Privatization and Its Discontents
Infrastructure, Law, and American Democracy

Matthew Titolo
In *Privatization and Its Discontents*, Matthew Titolo situates the contemporary debate over infrastructure in the long history of public–private governance in the United States. Titolo begins with Adam Smith’s arguments about public works and explores debates over internal improvements in the early republic, moving to the twentieth-century regulatory state and public-interest liberalism that created vast infrastructure programs. While Americans have always agreed that creation and oversight of “infrastructure” is a proper public function, Titolo demonstrates that public–private governance has been a highly contested practice throughout American history. Public goods are typically provided with both government and private actors involved, resulting in an ideological battle over the proper scope of the government sphere and its relationship to private interests. The course of that debate reveals that “public” and “private” have no inherent or natural content. These concepts are instead necessarily political and must be set through socially negotiated compromise.

Matthew Titolo is Professor of Law at the West Virginia University College of Law. Professor Titolo researches nineteenth-century American legal and political history and teaches American legal history as well as commercial law courses.
Privatization and Its Discontents

INFRASTRUCTURE, LAW, AND AMERICAN DEMOCRACY

MATTHEW TITOLO
West Virginia University College of Law
To my wife and daughter.
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Acknowledgments

This book is the culmination of several years of research and thinking about American political development, the public–private problem, and infrastructure. I first became interested in these issues when I started reading about privatization of public services in the United States, which a friend of mine once called “a niche issue.” This book is my effort to explain the historical importance of that niche issue as a central feature of American political economy. The problem of privatization seemed to me a missed opportunity to revisit American legal and policy history. It struck me as I researched the book that the voluminous literature on infrastructure across academic disciplines had not grappled with the intersection of law and politics in a way that captured central themes in American history: attitudes toward government and the fiscal order, the public/private divide in law, and public discourse around infrastructure. This book is my opportunity to make a point that others have made before me: While we commonly view the market and the state as separate entities, they are in reality entangled networks of governance. Infrastructure is a nice frame for these issues because it resonates with contemporary policy questions that everyone recognizes.

Writing a book like this is definitely not a solo project. Over the past several years, I have received support from my family, friends, and West Virginia University, all of whom have helped me bring this project to fruition. My wife, Tania de Miguel Magro, has encouraged my work on this book over the last couple of years in many ways, including reading drafts as well as by inspiring me to complete this manuscript as she finished her own. My seven-year-old daughter Ximena has kept me on track toward the harried end stage of the project by monitoring my daily writing progress, as well as giving me welcome respite from its burdens. Good friends and mentors over the years, including Steven Pfaff, Greg Jackson, Chris Sagers, and Vince Pecora, have influenced the outlook that gave the book whatever intellectual weight it has. Chris Sagers helped me formulate this project in its earliest stages, for which I am very grateful. Particular thanks also to Greg Jackson for reading
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Introduction

Building infrastructure is an inherently political act of creation. Every investment choice lays the foundation for a future that could have been otherwise. Yet, infrastructure needs are typically presented as dispassionate, objective facts. In truth, infrastructure is the physical manifestation of both political power and social values.¹

I. INTRODUCTION

I would like to begin this book with the term “infrastructure” itself, a word that turns up over a billion hits on a simple Google search. From this fact one might conclude that infrastructure has always been with us, like the air, sea, or water. But although it is ubiquitous today, infrastructure is really a very recent term in English. It entered our common vocabulary only in the late twentieth century, although it had been in use by military planners and development economists since the 1950s. Despite the fact that we now use the word all the time, infrastructure is a notoriously ambiguous word that has been defined in different ways at different times.² When we use the word today we might mean something like “[t]he underlying framework of a system; esp., public services and facilities (such as highways, schools, bridges, sewers, and water systems) needed to support commerce as well as economic and residential

² See, for example, Jeffrey M. Stupak, Economic Impact of Infrastructure Investment, CONG. Rsch. Serv. 1, 1 (2018): “Although infrastructure spending has garnered increased attention recently, there is no generally agreed-upon definition of infrastructure. In general, the term refers to longer-lived, capital-intensive systems and facilities. Some restrict the definition to include systems and facilities that have traditionally been provided by the public sector, such as highways and water treatment facilities. However, others include predominantly privately owned systems and facilities, such as those involved in electricity production and distribution. The definition of infrastructure can be extended even further to include research and development expenditures, as they add to the stock of technology and information available for use by private individuals.” Binyamin Appelbaum, Why the Meaning of “Infrastructure” Matters So Much, N. Y. TIMES OP. (Apr. 26, 2021), www.nytimes.com/2021/04/26/opinion/infrastructure-definition-history.html.
development.” Modern usage by economists and policy analysts focuses on “core” infrastructures that increase economic output (e.g., “roads, railways, airports, and utilities”), but it might exclude other types of structures that do not reflect how economists measure output such as “hospitals, schools, and other public buildings.” When figured this way, infrastructure measures the “public capital” that makes the private economy of goods and services function. Physical infrastructure is both an economic indicator and a force multiplier, enabling modern economies either to “take off” or stagnate, flourish or decline.

Before it was a modern economic term, however, infrastructure was a nineteenth-century French engineering word that slowly migrated into broader English usage in the twentieth century. As Ashley Carse writes: “[I]nfrastucture was initially an organizational and accounting term used to distinguish the construction work that was literally conducted beneath unlaid tracks (roadbeds) or was otherwise organizationally prior to them (surveys, plans, bridges, tunnels, embankments) from the superstructure of roads, train stations, and workshops that was situated above or constructed after the tracks.”

In this sense, infrastructure refers to the prior state investment required to build transportation systems: for example, the surveys, dredging and blasting, which are precursors to commercializing the railway hardware typically owned by the private contractor. In contrast, “superstructure” is the railway itself, privately owned and operated. The original definition identifies a persistent feature of infrastructure in liberal market economies: public investment is often a

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3 Infrastructure, Black’s Law Dictionary (11th ed. 2019). For another attempt at a definition, see Brett M. Frischmann, Infrastructure: The Social Value of Shared Resources 4 (2012) (emphasis in original): “Familiar examples of ‘traditional infrastructure’ include (1) transportation systems, such as highway systems, railway systems, airline systems, and ports; (2) communication systems, such as telephone networks and postal services; (3) governance systems, such as court systems; and (4) basic public services and facilities, such as schools, sewers, and water systems.”

4 Stupak, Economic Impact of Infrastructure Investment, supra note 2, at 13.


6 Wouter Thirie & Lieven De Moor, The Characteristics of Infrastructure as an Investment Class, 30 FIN. Mkt. PORTFOLIO MGMT. 277, 278 (2016): “Adequate infrastructure is a driver of a region’s comparative advantage..., economic growth..., its productivity..., and contributes to quality of life and welfare”; Surbhi Gupta & Anil Kumar Sharma, Evolution of Infrastructure as an Asset Class: A Systematic Literature Review and Thematic Analysis, 25 J. Asset Mgmt. 173, 173 (2022): “Infrastructure is considered as the linchpin of economic growth of any nation.”


8 Carse, Keyword: Infrastructure, supra note 7, at 29–30.
precondition for the flow of goods and services produced by private corporate firms, not to mention a precondition for life as we understand it in the modern world.

With this simple word, French engineers were dividing the world into public and private spheres – a division that has been re-enacted countless times in the infrastructures of modern life down to our own era. Like the word “system,” infrastructure implies a relationship between parts and a whole, with infrastructure providing the necessary and prior support for a larger project or purpose.9 Infrastructure also implies first- and second-order activities where certain underlying forms are required to enable some essential or desirable activity.10 Railroads, for example, cannot be built without surveys, digging, and blasting. But digging and blasting are not the main purposes of the railway system; the main reason for railways is the movement of goods and people across territories. Although the term infrastructure has changed meaning since it was first used by French engineers in the nineteenth century (it is now a much more comprehensive term), some version of the infrastructure concept is necessary whenever we divide up the world into primary and secondary activities, which we view as interconnected, but where we want to distinguish functions and purposes across layers or nodes in a system.

Infrastructure in its original sense links together public and private networks into an engineering framework in which the state is responsible for doing the ground-clearing work that allows for economic development. Infrastructure’s beginnings suggest another larger point that this book will explore: modern capitalism has always involved an entangled network of public and private actors subsidized and regulated by the state. The concept of infrastructure suggests a financialized public–private network that entails governance across space and requires legal and political regulation, as well as public subsidy, to support economic development. As I will argue throughout the book, the categories of “public” and “private,” however difficult to define precisely, are central to how we frame politics through infrastructure across the longue durée of American history.

Infrastructure, or its cognate concepts such as public utilities or public goods, divide up the world into market and non-market activities across the space of the “economic,” implicitly assigning responsibility to state and non-state actors (such as corporations) in ways that generate political contestation around republican governance and the public good; interest group dynamics; land rights; struggles over resources and ecological challenges; competing legal rationales; the division between public and private; and a host of other political issues. These larger

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9 Id. at 27.
10 Rankin, Infrastructure and the International Governance of Economic Development, supra note 5, at 62: “Infrastructure involves a separation of human activity into two categories: the supportive and the supported. The boundaries of infrastructure are thus defined in terms of a vertical, gravitational metaphor: infrastructure is fundamental, basic, foundational, and it is as necessary for its superstructure as a solid foundation is for a building. Karl Marx used a similar metaphor for describing society in general, where an economic base determines the nature of the cultural-political superstructure. The modern category of infrastructure, however, is more complex than this, as it blurs the distinction between physical and metaphorical support. The support provided by railroads and hydroelectric plants is undoubtedly metaphorical, yet immaterial infrastructures (such as standards) seem in turn to refer, metaphorically, to the physicality of steel and concrete.”
questions cannot be solved in the final instance by appealing solely to narrow economic rationales. How we parse out what are primary and secondary, private and public, plays an important role in mapping the relationships between state and market and to imagining political possibilities in the present.

Infrastructure in policy discourse has been even more malleable than its use in technical economics, where it appears as “social overhead capital” or related terms. If you are a national security bureaucrat, for example, “critical infrastructure” might encompass structures that stretch across much of the American economy, which would certainly fall outside of a narrow understanding of “public works infrastructure.” For national security purposes, if perhaps not at other times, infrastructure is critical when its vulnerability to attack highlights the dependency of the entire national polity on interconnected systems of production and circulation. Moreover, infrastructure can include both physical and nonphysical assets – where “assets” can even be defined as techniques of management.

As an example, consider the comprehensiveness of the following definition from the National Research Council’s *Infrastructure for the 21st Century: Framework for a Research Agenda* (1987):

> In this report, the term “public works infrastructure” includes both specific functional nodes – highways, streets, roads, and bridges; mass transit; airports and airways; water supply and water resources; wastewater management; solid-waste treatment and disposal; electric power generation and transmission; telecommunications; and hazardous waste management – and the combined system these modal elements comprise. A comprehension of infrastructure spans not only these public works facilities, but also the operating procedures, management practices, and development policies that interact together with societal demand and the physical world to facilitate the transport of people and goods, provision of water for drinking and a variety of other uses, safe disposal of society’s waste products, provision of energy where it is needed, and transmission of information within and between communities.

“Public works facilities” fits squarely within anyone’s definition of “infrastructure.” “Facilitate” shows us that infrastructure provides the supporting structures that we generally take for granted in modern societies (e.g., transportation, water provision, waste disposal, energy, and information transmission). However, “operating procedures, management practices, and development policies” shifts the frame away from

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11 “There are 16 critical infrastructure sectors whose assets, systems, and networks, whether physical or virtual, are considered so vital to the United States that their incapacitation or destruction would have a debilitating effect on security, national economic security, national public health or safety, or any combination thereof.” Cybersecurity & Infrastructure Security Agency, *Critical Infrastructure Sectors*, www.cisa.gov/critical-infrastructure-sectors; see also John Moteff et al., *Critical Infrastructures: What Makes an Infrastructure Critical?* (Report for Congress RL33556, Congressional Research Service, Aug. 30, 2002), https://digital.library.unt.edu/ark:/67531/metadc3176/.

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objects to policies and governance rationales that define an important aspect of the infrastructure idea. In the simplest sense, governance rationales can mean the justifications that are offered in favor of public investment in infrastructure. Frequently these have included military preparedness, commercial and residential development, nation-building, and economic competitiveness. In more recent years, those governance rationales have expanded to include a host of other concerns such as sustainability, equity, and resilience in human-designed systems.

Infrastructure is also a frequent theme in politics, as has been the case in America since the debates around “internal improvements” in the nineteenth century (a subject taken up in Chapter 2). Infrastructure stages long-standing American debates regarding the scope of federal power under the Constitution; the power of financial markets to control public resources; the role of government in providing public services; and the role of private interests and the corporation in developing and maintaining the basic infrastructure of society, among many others. Initially, we can identify two familiar patterns. On the one hand, many have worried about “boondoggles” that waste taxpayer money on large projects perhaps better left to the private sector, if they are needed at all. Since infrastructure investment inevitably involves channeling public money into private hands, it is always open to charges that it is really just “corporate welfare,” which is a critique with a long vintage in U.S. history. Concerns about the fiscal imprint of infrastructure harken back to fears of out-of-control government debt that have shaped the republican imaginary since the eighteenth century. Such fears, for example, were an important aspect of Adam Smith’s views on public works (discussed in Chapter 1) and continue to be an important theme in American politics. We hear echoes of this today in calls to outsource government functions to the private sector, or arguments in favor of more public–private partnerships to reduce the fiscal footprint, public bureaucracy, or labor costs for infrastructure (discussed in the Conclusion).

“The argument is straightforward: projects that will contribute substantially to political and economic stability or military preparedness must override narrow, self-interested concerns of individual localities. In the public works field, political and military claims have historically been crucial in legitimating government action. The French national government saw fit to subsidize Haussmann’s reconstruction of central Paris primarily because of such considerations, and public works spending has since been linked with governmental concern over unemployment-caused political instability.” Sy Adler, Infrastructure Politics: The Dynamics of Crossing San Francisco Bay, 10 Pub. Historian 19, 21 (1988).

See, for example, Org. for Econ. Co-op. & Dev., OECD Recommendation on the Governance of Infrastructures (OECD/LEGAL/0460, July 16, 2020), www.oecd.org/gov/infrastructure-governance/recommendation/: “Quality of public governance is essential to achieve national and international commitments on sustainable and inclusive economic growth, and to ensure equal opportunities and access to services for citizens. In particular, Infrastructure investment and delivery are important tools for the economic and social recovery efforts from the COVID-19 crisis. Infrastructure governance will be crucial to ensure that public investments contribute to a sustainable rebound while strengthening infrastructure resilience, in particular for challenges such as climate change and inclusive growth.”

For recent attacks along these lines, see David Blackmon, Infrastructure Bill Implements Green New Deal Via Corporate Welfare, FORBES (Aug. 10, 2021), www.forbes.com/sites/davidblackmon/2021/08/10/infrastructure-bill-implements-green-new-deal-via-corporate-welfare/?sh=6f3c263ebd0.
On the other hand, infrastructure is attractive for Progressives who want to revive the idea of the public good in an era dominated by neoliberal politics. Today you are likely to find a Progressive vision tied to a sense that the federal government should be doing more to invest in the American future. In fact, infrastructure can be synonymous with “the public good,” “the commons,” or simply “crucial objects worthy of government investment,” for those arguing against the reduction of all political values to market values. This is typically coupled with calls to make infrastructural goods more widely available, more just and more sustainable:

There is a long overdue need for major new federal investments in infrastructure – but increasing federal spending alone is not enough. To ensure the benefits of federal investments are shared broadly, an infrastructure bill should include policies designed to protect labor rights; fight workplace discrimination; set high standards for wages and benefits; and support high-quality training and apprenticeships. Additionally, federal funds should be targeted to those communities facing the greatest need as well as redress the unequal burden of pollution and geographic isolation that neglectful and discriminatory investment policies and projects cause.\(^\text{16}\)

The need for more federal investment has been a common theme since the 1980s, when the philosophy of public investment turned in a more conservative direction. Tying infrastructure into other policy questions (labor rights, discrimination, ecological concerns, etc.) can be traced back to the 1970s, when liberals began to turn against the New Deal state on a number of grounds, such as its corporatism; its bad record on environmental, labor, gender, and racial issues; its support for the military–industrial complex; and so on. When Progressives talk about infrastructure today, however, they nevertheless turn to the past for inspiration, speaking in terms of a “Green New Deal” that would enact programmatic investment in American society.\(^\text{17}\)

You will also find many noting the difference between physical and human infrastructures, a distinction with roots in development economics beginning in


\(^{17}\) For the range of issues that get bundled together under the rubric of “infrastructure” in contemporary politics, see, for example, White House, Fact Sheet: The Bipartisan Infrastructure Deal (Nov. 6, 2021), www.whitehouse.gov/briefing-room/statements-releases/2021/11/06/fact-sheet-the-bipartisan-infrastructure-deal/ (“This Bipartisan Infrastructure Deal will rebuild America’s roads, bridges and rails, expand access to clean drinking water, ensure every American has access to high-speed internet, tackle the climate crisis, advance environmental justice, and invest in communities that have too often been left behind. The legislation will help ease inflationary pressures and strengthen supply chains by making long overdue improvements for our nation’s ports, airports, rail, and roads. It will drive the creation of good-paying union jobs and grow the economy sustainably and equitably so that everyone gets ahead for decades to come.”); see also House Committee on the Budget, Strong Infrastructure and a Healthy Economy Require a Federal Investment, Oct. 29, 2019, https://budget.house.gov/sites/democrats.budget.house.gov/files/documents/Infrastructure%20and%20the%20Economy%20-%20Post-Hearing%20Report%20-%20FINAL.pdf.
the 1950s, when the term “infrastructure” first began to be widely used by planners and high-level politicians and bureaucrats. During the debates around President Biden’s infrastructure package in the fall of 2021, for example, Senator Bernie Sanders tweeted out his support for the bill in these terms: “Rebuilding our crumbling physical infrastructure — roads, bridges, water systems — is important. Rebuilding our crumbling human infrastructure — health care, education, climate change — is more important. No infrastructure bill without the $3.5 trillion reconciliation bill.” In another tweet, Sanders answered the question “[w]hat is infrastructure in this country” with a bullet point list: “roads, bridges, our energy grid, broadband, childcare, dental, vision, & hearing care for the elderly.” He concluded: “Now is the time to begin addressing our physical infrastructure as well as our human infrastructure. Let’s get it done.”

There is also a sense of urgency in contemporary infrastructure politics. Consider the modern phrase “our crumbling infrastructure,” which appears frequently in media reports, white papers, and political discourse and has been in use at least since the 1980s. There are several senses in which we can understand this phrase. First, in the literal sense, crumbling infrastructure comes to our attention in myriad ways in everyday life: blackouts caused by aging power systems and stressed power grids; transportation delays due to inadequate public transport or road construction, etc. Frequent reports since the 1980s have highlighted the physical decay of infrastructures: “The United States now has more than four million miles of roads and bridges,

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much of which was built for an earlier time, is now in poor repair, and continues to become more and more congested.” The fragility of infrastructure is also brought painfully to public awareness in moments of catastrophic failure: when bridges collapse, levees break, water systems fail, and dams crumble, we are made aware that the structures and systems we depend on are much more precarious than we imagine.

But I want to suggest that this phrase also has a great deal of force in modern politics because of its metaphorical resonance. Infrastructure can act as a powerful symbol of the collective social life that infrastructure literally makes possible. The infrastructure is “ours” in the popular phrase because it is imagined as the shared property of a political community. When infrastructure crumbles, it is not just the brute physical stuff like cement and asphalt that we worry about (although it is that too). Rather, it is the nation itself that is at risk of collapsing through a failure of political will and imagination. Everyday infrastructure discourse in our times reflects a widely shared sense of national decline that many attribute to a failure of government to live up the mid-century promise of New Deal social investment. Infrastructure rhetoric fuses the economic and the ideological into a vision of vitality and national renewal, tapping into the postwar politics of growth to imagine a prosperous collective future.

Infrastructure has long worked as a meditation on the national interest. Published for the bicentennial, for example, the History of Public Works in the United States (1976) nicely illustrates the view of infrastructure as a national patrimony: “The vast network of public works facilities which extends from coast to coast provides the life-support systems for the most productive nation in the world. Two-hundred years after its founding, the United States stands second to no other country in terms of wealth and power – characteristics which are both liked and disliked abroad. Each, however, is generally considered essential for protecting the interests of Americans, increasing their standard of living, and assisting the people of other nations in obtaining a better way of life.”


23 Eric Klinenberg, Palaces for the People: How Social Infrastructure Can Help Fight Inequality, Polarization, and the Decline of Civic Life 14 (2018); see also American Society of Civil Engineers, Infrastructure Report Card, https://infrastructurereportcard.org/making-the-grade/ (“Our nation is at a crossroads. Deteriorating U.S. infrastructure is impeding our ability to compete in the global economy, and improvements are necessary to ensure our country is built for the future”).


I Introduction

is a tangible example of government-led nation-building that stands in for a politics of the public good. Infrastructure offers widely credible evidence of the need for Government action in a time of market dominance, and acts as a metaphor for the social or the collective in an era of market-centered neoliberalism. For many today seeking to revive social democracy, infrastructure is the ultimate word to conjure with.

Along these lines, some have connected infrastructure to a normative vision of American democracy. Infrastructure used in this way is often credited to a speech by Ronald Reagan to the British Parliament on June 8, 1982: “The objective I propose is quite simple to state: to foster the infrastructure of democracy – the system of a free press, unions, political parties, universities – which allows a people to choose their own way, to develop their own culture, to reconcile their own differences through peaceful means.” Reagan is using the term in one of the senses that it acquired during the Cold War, to mean civil society and the institutions of liberal democracy. The phrase has long since migrated into general usage to the point where it is now a commonplace. In their defense of President Biden’s infrastructure package, for example, Christopher Jones & David Reinecke make the connection explicit between a normative vision of American democracy and infrastructure: “To be a full-fledged citizen able to achieve the American Dream,” they write, “requires access to infrastructure.”

Others have lent their support to Biden’s infrastructure bill by appealing to the infrastructure-American democracy link:

With a once-in-a-generation investment in infrastructure just passed by Congress and awaiting the president’s signature, we have a unique opportunity to ensure these dollars are spent in a participatory and inclusive capacity, bringing Americans together across differences to revitalize the practice of democracy. In addition to our roads, tunnels, and bridges, we can allocate these dollars through channels that also strengthen our civic infrastructure. Ultimately, the goal is to use federal infrastructure dollars in ways that also support our democracy.

When used in this way, it is clear that we are a long way from the roads, bridges, and subways we need to for our daily commute. We are closer to a sense of imagined community, a civic culture of democracy materialized through massive federal investment. After news reports publicized the billions of dollars the American

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30 Benedict Anderson, Imagined Communities: Reflections on the Origins and Spread of Nationalism (2016); Gilman et al. Use Infrastructure Dollars, supra note 29 (“In addition to our roads, tunnels, and bridges, we can allocate these dollars through channels that also strengthen our civic infrastructure. Ultimately, the goal is to use federal infrastructure dollars in ways that also support our
government was spending on rebuilding Iraq and Afghanistan, many Americans responded with a call for “nation building at home” through infrastructure investment.\textsuperscript{31} It is clear, then, that we speak of infrastructure in both ideological and practical senses. Infrastructure is not just limited to physical things that move people and goods from point A to point B. It invokes normative commitments to governing in the public good and a vision of investment in the nation. Moreover, infrastructures call upon us to resolve thorny questions that have been central themes in American political history: the proper role of government; federalism; the role of the corporations as a government actor doing public work; histories of racial exclusion inscribed into the material infrastructures of modern life; the possibility for corrupt collusion between public and private sectors; and public attitudes toward taxes, debts, deficits, etc.

In our times there is another reason that infrastructure widely resonates: the privatization of infrastructure has become a major public issue since the Reagan years.\textsuperscript{32} “Privatization” can mean different things in different contexts. In some parts of the
world (e.g., Europe and Latin America), it might mean selling off large state-owned enterprises to the private sector. The United States, on the other hand, does not have large state-owned enterprises, so the debate has centered on outsourcing government services to the private sector, “government by contract,” and now most recently, state and municipal privatization efforts. Many have written about privatization in the context of market-based governance under what has come to be called neoliberalism. National and local media have reported widely on this phenomenon, often expressing concerns about the loss of control over public infrastructures, possibilities for corruption, accountability, and other risks in leasing or selling public assets to the private sector. Defenders of privatization point to the potential for cost savings, efficiency, flexibility, and historical pedigree of public–private cooperation.

Once “infrastructure,” rather than say “public works,” becomes the nomenclature, it becomes a technocratic issue of sound management and loses its connection to government. The “public–private partnership” terminology, for example, frames infrastructure as a problem to be solved across the government–corporate divide. From this perspective, there are not compelling reasons why infrastructures should be controlled directly by public agencies. In fact, there may be good reasons to move infrastructures off government balance sheets, where they can appear as liabilities, whereas a public–private lease arrangement, for example, can at least in the short term appear as an asset. Privatization and infrastructure are also a natural conceptual pairing because public infrastructures are today the logical object for the global privatization industry: They are often massive structures built during the heyday of direct public expenditures in the mid-century infrastructure boom, now often undercapitalized because of the fiscal revolution in the 1970s. In other words, much of what is “public” and in need of private capital can also be categorized as infrastructure.

The pushback against privatization and arguments for more government investment in infrastructure is founded on a specific historical vision of the twentieth-century welfare state as an embodiment of democracy and the rule of law. Jon D. Michael’s Constitutional Coup: Privatization’s Threat to the American Republic, for example, lays out the case for privatization’s pivotal connection to public–interest liberalism and democracy:

[This] book takes us back in time to explore the project of twentieth-century administrative governance as a normatively and constitutionally virtuous one. It describes the almost evangelical denunciation of that project, as evidenced by what

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33 See, for example, The Neoliberal Deluge: Hurricane Katrina, Late Capitalism, and the Remaking of New Orleans (Cedric Johnson, ed. 2011).

is now a multigenerational campaign to refashion public governance in the image of a Fortune 500 company, if not now something straight out of the new gig economy. And it explains how dangerous, distorting, and destructive this campaign has been—and why the operational challenges and democratic imperatives of the twenty-first century compel us to redeem that original, and long beleaguered, administrative project.\footnote{Jon D. Michaels, Constitutional Coup: Privatization’s Threat to the American Republic 4 (2017).}

While this view has much to commend it and many defenders today, the purpose of this book is different: not so much to critique privatization or defend public infrastructure, which has so ably been undertaken elsewhere, as an attempt to bring infrastructural history in the United States into clearer focus. Privatization is of our moment, to be sure, but it also reflects long-standing entanglements of public and private in government, economy, and law throughout American history. This book will suggest that our framing of the world into state and market, public and private, is foundational to liberal politics and economics in ways that have been open to contestation, redefinition, and debate.

However malleable a term, I argue that some version of infrastructure, whether called “internal improvements,” “public works,” “public utilities,” or something else, has been central for liberal development models based on political commitment to economic growth anchored in state governance, investment, and regulation. Arguments about who builds, owns, and controls infrastructure, and what its purposes are, also implicate debates about the meaning of democracy within liberal capitalist modernity. The terminologies at play may be different, but they all suggest a common thread: infrastructure troubles liberalism’s categories of public and private because it links the two domains together in a literal sense – governments are often involved on a massive scale in subsidizing corporate ventures – but also along the dimensions of law and ideology, because the categories of public and private, while hardwired into modern liberal capitalism, are nevertheless fluid and permeable. Infrastructure demonstrates the stubbornly political nature of economic life while also complicating models that imagine self-sustaining market systems.

\section*{II INFRASTRUCTURE STUDIES}

Scholars across academic disciplines have made infrastructure an object of study since the 1990s.\footnote{See, for example, Infrastructures and Social Complexity: a Companion (Penn Harvey et al., eds., 2017).} Since it is a key concept for nation-building and what we now call economic development, infrastructure can also be a way of understanding the material embodiment of state governance and Enlightenment rationality, which have been both celebrated and contested throughout modern history. Infrastructures