of the New Deal era to today's "vetocracy," where procedural requirements and interest group opposition routinely override broader public interests. The paper then proposes a series of institutional reforms focused on tempering NEPA and judicial review, coordinating government response through lead agencies, making design and procurement more flexible, and rebuilding state expertise. These reforms would rebalance power between government actors and opposition groups without abandoning essential environmental and community protections. We conclude that America's infrastructure challenges require not just increased funding, but a fundamental reconsideration of how institutional arrangements structure decision-making and mediate competing interests in the development process.			
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Executive Summary

The United States possesses one of the most limited mass transit systems in the developed world—a consequence not merely of historical policy choices, but of a development process that systematically undermines efficient infrastructure construction. While infrastructure costs have risen globally, the United States is uniquely ineffective at delivering projects on-time and on-budget among large, industrialized economies. Building one kilometer of heavy rail costs twice as much in the U.S. as in Germany and three times as much as in Sweden and Japan. These inefficiencies extend beyond transit to highways and other projects, creating fundamental obstacles to economic mobility and quality of life for citizens across the country.

This dysfunctional system stems from four interconnected problems. First, the environmental review process mandated by NEPA has evolved from a process offering legitimate protections into a series of veto points where opposition groups can effectively challenge projects through prolonged litigation, regardless of broader public benefit. Second, the hollowing out of expertise within transportation agencies has created dependency on profit-driven consultants and contributed to inflated labor costs—which now constitute 40-60% of total project costs compared to just 19-30% in peer nations. Third, prevailing design and procurement practices actively incentivize contractors to secure projects with artificially low bids, only to later extract additional funds through change orders and litigation. Finally, America's fractured institutional landscape creates perverse political incentives where infrastructure projects become vulnerable to jurisdictional turf wars and the shifting priorities of elected officials, rather than being evaluated on their technical merits.

The combination of these factors produces a self-reinforcing cycle where rising costs galvanize opposition, reduce political will, trigger further delays, and sometimes kill projects entirely. This results in a development paradigm biased toward incrementalism rather than transformative projects that could enhance regional productivity and improve daily life.

To address these systemic failures, this report propose four core reforms:

1. **Temper NEPA and judicial review** by implementing categorical exclusions for high-priority projects, imposing strict deadlines and page limits on environmental studies, and shortening statutes of limitations for infrastructure projects.
2. **Coordinate and centralize government response** by assigning lead agencies with authority to align regulations and clarify jurisdictions, while developing national infrastructure frameworks that guide cohesive development patterns.
3. **Make design and procurement more flexible** by awarding contracts based on multiple factors beyond cost alone, using itemized rather than lump-sum contracts, and establishing clear processes for change orders that minimize litigation.
4. **Restore state capacity** by developing an ecosystem of industry professionals with competitive salaries who can carry expertise across projects, standardize components, and properly manage contractors, courts, and other agencies.

These reforms recognize that we need not choose between the unconstrained development of the New Deal era and today's process-heavy “vetocracy”. Rather, we can create institutional arrangements that balance a muscular, development-oriented state with genuine protections for places and lifestyles that are worth preserving. This new paradigm would deliver transformative projects while ensuring democratic input is channeled constructively—not as a tool for indefinite obstruction, but as a mechanism for creating infrastructure that genuinely serves the public interest.

Abstract

This paper examines the institutional and regulatory factors driving excessive delays and cost overruns in American transportation infrastructure development. The United States faces a paradox: despite being one of the wealthiest nations globally, it has become increasingly unable to build critical infrastructure efficiently, with costs often two to three times higher than peer nations and timelines extending decades beyond initial projections. Through analysis of historical development paradigms and contemporary case studies, the report identifies four interconnected sources of dysfunction: an environmental review process that has evolved into a series of litigation-prone veto points, diminished state capacity leading to over-reliance on private consultants, procurement practices that incentivize underbidding and subsequent litigation, and a fractured institutional environment that fosters interagency conflict. The paper argues that these problems reflect a transition from the muscular state-led development of the New Deal era to today's "vetocracy," where procedural requirements and interest group opposition routinely override broader public interests. The paper proposes a series of institutional reforms focused on tempering NEPA and judicial review, coordinating government response through lead agencies, making design and procurement more flexible, and rebuilding state expertise. These reforms would rebalance power between government actors and opposition groups without abandoning essential environmental and community protections. We conclude that America's infrastructure challenges require not just increased funding, but a fundamental reconsideration of how institutional arrangements structure decision-making and mediate competing interests in the development process.

Introduction

The United States possesses one of the most limited mass transit systems in the developed world. Whether one considers its aging passenger rail corridors, limited metro systems, or overburdened bus networks, many Americans who rely on transit must grapple with inconsistent service or long headways, often resulting in trip times that far exceed what many are willing to endure. Since the mid-20th century, the country has pursued an autocentric development policy, laying the foundation not only for the geography of its transport corridors, but also its housing plans, commercial networks, energy infrastructure, and recreational spaces. When mobility is limited by poor or non-existent transit services, the availability of quality food, education, jobs, and healthcare becomes mediated by one's zip code.

The dependence of American society on the automobile cannot merely be understood as a consequence of federal policies that favored cars in the immediate postwar era, but also as a function of wider development trends that have uniquely undermined the construction of robust transportation infrastructure in the United States for the last half century. Indeed, while the real costs of megaprojects have increased worldwide over this time period, the United States stands alone among large, industrialized economies for its inability to deliver infrastructure projects on-time and on-budget. Building one kilometer of heavy rail in the United States costs twice as much as it does in Germany, and three times as much as in Sweden and Japan.¹ Only five countries in the world have more expensive rail development costs on a per-mile basis, all of which collectively have a much greater proportion of expensive, tunneled track than the U.S.²

High costs for transportation infrastructure development often accompany exceedingly long and frequently delayed project timelines. Horror stories are common in the industry. The L.A. to San Francisco high-speed rail (HSR) project was projected to cost \$33 billion and be completed by 2020. It is now expected to be completed in 2033 at \$100 billion.³ These problems are not limited to transit either. Highway development projects lasted for an average of 2.2 years in the 1970s but took 6.6 years to complete by 2011.⁴ The Maryland Intercounty Connector, a state highway project first proposed in the 1950s, was delayed for 26 years while developers waited for an environmental permit to be issued.⁵

These widespread delays and cost overruns originate in a collection of institutional relationships that weaken state capacity and allow interest group conflicts to fester. Contested projects are

¹ J. B. Ruhl and James E. Salzman, "The Greens' Dilemma: Building Tomorrow's Climate Infrastructure Today," *Emory Law Journal* 73 (2023): 1, <https://scholarlycommons.law.emory.edu/cgi/viewcontent.cgi?article=1510&context=elj>.

² Eric Goldwyn, Alon Levy, Elif Ensari, and Marco Chitti, *Transit Costs Project: Understanding Transit Infrastructure Costs in American Cities* (New York: New York University Marron Institute of Urban Management, n.d.).

³ Ralph Vartabedian, "Years of Delays, Billions in Overruns: The Dismal History of Big Infrastructure," *New York Times*, November 28, 2021.

⁴ Philip Rossetti, "Addressing NEPA-Related Infrastructure Delays," *R Street Policy Study* no. 234 (July 2021).

⁵ P. M. Plotch, "What's Taking So Long? Identifying the Underlying Causes of Delays in Planning Transportation Megaprojects in the United States," *Journal of Planning Literature* 30, no. 3 (2015): 282–295, <https://journals.sagepub.com/doi/pdf/10.1177/0885412214566116>.

often mired in bureaucratic and legal limbo for years, dissuading private investment and increasing risk for political actors who are incentivized to preserve the status quo rather than strain their coalitions. The result is a development paradigm that defaults to more politically safe projects instead of ones that entail more risk but could greatly improve economic mobility and quality of life for citizens in the long run.

The effects of this development paradigm have been extremely costly across several dimensions. Productive cities along the Northeast corridor, the Midwest, and the West coast remain disconnected, lacking vital links that could enhance regional productivity. Fiscally, sprawl in sparsely-populated rural and suburban communities has strained municipal budgets, as the ever-growing infrastructure demands on local governments must be supported by a limited tax base. There are also strategic implications. Since 2008, the People's Republic of China has built 50,000 km of high-speed rail—more than all other countries' HSR networks combined—while America constructed just 90 km during the same period.⁶ This disparity is particularly significant given that infrastructure investment typically generates a 1.5x economic multiplier for every dollar spent. The potential benefits of robust infrastructure development, both in terms of economic growth and tangible improvements to people's daily lives, remain largely unrealized in the United States.⁷

Unusual intellectual coalitions and interest groups have emerged in recent years in acknowledgement of the acute shortages that have defined the country's dearth of transportation services and other key infrastructure. So-called supply-side progressives have found common cause with some of the more traditional deregulatory impulses of the conservative movement. Coalitions of labor unions, businesses, developers, social activist groups, and environmentalists have been drawn together by the belief that the country has failed to provide adequate levels of essential services needed for its citizens to thrive, and that government has often hobbled its own ability to do so.⁸ That this shared critique has transcended typical political fault lines in the U.S. underscores the salience of the current moment and suggests a potential opening for meaningful reform.

This report will identify and analyze the causes of widespread delays and cost overruns in American transportation infrastructure projects, examining how the current development paradigm has evolved from a robust state-led approach to a system of fragmented authority and procedural barriers. It will document how four interconnected problems—an environmental review process riddled with veto points, diminished state capacity, dysfunctional procurement systems, and fractured institutional environments—combine to undermine efficient project delivery. The report will then propose targeted reforms to mitigate these obstacles across different levels of government, with the aim of facilitating more rapid and cost-effective transit construction. It will conclude by considering how a revised development paradigm might balance necessary protections with more streamlined decision-making processes. In general, this paper finds that America can substantially reduce the cost and time burdens experienced during

⁶ Lawrence, Martha, Richard Bullock, and Ziming Liu. *China's High-Speed Rail Development*. Washington, DC: World Bank, 2019.

⁷ James McBride, Noah Berman, and Anshu Siripurapu, “The State of U.S. Infrastructure,” Council on Foreign Relations, last updated September 20, 2023, <https://www.cfr.org/backgrounders/state-us-infrastructure>.

⁸ Ezra Klein and Derek Thompson. *Abundance*. New York: Avid Reader Press/Simon & Schuster, 2025.

transit project development by bolstering state capacity and expertise, realigning political incentives, centralizing authority through lead agencies and preemption of local opposition, and reforming the judicial review process to limit the multiplication of veto points that currently plague the system.

Infrastructure Development Paradigms in the U.S.

A historical reading of America's approach to transportation infrastructure development demonstrates that the size and quantity of projects pursued by state and federal governments follows the predominant trends that shaped both the American political economy and the cultural attitudes of the 20th Century. An evaluation of the literature on the subject reveals three discrete eras or paradigms of infrastructure development in the U.S. A basic understanding of the legal and administrative changes that occurred over this period informs a significant portion of the causes of cost overruns and delays described in the sections that follow.

The New Deal Period

The United States had the best infrastructure in the world at mid-century. Following the Second World War, the country's ambition for large-scale infrastructure projects was intimately tied to the ethos and politics of the New Deal and the Cold War. The strategic investments in American road and rail were inextricably tied to a belief that government power could be mobilized to lay the foundation of economic prosperity at home and cement its hegemony abroad.⁹ While this period was characterized by state and federal policymakers' decisive turn away from mass transit as a core component of the transportation network, it is undeniable that various levels of government assumed wide latitude to plan and execute projects on a scale that has not been matched in recent decades.

The Transition Period

The speed and scope of state and federal transportation infrastructure projects began to taper in the 1960s. During what Bagley calls the "era of transition," the excesses of the New Deal era in environmental damage and social dislocation led to the formation of the conservation movement.¹⁰ Environmental activists led protests against high-profile, contentious projects and pressured local lawmakers to stymie the pace of not only public infrastructure projects, but also the construction of factories, residential units, and other private initiatives.¹¹

At the legal level, liberal lawyers and politicians, motivated by Supreme Court rulings, especially *Brown vs. Board of Education*, began to use legalistic approaches to constrain government action. With early wins in the realm of environmental law and consumer protections, a generation of liberal lawyers developed a theory of halting development centered on using the federal judiciary to delay or stop development projects.¹² This was the beginning of a tradition of

⁹ Nicholas Bagley, "The Procedure Fetish," *Michigan Law Review* 118, no. 3 (2019): 345.

¹⁰ *Ibid.*

¹¹ Plotch, "What's Taking So Long?," 282.

¹² Michael Bennon and Devon Wilson, "NEPA Litigation over Large Energy and Transport Infrastructure Projects," *Environmental Law Reporter* 53 (October 2023): 10836.

“adversarial legalism” in the U.S., an approach to political decision-making that relies of litigation to resolve policy and regulatory disputes.¹³

NEPA and the "Do No Harm" Era

The National Environmental Policy Act (NEPA) went into effect in 1970. Referred to by some as "the Magna Carta of environmental law," NEPA does not itself stipulate specific environmental regulations, but rather lays out a procedural framework for ensuring compliance with federal, state, and local laws concerning the protection of the environment and communities affected by development projects subject to federal funding or permitting requirements.¹⁴ It is fundamentally an administrative process by which developers identify possible alternatives to a given project and select the one with the most limited environmental impacts. This also includes an ostensibly democratic component in which all decisions are subject to public comment and, ultimately, judicial review.¹⁵

The passage of NEPA represented a new "grand bargain" with respect to infrastructure development in the United States.¹⁶ If the New Deal paradigm represented one in which rapid development was possible at the cost of great environmental degradation and acute pain for nearby communities, the post-NEPA paradigm was one in which robust environmental and social safeguards were put in place at the cost of a considerably more lengthy approval process for development projects.¹⁷

The main vehicle through which this was achieved was the court system. Written in often lofty, "quasi-constitutional" language, early case law with respect to NEPA's statutory requirements made all administrative decisions subject to review by federal courts.¹⁸ This shift heralded the introduction of numerous veto points into the approval process—one that has resulted in a "do no harm" approach to infrastructure development that can obstruct transportation projects "if they impose more than trivial costs on neighborhoods or the natural environment."¹⁹

Sources of Cost Overruns and Delays for Transit Development Projects

The sources of widespread delays and cost overruns in American infrastructure projects can be grouped into several distinct but interrelated categories: State Capacity, Political Incentives, Design and Procurement, and Judicial Review. While each of these issues is widespread, their relevance and intensity varies significantly depending on the project and locality in question, underscoring how the fragmented jurisdictional environment that development projects must navigate fundamentally undermines efficient completion.

¹³ Bagley, "Procedure Fetish," 345.

¹⁴ Bennon and Wilson, "NEPA Litigation,"

¹⁵ *Ibid.*

¹⁶ Ruhl and Salzman, "Greens' Dilemma," 10. ¹⁷

Bagley, "Procedure Fetish," 351.

¹⁸ Bennon and Wilson, "NEPA Litigation,"

¹⁹ Bagley, "Procedure Fetish," 355.

Before examining these factors in detail, it is worth addressing that "delay" and "cost overruns" are themselves contested terms. Some defenders of the status quo suggest that such excesses are simply "part of the process" or inherently baked into the political economy of local development. Opponents of specific projects may even celebrate delays as victories.²⁰ This report rejects such relativistic interpretations on several grounds. First, they lack historical perspective, ignoring the more ambitious and timely results achieved during the New Deal era. Second, they disregard comparative political evidence, as America's development costs far exceed those of other industrialized nations with similar or superior outcomes. Finally, the endemic nature of these problems in the American context has a "know it when you see it" quality that transcends procedural justifications: a rail line completed 10 or 20 years behind schedule cannot reasonably be dismissed as merely an optimistic initial projection, nor can waiting 26 years for an environmental permit be rationalized as thorough agency due-diligence. This study therefore adopts the mainstream interpretation of delay and cost overruns used by academic institutions and media, defining both terms relative to projects' pre-established timelines and budgets.

It's also important to recognize that delays and cost overruns typically reinforce each other in a vicious cycle. Factors that delay projects invariably raise costs, whether through increased billable hours for consultants or extended rental periods for capital equipment like heavy machinery. In other words, "time is money," and bottlenecks create negative feedback loops where rising costs galvanize opposition, reduce political will, trigger further delays, and sometimes kill projects entirely. This self-reinforcing dynamic helps explain why American infrastructure projects so frequently fail to meet their original objectives.

Permitting and Review

Permitting and Approval

Any development proposal of significant scope must contend with the high likelihood of triggering an array of concurrent permitting and approval processes administered across multiple agencies and levels of government.²¹ Infrastructure projects of all kinds must adhere to a network of up to 60 federal regulatory programs, many of which are mimicked at the state and local level.²² Federal preemption of projects is rare, leaving developers vulnerable to jockeying by agency regulators with different and often opposing sets of interests, from noise and traffic management to economic development and safety.²³ Such institutional arrangements can produce absurd outcomes where different parts of the same municipality compete or work against each other. In New York City, the Metropolitan Transit Authority paid the New York City Parks Department for use of its land to complete one transit development, marking one instance where the city negotiated a transaction with itself.²⁴ Incidents like this reflect a common institutional feature of infrastructure development in the United States: few mechanisms exist to coordinate across and within jurisdictions to deliver development projects. Developers must instead contend

²⁰ Vartabedian, "Years of Delays."; John C. Ruple and Kayla Race, "Measuring the NEPA Litigation Burden: A Review of 1,499 Federal Court Cases," Utah Law Review (Digital Commons), 2019.

²¹ Ruhl and Salzman, "Greens' Dilemma," 9.

²² *Ibid.*

²³ Plotch, "What's Taking So Long?," 290.

²⁴ Darian Woods, Corey Bridges, and Viet Le, "Why Building Public Transit in the US Costs So Much," NPR, June 26, 2023.

with permitting and approval processes that are duplicative or contradictory, requiring more time and resources to adjudicate decisions from both the developers and the relevant government agency.

Judicial Review

Research on the impact of NEPA and its state analogues on cost overruns and delay for transportation infrastructure projects is rich and contested. Numerous studies conducted by or on behalf of federal, state, and local authorities have sought to identify and aggregate the sources of ballooning costs and delays for high-value infrastructure projects over the past 20 years, with many relying on interviews and surveys conducted in partnership with officials from relevant transportation agencies.²⁵ A well-cited survey conducted by the American Association of State Highway Transportation Officials attributed much of the delay for transportation infrastructure projects to NEPA, owing to a "complex maze of individual statutes and regulations relating to air, water, parkland, historic properties, rare and endangered species, and other resources," made worse by the fact that "federal agencies' interpretations of laws are inconsistent and constantly changing."²⁶ Similar sentiments can be found among surveys with officials at the Federal Highway Administration, and among reports prepared by the Congressional Research Service and the U.S. General Accounting Office.

These studies are limited by the anecdotal nature of the surveys. Many did not independently verify the impact of permitting and environmental review on the projects overseen by the survey participants, nor did they seek to weight the impact of the review process against other reasons for delay noted in the surveys, such as "low priority for the state," "poor consultant work," and "project changes."²⁷ Moreover, the methodology of these reports fails to identify the severity or duration of the delays referenced in their respective questionnaires. This leaves little room for analysts to identify the most significant sources of project delays, let alone remedy them. A substantial review of these surveys by Plotch rightly notes the inherent bias of these reports, as key stakeholders within government agencies are incentivized to defend their own actions and place blame elsewhere, be it with environmental groups, other agencies, or at different levels of government.

The critiques of these reports highlight the difficulty of disaggregating sources of cost overruns and delay. It is also nearly impossible to determine the second- and third-order effects of a law as sweeping and general as NEPA. Nonetheless, the procedural requirements stipulated in NEPA necessarily extend development timelines by requiring environmental review and subjecting agency decisions to public comment periods and judicial review. As Benon and Wilson state,

“We know that NEPA is probably a net benefit to the U.S. environment simply because we can see that it requires agencies to account for environmental impacts.... The same consideration must be given to NEPA’s broader societal costs. Yet, this treatment is rare in prior studies of NEPA. This study and others can gather some indicators of NEPA’s costs, but will never be able to account for all of the indirect costs of a law with NEPA’s scope. We can see, however, that NEPA’s administrative and judicial process gives individuals with the motivation and resources to

²⁵ Plotch, “What’s Taking So Long?,” 284.

²⁶ Ruhl and Salzman, “Greens’ Dilemma,” 15. ²⁷

Plotch, “What’s Taking So Long?,” 285.

litigate (or threaten litigation) the ability to delay or potentially enjoin large, environmentally impactful projects.”²⁸

NEPA's significant contribution to delay times for transportation projects is fundamentally linked to the oversight of the federal court system in agency decision-making. Opposition groups have the ability to challenge agency decisions on procedural grounds. Historically, these groups have seized on the vague language in NEPA and the inherently open-ended nature of environmental review to challenge agency decisions. In practical terms, this often entails litigants arguing that a given agency failed to identify a "significant" environmental impact or did not properly assess an "alternative" development project pursuant to NEPA's language.²⁹ This is compounded by the fact that judges have tended to act inconsistently with respect to court standing. Despite the mountains of case law that has clarified NEPA's often vague and lofty text over the past half century, agencies remain unclear about what compliance with NEPA regulations looks like on a project-by-project basis.³⁰ This has resulted in a situation where the environmental review process is functionally a collection of veto points where opposition groups are incentivized to file lawsuits of middling quality against controversial projects in an attempt to set favorable legal precedents.

Litigation thus provides leverage to opposition groups by granting them the ability to block or delay projects through court injunctions at multiple points in the development process. This has created incentives for federal agencies to "litigation-proof" their decisions.³¹ In practice, this has meant vastly expanding the duration and length of key documents, in particular the Environmental Impact Statement.³² Indeed, EISs have grown from a historical median of 397 pages to a peak of 490 pages in 2016. Similarly, the time required to prepare these documents has increased to an average of 5.2 years by 2016, up from 3.4 years in 2010.³³ As case law surrounding environmental review has grown over the past several decades, federal agencies are incentivized to produce ever more expansive EISs to thwart opposition groups' ability to litigate against projects on procedural grounds. This is validated by the well-documented correlation between EISs and litigation rates, as longer EISs are associated with fewer lawsuits against their corresponding projects. Federal agencies with competing priorities are forced to divert limited resources to tedious processes that give opposition groups ample time to mobilize.³⁴ Delays for transportation projects are thus driven by an adversarial legal system that has been tilted toward those who oppose projects, with federal regulators' only recourse being to "study everything" to account for every conceivable line of litigation, no matter how unlikely.³⁵ This is a rational approach from the perspective of the agencies, as low standards for court standing are the norm and one in three court challenges succeeds in some way.³⁶

²⁸ Bennon and Wilson, "NEPA Litigation,"

²⁹ *Ibid.*

³⁰ Bagley, "Procedure Fetish," 345.

³¹ *Ibid.*

³² Jennifer Dill, "What Influences the Length of Time to Complete NEPA Reviews? An Examination of Highway Projects in Oregon and the Potential for Streamlining" (paper presented at the Transportation Research Board 85th Annual Meeting, Washington, DC, 2006).

³³ Rossetti, "Addressing NEPA-Related Infrastructure Delays."

³⁴ Bennon and Wilson, "NEPA Litigation,"

³⁵ *Ibid.*

³⁶ Bagley, "Procedure Fetish," 360.

The effects of this combative relationship between regulatory agencies and opposition groups have effectively limited the speed and scope of what is considered possible from a development perspective in the U.S. Transportation projects are increasingly pared down to avoid meeting the legal standard of a "significant" environmental impact, a standard which courts were given wide latitude to interpret under the 1971 *Calvert Cliffs* decision.³⁷ Transit lines, for instance, are sited in a conflict-avoidant manner that avoids impinging on existing right-of-way rather than maximizing utility to travelers and local economies. Among projects that require an Environmental Assessment, 28% are subject to litigation, with 50% of light rail projects being litigated. That compares to 33% for heavy rail and 28% for high-speed rail. Interestingly, research also reveals that transportation projects have much longer permitting times but lower risk of litigation on average, a fact which holds true even when considering other linear projects like oil pipelines or transmission lines.³⁸ These problems are exacerbated by the relatively long statute of limitations that transit and other infrastructure projects are subject to, which can last for up to 6 years.³⁹

The "Do No Harm" approach to project development in the United States has given citizens more power to intervene in the planning and construction of transit projects. This was a response to the more muscular approach that government took to constructing megaprojects in the middle of the 20th century and the significant consequences it had for regions with limited representation and political capital. This approach has crystallized around a political theory that big projects are necessarily harmful and a legal tradition that has perfected the art of thwarting projects through the review process. When a small, uniquely plugged-in minority is given copious opportunities to veto developments, every mile of rail becomes a becomes vulnerable to relatively minor breaks in consensus.

State Capacity

The U.S. federal government's capacity to execute transportation infrastructure has dramatically declined since the New Deal era, when ambitious megaprojects were central to the American political economy. The same can be said with respect to state governments and their requisite agencies. This diminished capacity extends to state governments and their requisite agencies, creating a vacuum of expertise that has fundamentally altered how infrastructure projects are delivered.

The hollowing of expertise within transportation agencies has led to a vast expansion of a private consultancy industry that inherently optimizes for profits. This creates a profit premium that would not exist if design, planning, and compliance processes were executed in-house within the relevant transportation agency.⁴⁰ It also incentivizes the most knowledgeable and capable transportation planners and engineers to work for private firms rather than in the public sector in search of higher wages. Moreover, hiring consultants entails lengthy Request for Proposals (RFP) processes in which various firms compete for contracts, followed by review processes

³⁷ Bagley, "Procedure Fetish," 363.

³⁸ Bennon and Wilson, "NEPA Litigation,"

³⁹ Rossetti, "Addressing NEPA-Related Infrastructure Delays."

⁴⁰ Alon Levy, "Why American Costs Are So High (Work-in-Progress)," Pedestrian Observations (blog), March 3, 2019, <https://pedestrianobservations.com/2019/03/03/why-american-costs-are-so-high-work-in-progress/>.

subject to their own lengthy set of regulations that vary depending on the scope, scale, and location of the project.

Growth in blue collar labor costs has conversely been driven by redundancies and anemic institutional relationships. In New York City, for example, construction firms and union leaders negotiate staffing and wage decisions without government involvement, despite the fact that the state provides the capital for the projects.⁴¹ It is typical for such projects to have four times the number of construction staff compared to projects of similar scale in Europe. While union leaders often cite safety concerns or a desire to protect their members from exploitative labor practices, rates of injuries and other safety incidents are not significantly lower in New York City than in other cities across the developed world.⁴² The end result is substantially higher labor costs as a proportion of the overall project cost.

This lack of state capacity at all levels of the planning, design, construction, and compliance processes has created institutional arrangements that raise project costs and extend project timelines well beyond their original deadlines. Labor costs for transit development projects in the U.S. typically make up about 40-60% of the overall cost of a project compared to 19-30% in other developed countries.⁴³ While the intricacies of systems like the New York metro possess qualities unique to their jurisdiction, they nonetheless reflect a tendency in the American development paradigm to produce adversarial institutional arrangements that encourage construction firms, unions, developers, and consultants to extract substantial premiums from government contracts without providing any clear benefit in terms of safety or cost; on the contrary, they produce some of the highest development costs in the world.

Design and Procurement

A second-order effect of American public transit agencies' limited in-house expertise is a chronically ineffective design and procurement system. Public transit developments across the country routinely suffer from ill-conceived proposals from bad-faith contractors and frequent change orders, resulting in costly redesigns.⁴⁴ These challenges often begin at the bidding process, where government actors' inability to properly manage and direct the myriad of consultants and construction firms creates ripple effects that hamper projects years down the line.

Here again, the specific manifestations of this phenomenon vary by geography, yet the essential task of efficiently translating a design from the cutting room to the real world is something that most jurisdictions struggle to do effectively. In California, transit projects are awarded based on cost alone, incentivizing firms to underbid in order to secure contracts and revise costs upward later, often through litigation.⁴⁵ States like New York avoid this issue by instituting an array of strict regulations on design specifications, effectively micromanaging firms to avoid the confrontations between states and contractors that are typical on the West Coast.⁴⁶ In both cases,

⁴¹ Brian M. Rosenthal, "The Most Expensive Mile of Subway Track on Earth," New York Times, December 28, 2017, <https://www.nytimes.com/2017/12/28/nyregion/new-york-subway-construction-costs.html>.

⁴² *Ibid.*

⁴³ Goldwyn et al., Transit Costs Project.

⁴⁴ *Ibid.*

⁴⁵ Levy, "Why American Costs Are So High."

⁴⁶ *Ibid.*

the development process is unable to effectively accommodate unexpected but typical changes that arise between project planning and construction. This seems to be the case regardless of whether or not the same firm designs and builds the project in question. Limited state capacity among government agencies not only degrades meaningful oversight over its private sector partners, but also diminishes the system's flexibility overall. Rather than being incorporated quickly, simple design tweaks become vulnerable to the same judicial scrutiny and interest group conflict that characterize the rest of the process.

Political Economy and Perverse Incentives

Many sources of cost overruns and delay mentioned thus far are in large part driven by the fractious institutional environment that characterizes infrastructure development in the United States. Because there is rarely one governing body directing a project and making decisions, veto points multiply and contractors have wide latitude to extract rents. City, state, and administrative entities have different geographic and statutory authorities, budgets, priorities, and constituencies, leading to instances where government entities in the same municipality work at cross-purposes to one another.⁴⁷ Within these contested jurisdictions, infrastructure development projects can quickly devolve into turf wars between territorial bureaucrats with incentives to extend their decision-making authority.⁴⁸ In this context, every public works project becomes a "herculean effort of coalition building," subject to factional infighting or rejection by a loud minority.⁴⁹

This is one of the reasons why the success or failure of public development projects in the U.S. are "uniquely reliant" on elected officials. Public sector champions can help "galvanize legislative and executive support, accrue resources, mollify critics and manage conflict."⁵⁰ They also exercise decision-making authority over projects often reserved for civil servants in other developed countries. This authority can cut both ways, however, and reflects the vulnerability of development projects to changing political attitudes in all or part of a development site. Politicians are incentivized to seek "pork" in exchange for political support for a project, rewarding part or all of their constituency at the expense of the broader tax base.⁵¹ Under these conditions, infrastructure development becomes subject to the "mixed mandates" of politicians, not only providing mobility, but also serving as tools for job creation and economic development.⁵² Politicians are also incentivized to lie about such projects, exaggerating the benefits and hiding the costs. Moreover, ambitious but risk-averse politicians are given the tools to delay projects indefinitely with "pointless studies" rather than galvanize opposition by seeing a project through to completion.⁵³

In the multi-agency, multi-level regulatory environment that development projects are subject to, fractured institutional environments and perverse incentive structures create an extremely high threshold for consensus. As each step introduces new veto points, coalitional, jurisdictional, and

⁴⁷ Woods, Bridges, and Le, "Why Building Public Transit." ⁴⁸

Plotch, "What's Taking So Long?," 235

⁴⁹ Woods, Bridges, and Le, "Why Building Public Transit." ⁵⁰

Plotch, "What's Taking So Long?," 282.

⁵¹ Goldwyn et al., Transit Costs Project.

⁵² Plotch, "What's Taking So Long?," 290.

⁵³ *Ibid.*

engineering challenges reinforce one another. Weak but numerous governing bodies create a confusing and duplicative process for developers to navigate while turf wars and contracting disputes create a culture of "secrecy and adversarialism," both within the government and between the government and private firms.⁵⁴ The result is a relatively narrow path to success for any American infrastructure project of meaningful scope and ambition under the current regime: steady funding, strong leadership, robust consensus, and sufficient time.

Reducing Delays and Cost Overruns in American Infrastructure Development

The widespread inability of American municipalities to execute bold and effective transportation infrastructure projects reflects a deference towards process over outcomes on one hand, and a half-hearted ideological commitment to small government on the other. An adversarial legal system and a maze of government agencies has introduced a myriad of veto points into the development process, giving actors at different levels and positions of government substantial leeway to undermine the development process. Meanwhile, insufficient staffing and expertise at the transportation agencies responsible for executing these projects has left a vacuum filled by expensive consultants with little supervision. This combination of fractured regulatory environments and low state capacity produces inefficiencies during planning, design, permitting and construction, resulting in projects that far exceed their initial fiscal and temporal boundaries. What follows is a self-fulfilling prophecy in which poorly executed projects reflexively galvanize opposition to future proposals and justify additional cuts to the agencies that oversee them, further diminishing state capacity.

Reforms aimed at accelerating infrastructure development must therefore focus on restoring state capacity by targeting the critical bottlenecks where delays and cost overruns accumulate. Moreover, these reforms should be comprehensive in nature, acknowledging that bottlenecks exist in different agencies, levels of government, and geographies at distinct points in the development process. As such, the policy tools recommended here do not reflect a one-size-fits-all approach, but instead offer a modular set of reforms designed to provide policymakers with methods to address specific choke points that exist within their jurisdiction. That being said, changes in statutes and guidelines at higher levels of government, particularly at the state and federal level, can have powerful agenda-setting effects and could greatly expedite the adoption of effective reforms.

This section enumerates policy solutions to aspects of the American transportation development process, organized to provide direct policy responses to the sources of delays and cost overruns explored in the previous section.

Tempering NEPA and the Judiciary

The combative interplay between bureaucracies and the court system is one of the most significant drivers of delays and cost overruns in the infrastructure development process. This is largely a result of the significant length and duration of the review processes required under

⁵⁴ Goldwyn et al., Transit Costs Project.

NEPA and its state analogues. Implementing a much more narrow standard for what is subject to review and how long it can be challenged can dramatically reduce the scope of these review processes, and by extension their cost both in time and public funds.

Statutory carve-outs and exemptions to the review process can be implemented for part or all of high-priority projects. These “categorical exclusions” have been effective in reducing deployment timelines for energy and other infrastructure projects over the past decade.⁵⁵ For projects where exemptions are not appropriate, reducing the scope and duration of parts of the review process can be effective. Imposing strict deadlines and page limits on environmental studies and impact assessments can similarly expedite the development process, as can reducing the length of the public comment period.⁵⁶ These reform should only be pursued in conjunction with judicial reforms aimed at disarming bad-faith or otherwise ill-conceived legal challenges, however, as agencies routinely produce extensive environmental reports to dissuade courts from taking up legal challenges against development projects. To that end, lawmakers in Washington and state capitals should seek to clarify exactly what statutory requirements developers and agencies need to satisfy to a project to proceed.⁵⁷ Current legal norms produce wildly inconsistent standards for what constitutes an acceptable impact assessment.⁵⁸ This, along with shortening statutes of limitations for infrastructure projects, would be effective in disarming some of the worst tendencies of adversarial legalism in the U.S.

Coordinating and Centralizing Government Response

Further bureaucratic reforms can help expedite development by limiting opportunities for court challenges and limiting agency points-of-contact. These reforms generally seek to streamline and centralize the permitting process, simplifying the multi-level network of approvals into a single evaluation process for developers. In many cases, legislators can assign a single lead agency to carry out permitting decisions--an approach adopted during the implementation of the Bipartisan Infrastructure Law of 2022.⁵⁹ Beyond collating the different permitting and review processes, lead agencies are typically granted the authority to clarify jurisdictions among different government bodies, share information between different actors, and align regulations when they conflict. This can vastly reduce the complexity of project execution for both developers and bureaucrats, making more rapid project implementation possible.⁶⁰ An alternative approach is for states or the federal government to simply preempt lower jurisdictions for high-priority projects, minimizing regulatory hurdles and legal challenges arising from local or municipal governments.

Governments have also been successful in coordinating development through the creation of new or parallel governing structures. Countries like Australia, the United Kingdom, and France have developed centralized national infrastructure frameworks in contrast to the radically decentralized approach pursued in the United States. These systems serve to direct and prioritize funding and development patterns, opening the door for the development of complementary

⁵⁵ Ruhl and Salzman, “Greens’ Dilemma,” 15. ⁵⁶

Ibid.

⁵⁷ Bennon and Wilson, “NEPA Litigation,”.

⁵⁸ Bagley, “Procedure Fetish,” 365.

⁵⁹ Ruhl and Salzman, “Greens’ Dilemma,” 17. ⁶⁰
Goldwyn et al., Transit Costs Project.

transportation infrastructure and increased standardization.⁶¹ Lawmakers in California have launched a similar framework in 2025, dubbed the California State Rail Plan, which intends to guide development and investment decisions across the state in a cohesive manner.⁶²

Making Design and Procurement Flexible

Design changes are an often-cited contributor to transportation infrastructure delays among bureaucrats and developers alike. This is because common-sense change orders that frequently arise during construction projects run counter to the way that most developer contracts are structured. Establishing clear processes for change orders to minimize litigation and redundant approval processes would indeed be an effective solution, but substantial smart reforms can also be implemented earlier during the bidding process itself.⁶³ Namely, governments should seek to award contracts based on cost, timelines, and technical proficiency rather than on cost alone. Once awarded, governments should award itemized rather than lump-sum contracts.⁶⁴ These offer developers and agencies more financial wiggle room when change orders arise and present lower stakes for both sides in terms of litigation risk and liability. In general, public sector actors should be willing to assume more risk for design decisions throughout the development process, which has the benefits of reducing contractor risk premiums and dissuading developers from pursuing either "defensive" or "gold-plated" design decisions.⁶⁵ Thoughtful design and procurement reforms should generally seek to acknowledge the inevitability of design changes during construction by promoting flexible decision-making within contractual arrangements. This is a more straightforward process when government partners interact with competent industry partners with sound designs.

Restoring State Capacity

In a modern, industrial economy, the process of translating a project design into the real world relies on the existence of knowledgeable civil servants with the ability to properly manage contractors, courts, and other agencies. Restoring state capacity in the U.S. functionally means developing an "ecosystem of industry professionals" that can carry know-how and expertise across projects.⁶⁶ Municipalities should invest in personnel to encourage long-term employment, offering competitive salaries to attract competent managers and administrators, who have the ability to turn around otherwise failing projects. Establishing this sense of continuity across projects is not just important from a personnel standpoint, but from a construction standpoint as well. Agencies and developers that continuously design and deploy transportation infrastructure accumulate capital and rolling stock in addition to experience, and are more effective at standardizing materials and designs across projects.⁶⁷ The potential gains from these capacity-building measures are most apparent at the federal level, where the government has the greatest latitude to preempt municipalities, standardize components, guide regional development

⁶¹ McBride, Berman, and Siripurapu, "State of U.S. Infrastructure."

⁶² Caltrans, California State Rail Plan, accessed May 17, 2025, <https://dot.ca.gov/programs/rail/california-state-rail-plan>; Levy, "Why American Costs Are So High."

⁶³ Goldwyn et al., Transit Costs Project.

⁶⁴ Levy, "Why American Costs Are So High."

⁶⁵ Goldwyn et al., Transit Costs Project.

⁶⁶ Vartabedian, "Years of Delays."

⁶⁷ Goldwyn et al., Transit Costs Project.

practices, leverage vast financial resources, and even act as consultants for state and local governments.

A key ideological component of the transition from the New Deal Era to the "Do No Harm" Era was the belief that government cannot efficiently or effectively deliver large-scale infrastructure projects, or that when they do, they unwittingly trample other things that society values, like nature or the character of our communities. While the failures and excesses of the New Deal paradigm are well-documented, the reality is that a robust state apparatus can also protect that which we want to preserve and build the things that improve quality of life. The mobility provided by transportation infrastructure is a boon for economic development, but the federal structure of the American government paired with our robust democratic tradition places unique constraints on our ability to build. Meeting the challenges of the 21st century will require careful consideration of the institutional structures that we use to mediate the pluralism of a decentralized system while still meeting our broader societal goals. Our reforms should therefore champion an outcome-oriented development process where a robust but accountable government integrates the talents and incentives of the private sector to deliver ambitious projects.

Conclusion: Towards a New Development Paradigm

In June of 2023, a bridge on the I-95 corridor in Philadelphia caught fire and collapsed after a tanker truck carrying 8,500 gallons of gasoline caught fire under an access ramp. In response, Pennsylvania governor Josh Shapiro, leveraging emergency powers granted to him under state law, suspended or bypassed most of the permitting and approval processes that govern highway infrastructure construction. A development project that would have taken months under normal circumstances was completed in just 11 days, a timeline which evokes images of construction juggernauts like the People's Republic of China.⁶⁸

The I-95 bridge episode is illuminating because it shows how transportation infrastructure development can work in a state of exception when the typical constraints of the current development paradigm don't apply. A report from the Congressional Research Service notes that emergencies expedite development because such projects are "high-priority, with few interagency, intergovernmental, or citizen-opposition conflicts."⁶⁹ Indeed, how we more effectively manage the competing preferences of interest groups is the central question in imagining a new, more effective development paradigm. The introduction of NEPA and the grand bargain struck in the 1970s answered this question by creating a vetocracy, giving many different stakeholders the ability to delay or halt development. Even when projects do succeed, this system of rules and procedures mires developments in costly delays that undermine the government's efficacy and credibility.

The failures of the "Do No Harm" paradigm do not warrant a return to the New Deal system, however. The high costs that system imposed on the country's air and water were real, as were the systematic uprooting of individuals and places deemed expendable in the name of progress. The legal protections afforded by NEPA were a genuine improvement, even if they carried a

⁶⁸ Meghan Sheets, "Philadelphia Turns Heads with Speedy I-95 Bridge Reconstruction," Business Insider. June, 2023

⁶⁹ Congressional Research Service, Accelerating Highway and Transit Project Delivery.

status quo bias. The challenge for the architects of a new development paradigm will be to balance a muscular, development-oriented state with a humane consideration for the places and lifestyles that are worth preserving.

Finding that balance will inevitably entail a sober evaluation of tradeoffs. Law is an expression of a society's values, and determinations of where, what, and how to build transportation infrastructure inevitably reflects implicit decisions of how costs and benefits are distributed over space and time. Constructing bike lanes or rail lines brings acute, temporary disruptions to those living near the development, but the benefits are experienced by the broader community far into the future through network effects. Similarly, choosing not to build a light rail system may preserve a city's medium-term financial resources, but it also denies the next generation of residents greater mobility.

What matters most in establishing a more responsive development paradigm is not merely building more, but reconsidering how we determine what gets built and restructuring the institutional arrangements that produce these outcomes. NEPA and its analogues institutionalized a narrow understanding of public engagement into the permitting and approval process, one that empowered vocal opposition groups pursuing minoritarian interests as much as it empowered legitimate criticisms of harmful development proposals. The presence of conflict over infrastructure development should be assumed, but policymakers should be open to implementing novel ways of mediating disputes to better reflect public attitudes. It is not clear that zoning meetings, for instance, are an effective way of gauging public preferences if their attendees are overwhelmingly affluent homeowners.⁷⁰ An improved paradigm will require thoughtful consideration of the democratic dimensions of infrastructure development, reckoning with how institutions can deliver effective services that reflect majoritarian preferences while protecting individual rights.

The United States has much to gain from reforming this anemic development system. By any comparison, the country ranks poorly among its industrial peers in its transportation and rail infrastructure production, stunting its economic potential and limiting the opportunities available to its population. A series of contingent policy choices during the mid-20th century forged a development system that is biased towards incrementalism rather than transformative projects. State capacity has withered, while the bureaucracy and judicial system have become arenas for interest group conflicts that are not optimized to produce fair or practical resolutions. Restoring America's tradition of ambitious engineering projects will require the rebuilding of state capacity at multiple levels of government and the conception of new institutional arrangements that promote popular and broadly beneficial projects while protecting the rights of citizens.

This paper has attempted to enumerate how policymakers can reform these institutions and raise questions about how the U.S. should consider the tradeoffs inherent to development decisions in the context of its democratic tradition. Doing so effectively will require great imagination and political will, but the current paradigm is no longer working as intended. Delivering high-quality transportation services, alongside other goods like housing and energy, has the potential raise quality of life for Americans at a time of declining institutional trust.

⁷⁰ Granicus, History of Public Meetings eBook, accessed May 17, 2025, <https://granicus.com/wp-content/uploads/application/pdf/History-of-Public-Meetings-eBook-1.pdf>.

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