

**INFRASTRUCTURE PROJECT OVERSIGHT: LESSONS
LEARNED FROM THE GORDIE HOWE INTERNATIONAL
BRIDGE PROJECT**

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I. INTRODUCTION

For the last nine years, I have devoted much of my professional life to leading all aspects of Michigan’s participation in the mammoth and almost

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infinitely complex Gordie Howe International Bridge project.¹ At the behest of, first, Governor Rick Snyder, and then, Governor Gretchen Whitmer, I have worked with a committed and talented team of colleagues to help make sure that: project procurement milestones are achieved; lawsuits filed by project opponents are defeated; hundreds of needed properties are acquired; project leaders are kept fully informed about the status of the project; the interests of impacted communities are protected and advanced; material issues and challenges are identified, communicated and attacked; applicable laws, regulations and other requirements are followed; public support for the project is maintained; agreements among project partners are forged; Michigan's contractual obligations, and contractual obligations owed to Michigan, are honored; and the myriad of stakeholders collaborate as partners, always working together to move the project forward.

When I joined the Gordie Howe International Bridge project in 2013, I knew little about infrastructure, which in previous eras was referred to as "public works" or "internal improvements." I left my law practice to work for Governor Snyder thinking that the delivery of financed projects generally can be safely presumed, like the arrival of the goods we order on Amazon. But the more deeply I immersed myself in the bridge project, the more I realized the precariousness of this and other projects and that upgrading our infrastructure assets requires, not just money, but bottomless expertise, the careful alignment of competing interests among a myriad of stakeholders, commercial and legal sophistication, and armies of hyper-focused public and private sector actors committed to defeating sometimes existential challenges as they arise. Another realization that dawned on me during my early years on the Gordie Howe International Bridge project: governmental leaders and the public know precious little about infrastructure in general or the successful delivery of infrastructure projects specifically. When will the bridge project be completed? How many jobs will it create? How much will toll fare cost? Those are among the anodyne questions often asked. Rarely have media or public inquiries been grounded in a sophisticated understanding of the project.

The impetus behind this article is to shed some light on infrastructure projects, using the Gordie Howe International Bridge project as a vehicle to demystify them at a time when, thanks to Congress's recent passage of

1. See *infra* Part I. The Gordie Howe International Bridge project, which was known during development until 2013 as the Detroit River International Crossing and then the New International Trade Crossing, is a multi-billion dollar, once-in-a-generation undertaking. The cable-stayed bridge will span the Detroit River, be anchored by two state-of-the-art ports-of-entry (one in Windsor, Ontario and the other in Detroit, Michigan), and provide for the first-time highway-to-highway connectivity at one of North America's busiest trade corridors.

transformational, \$1.2 trillion infrastructure legislation, unprecedented opportunities to rebuild our roads, bridges, rails, and other public works will soon abound. If there is one message I want to convey in these pages to policymakers, political leaders, and project managers, if there is one lesson I believe the Gordie Howe International Bridge project teaches above all others, it is this: Infrastructure projects are often fragile undertakings, and their successful planning, execution, and delivery requires effective, rigorous oversight.

I concede that an article addressing infrastructure project oversight may have difficulty capturing and holding the attention of many readers. The word “infrastructure” tends to evoke images of impenetrable engineering specifications, tangles of telephone wires, and the irritating but ho-hum pothole. But when the suggestion is made that infrastructure is boring, my thoughts gravitate to author David Foster Wallace’s famous commencement speech, delivered at Kenyon College in 2005. Wallace began that address by saying, “There are these two young fish swimming along, and they happen to meet an older fish swimming the other way, who nods at them and says, ‘Morning, boys, how’s the water?’ And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes, ‘What the hell is water?’”² The point of the parable, according to Wallace, is that “the most obvious, important realities are often the ones that are hardest to see and talk about.”³ Our infrastructure is analogous to the water in which Wallace’s fish swim: perhaps invisible but ubiquitous, life-sustaining, and definitely not boring. There is no commonly accepted definition of “infrastructure,”⁴ but it is helpful to think of its definition as encompassing physical, structures, facilities, and systems that are needed to connect us to each other, girding society, thereby creating broadly shared opportunities, improved standards of living, and new efficiencies.

Infrastructure is about more than the roads, fiber optic cables, and sewer lines that incise our landscape. Its significance transcends the physical and is spiritual, communal, and moral in nature. This, perhaps, was what Winston Churchill was getting at when he wrote to a friend of

2. David Foster Wallace, *This Is Water*, FARNAM ST. (May 21, 2005), <https://fs.blog/david-foster-wallace-this-is-water/> [<https://perma.cc/HYF7-R4MT>].

3. *Id.*

4. HENRY PETROSKI, *THE ROAD TAKEN* 14 (2016) (“‘infrastructure’ as a common English word has a surprisingly recent etymology, with the present meaning being traced only from 1927” and obscure usage through the 1980s).

his father in 1901, “I see little glory in an Empire which can rule the waves and is unable to flush its sewers.”⁵

The recommendations and observations in this article are impressionistic in some ways, as there is no analytic bureaucracy whose mission is to research infrastructure oversight practices, and there are no comprehensive data metrics predicting or measuring the success of infrastructure projects. When it comes to infrastructure, there has been “disappointingly little cross-over [research] between . . . disciplinary groups,” and the scholarship is “still some way off the ideal.”⁶ Thus, knowledge about the building blocks of successful infrastructure projects and effective oversight often remains anecdotal and based on case studies.⁷

For multiple reasons, now more than ever is the time for us to consider the imperative of infrastructure oversight. First, the poor condition of our nation’s infrastructure, standing alone, underscores the need for better oversight. In its 2021 quadrennial report, the American Society of Civil Engineers, the country’s oldest national civil engineering organization, assigned a grade of “D” to 11 out of 17 infrastructure categories, giving an overall “C-” grade.⁸ The report concluded, for example, that forty percent of the nation’s road system is now in poor or mediocre condition and that forty-five percent of Americans have no access to transit.⁹

Second, the infrastructure legislation passed by Congress, known as the Infrastructure Investment and Jobs Act (“IIJA”)¹⁰ signed into law by President Joe Biden in November 2021, gives the United States a historically unprecedented opportunity to narrow the infrastructure funding gap, which the ASCE estimates would be \$2.59 trillion over ten

5. ANDREW ROBERTS, CHURCHILL 83 (2018) (stating that Churchill wrote the letter after reading Benjamin Seebohm Rowntree’s *Poverty, A Study of Town Life*, published in 1901).

6. Graeme Hodge, Carsten Greve & Mhamed Biygautane, *Do PPP’s work? What and how have we been learning so far?*, 20 PUB. MGMT. REV. 1105, 1113 (2018).

7. See, e.g., Nicola Ulibarri, Bruce E. Cain & Newsha K. Ajami, *A Framework for Building Efficient Environmental Permitting Processes*, 9 SUSTAINABILITY 1, 3 (Jan. 25, 2017), <https://www.mdpi.com/2071-1050/9/2/180> [<https://perma.cc/TX6G-9WG8>] (study of the environmental permitting process in California was based on interviews conducted with participants in four projects).

8. AMERICAN SOC’Y OF CIV. ENG’RS, 2021 REPORT CARD FOR AMERICA’S INFRASTRUCTURE 4 (2021), https://infrastructurereportcard.org/wp-content/uploads/2020/12/National_IRC_2021-report.pdf [<https://perma.cc/UH9F-ZC2A>] (Aviation (D+), bridges (C), dams (D), drinking water (C-), energy (C-), hazardous waste (D+), inland waterways (D+), levees (D), ports (B-), public parks (D+), rail (B), roads (D), schools (D+), solid waste (C+), stormwater (D), transit (D) & wastewater (D+)) [hereinafter ASCE 2021 REPORT CARD].

9. *Id.*

10. Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021).

years.¹¹ Specifically, the \$550 billion in new spending provided by the bill gives “big boosts in funding for transportation, internet access, and clean drinking water, much of which will be distributed to states that will then allocate the funds to regional projects. The bulk of the money focuses on transportation-related needs including roads, bridges, rail, public transit, airports and waterways;”¹² these projects must be carefully executed to not squander this rare opportunity.¹³

Third, wasteful resource misallocation is most likely to occur when, as is the case with the Biden infrastructure plan, vast sums of money are made available to governments lacking the oversight skills or experience needed to spend it efficiently.¹⁴ This is at least partially why China’s Belt and Road Initiative, a multi-trillion dollar global infrastructure development strategy that sprang into existence in 2013, has been defined by what researchers describe as “substantial macroeconomic risks: accumulating debt and non-performing loans, distortionary monetary expansion, and lost alternative investment opportunities.”¹⁵ For example, one airport in Sri Lanka financed by China is said to be the least

11. ASCE 2021 REPORT CARD, *supra* note 8.

12. Li Zhou, *The Bipartisan Infrastructure Law is Both Historic and Not Nearly Enough*, VOX (Nov. 15, 2021, 4:23 PM), <https://www.vox.com/22770447/infrastructure-bill-democrats-biden-water-broadband-roads-buses> [<https://perma.cc/4BWM-K7EG>].

13. The Biden infrastructure legislation belies this country’s long history of underfunding public works, which has witnessed extended periods of stasis or neglect punctuated by rare bursts of federal investment in, for example, the transcontinental railroad and the interstate highway system. During Antebellum America, Jeffersonian Democrats and states’ right advocates believed a strong central government both was unconstitutional and threatened slavery and, therefore, vigorously (and successfully) opposed federal investments in “internal improvements.” JAMES TRAUB, JOHN QUINCY ADAMS: MILITANT SPIRIT 316 (2017). “In 1919, Dwight Eisenhower led the Army’s first transcontinental motor convoy, a 62-day journey that was, according to biographer Jean Edward Smith, ‘marred by... rain that turned dirt into gumbo... collapsed bridges, deeply rutted roadways, and the absence in places of any roadbed whatsoever.’” Andy Doctoroff, Opinion, *Biden’s Infrastructure Plan: A Chance to Transform US Economy*, DET. FREE PRESS (Apr. 8, 2021), <https://www.freep.com/story/opinion/contributors/2021/04/08/biden-infrastructure-plan-us-economy/7114574002/> [<https://perma.cc/76VJ-YGJN>] (quoting JEAN EDWARD SMITH, *EISENHOWER IN WAR AND PEACE* ch. 3 (2017)).

14. Commentators have observed that certain infrastructure like mass transit is often markedly more expensive in the United States, because we build it less often than other countries and, therefore, lack the “practice” to develop efficiencies and best practices. Jerusalem Demsas, *Why Does it Cost so Much to Build Things in America?*, VOX (June 28, 2021) <https://www.vox.com/22534714/rail-roads-infrastructure-costs-america> [<https://perma.cc/R9KN-55QC>]. To wit, between 2003 and 2016, China built 22,000 kilometers of high-speed rail, compared to existing networks of 2647 kilometers in France, 3164 kilometers in Japan, and zero in the United States. FRANCIS FUKUYAMA, MICHAEL BENNON & MUSHRA BATAINEH, *CHINESE AND WESTERN APPROACHES TO INFRASTRUCTURE DEVELOPMENT*, in *DEVELOPMENT STUDIES IN REGIONAL SCIENCE* 245 (2020).

15. FUKUYAMA ET AL., *supra* note 14, at 249.

trafficked in the world; its regional roads carry more elephants than automobiles.¹⁶

This article asks: what can we do to better understand how all aspects of infrastructure projects, including their planning, execution, and delivery, are effectively overseen? Each infrastructure project, whether it is large or small, complex, or relatively simple, is unique, and, therefore, it is unrealistic to think that the issue of oversight can be reduced to a quantifiable formula. Still, as stated above, the Gordie Howe International Bridge project is a useful lens through which to examine infrastructure oversight, and, for that reason, Part II of this article devotes considerable space to describing the project and its benefits, political and legal history, and procurement process. My professional experiences working on the Gordie Howe International Bridge and other infrastructure projects allow me to make several observations about project oversight, each of which will be discussed at greater length below.

First, as used in this article, “project management oversight” means watchful, responsive, and affirmatively engaged supervision of the actions and conduct of project co-owners, contractors and other stakeholders intended to improve the delivery of an infrastructure project and increase the likelihood of its success. Second, there are multiple (often conflicting) criteria used to assess whether a project is “successful,” but those of us working on the Gordie Howe International Bridge project will consider several factors—including but not limited to timeliness of completion, quality, cost, and reputation—when making this evaluation. Third, a survey of infrastructure projects shows that they often fail, sometimes spectacularly so, on account of poor oversight. Fourth, there is no road map that points the way toward effective oversight of infrastructure projects, but the foundational Gordie Howe International Bridge project documents identify a plethora of instructive oversight mechanisms. Fifth, the history of the Gordie Howe International Bridge project is, at its best, one of collaboration demonstrating that, ultimately, effective oversight is about people—how they think, problem solve, interact, and, most importantly, lead.

The parameters of this article are narrow. They encompass the oversight of specific infrastructure projects, not the oversight of infrastructure policy itself. However, the essential values, or civic virtues, required for effective oversight at the project level mirror what is required for the effective oversight of infrastructure policymaking in general. Thus, the end of this article contains a specific proposal that would, if adopted, both honor the late Senator Carl Levin’s commitment to principled and

16. *Id.* at 249, 253.

aggressive oversight and help Michigan become a leader in infrastructure delivery and policy formation.

II. THE GORDIE HOWE INTERNATIONAL BRIDGE PROJECT

The Gordie Howe International Bridge project is a prism through which we may constructively look when considering infrastructure oversight. This section describes the project and also contains a factual narrative on which conclusions stated in this article will be based or to which later discussions will refer.

A. The Physical Aspects of the Bridge Project

The physical aspects of the Gordie Howe International Bridge project are well-known. Today, motorists traveling on I-75 in southwest Detroit can see two towering inverted Y-shaped concrete piers under construction, which as of this writing rise higher than 400 feet above the ground: one immediately adjacent to the Lafarge Cement Terminal and the other in the distance, across the Detroit River, in Windsor, Ontario. The piers will reach a height of 722 feet, rivaling the height of the 73-story General Motors Renaissance Center, and anchor 216 parallel strand cable stays that will support the main deck of the Gordie Howe International Bridge.¹⁷ The structure, which will be 1.5 miles long,¹⁸ will have the longest main span of any cable-stayed bridge in North America.¹⁹ The Gordie Howe International Bridge, which will have a dedicated, multi-use path to accommodate pedestrians and cyclists, will connect to a state-of-the-art port-of-entry on each side of the Canadian-United States border.²⁰ The ports-of-entry, which collectively occupy 297 acres of land, will feed into, respectively, Highway 401 in Ontario (through the Herb Gray Parkway

17. *High Profile of Gordie Howe International Bridge*, WINDSOR-DETROIT BRIDGE AUTH. (June 11, 2021), <https://www.gordiehoweinternationalbridge.com/en/high-profile?printer-friendly> [https://perma.cc/7HD4-ZNHS].

18. *Project Overview of Gordie Howe International Bridge*, WINDSOR-DETROIT BRIDGE AUTH., <https://www.gordiehoweinternationalbridge.com/en/project-overview> [https://perma.cc/U944-CYWD] (last visited Jan. 3, 2022).

19. A cable-stayed bridge is a “bridge form in which the weight of the deck is supported by a number of nearly straight diagonal cables in tension running directly to one or more vertical towers. The towers transfer the cable forces to the foundations through vertical compression.” *Cable-stayed Bridge*, BRITANNICA.COM, <https://www.britannica.com/technology/cable-stayed-bridge> [https://perma.cc/LW8Z-5H3S] (last visited Jan. 3, 2022).

20. The multi-use path will could make the bridge a tourist destination. Not only will it enable people to embark on international cycling and hiking trips, but it will afford them the opportunity to leisurely take in breathtaking views of the sun rising and setting over the downtown Detroit skyline.

extension of Highway 401) and I-75 in Michigan, thereby providing for the first time in this region uninterrupted, cross-border freeway traffic flow.²¹ Construction of the new I-75 interchange will require the building of four new ramps and will be accompanied by local road improvements, including “complete” streets, four new road bridges and five new pedestrian bridges.²² In short, the Gordie Howe International Bridge project is a massive undertaking, one whose design and construction alone will cost \$3.8 billion (CAD).²³

B. Benefits of the Gordie Howe International Bridge Project

The benefits of the Gordie Howe International Bridge are legion. First, the bridge satisfies a long-term need for enhanced border-crossing capacity. The bridge will be built in a location that is an epicenter of international trade; in 2019, total trade in goods and services between the United States and Canada surpassed \$718.4 billion.²⁴ Canada is easily the United States’ top trading partner, and nearly nine million jobs across the U.S. depend on trade with Canada.²⁵ Detroit, in turn, is the busiest border crossing between Canada and the United States. In 2019, more than twenty-seven percent of annual two-way trade between Canada and the United States—approximately \$193.9 billion—crossed the Windsor-Detroit border.²⁶ This amount is greater than the value of all trade between the United States and Great Britain.²⁷ Despite the importance of trade

21. *Gordie Howe Bridge Construction Updated*, FINCAS VITAL <https://fincasvital.com/29f3g/gordie-howe-bridge-construction-update.html> [<https://perma.cc/4V83-22FR>] (last visited Apr. 16)

22. *Id.*

23. *Contract Value Overview of Gordie Howe International Bridge*, WINDSOR-DETROIT BRIDGE AUTH., [https://www.gordiehoweinternationalbridge.com/u/files/Fact%20Sheets/English/Financial%20Close/3%20-%20FS%20-%20Contract%20Value%20Overview%20\(2018-09-27\)%20ENGLISH%20FINAL.pdf](https://www.gordiehoweinternationalbridge.com/u/files/Fact%20Sheets/English/Financial%20Close/3%20-%20FS%20-%20Contract%20Value%20Overview%20(2018-09-27)%20ENGLISH%20FINAL.pdf) (last visited Jan. 3, 2022). The \$3.8 billion figure does not include operation and maintenance costs totaling \$1.9 billion (CAD). Thus, as discussed below, the Gordie Howe International Bridge project is a \$5.7 billion enterprise.

24. *Canada*, OFF. U.S. TRADE REPRESENTATIVE, <https://ustr.gov/countries-regions/americas/canada> [<https://perma.cc/LDT9-PYGP>] (last visited Jan. 3, 2022).

25. Niall McCarthy, *Nearly 9 Million U.S. Jobs Depend on Trade with Canada*, FORBES (June 12, 2018) <https://www.forbes.com/sites/niallmccarthy/2018/06/12/nearly-9-million-u-s-jobs-depend-on-trade-with-canada-infographic/?sh=3fe8212a538e> [<https://perma.cc/3EPE-R9Q8>].

26. *Ambassador Bridge between US and Canada Closes Over Potential Explosives Threat*, DW (Oct. 4, 2021), <https://www.dw.com/en/ambassador-bridge-between-us-and-canada-closes-over-potential-explosives-threat/a-59404102> [<https://perma.cc/H4Q5-D4YF>].

27. The Gordie Howe International Bridge will directly and significantly benefit Michigan and the companies located in the state. In 2020, Michigan exported more goods

between the U.S. and Canada, the only bridge currently spanning the Detroit River is the 95-year-old, four-lane Ambassador Bridge. The Ambassador Bridge is not large enough to accommodate traffic flow that is projected to significantly increase in the coming decades. This has consistently been one of the central findings contained in the environmental impact statement (“EIS”) for the Gordie Howe International Bridge project and subsequent reevaluations.²⁸

Second, the Gordie Howe International Bridge project is needed “to improve system connectivity between the U.S. Interstate Highway system in Michigan and the Canadian freeway Highway 401.”²⁹ The Ambassador Bridge connects to busy city streets located near the heart of downtown Windsor. In this era of just-in-time-delivery, commercial trucks and other vehicles often must wait for hours, stopping at numerous red lights and idling in long lines of traffic that meander their way through Windsor. It has been reported that truck drivers prepare for lengthy border delays by wearing adult diapers and taking amphetamines to avoid stopping.³⁰ The Gordie Howe International Bridge will provide the first direct freeway-to-freeway connections on both sides of the United States/Canadian border.³¹ This will save approximately 850,000 hours per year for the trucking industry.³²

and services (\$19.6 billion) to Canada than to its next seven largest foreign markets combined. *Michigan & Canada*, CONSULATE GEN. OF CANADA: CONNECT 2 CANADA (Apr. 2021), <https://connect2canada.com/wp-content/fact-sheets/mi.pdf> [<https://perma.cc/5S3W-LC4V>]. In 2018, a full 41% of all goods exported from Michigan were delivered to Canada. *Michigan*, OFF. U.S. TRADE REPRESENTATIVE, <https://ustr.gov/map/state-benefits/mi> [<https://perma.cc/6YV5-VNCT>] (last visited Jan. 3, 2022). Meanwhile, Michigan annually imports from Canada \$48.3 billion in goods; 35.8% of the goods imported by Michigan were from Canada. *How Closely is Your State’s Economy Tied to Canada?*, HOWMUCH.NET (July 17, 2017), <https://howmuch.net/articles/states-most-dependent-on-trade-with-canada> [<https://perma.cc/35BU-8Z25>].

28. Thus, the re-evaluation of the EIS dated May 4, 2018, states, in relevant part: “To meet long-term border crossing needs, sufficient capacity is needed on all elements of a border crossing system, including access roads, inspection facilities and on the crossings themselves. The Gordie Howe International Bridge is the only proposed project in the Detroit/Windsor corridor that includes improvements to all elements of a border crossing system sufficient to meet long-term border crossing capacity . . . needs.” MICH. DEP’T OF TRANSP. & FED. HIGHWAY ADMIN., APPROVAL OF THE ADMINISTRATIVE RE-EVALUATION OF THE ENVIRONMENTAL IMPACT STATEMENT AND RECORD OF DECISION FOR THE GORDIE HOWE INTERNATIONAL BRIDGE PROJECT 4 (May 4, 2018) [hereinafter EIS Re-Evaluation].

29. *Id.* at 5.

30. Matt Mossman, *Crossing Guards*, HARPER’S, <https://harpers.org/archive/2017/12/crossing-guards/> [<https://perma.cc/5CY3-YTSC>] (last visited Apr. 16, 2022).

31. *Id.*

32. *The Gordie Howe International Bridge and the Bi-National Great Lakes Economic Regions: Assessing Economic Impacts and Opportunities*, CROSS-BORDER INST. at 4 (Jan.

Third, the Gordie Howe International Bridge project satisfies the need for improvements to operations and processing capabilities at the customs plazas on both sides of the border. Those plazas will be state-of-the-art. Travelers crossing the six-lane bridge en route to I-75 will pass through one of thirty-six inspection booths.³³ In contrast, the existing customs facilities adjacent to the Ambassador Bridge and the Detroit-Windsor tunnel are “landlocked by roadways” and other features that restrict and limit the ability of border crossing agencies to both ensure public safety and efficiently process passenger and commercial vehicles.³⁴

“Redundancy” is a fourth need that the Gordie Howe International Bridge addresses. As recognized in the 2018 re-evaluation of the EIS, “[r]edundant crossings are essential to maintain the seamless flow of people and goods in the event of disruptions to the normal flow of traffic.”³⁵ This fact was underscored in October 2021 when the Ambassador Bridge was closed for several hours “due to possible explosives in the area” causing traffic backups.³⁶ The nearby Detroit-Windsor Tunnel was not an alternate route, because its twelve-foot, eight-inch height restriction precludes most commercial traffic.³⁷ Lest there be any doubt that the Detroit-Windsor trade corridor needs a second crossing, in 2015, chunks of concrete, including one that measured twenty-two inches across, fell from the aging Ambassador Bridge, prompting Windsor officials to close numerous streets.³⁸

2021), <https://www.cbainstitute.ca/wp-content/uploads/2021/01/Gordie-Howe-International-Bridge-Summary-Report.pdf> [<https://perma.cc/4GF7-9Q2G>].

33. Ronald Ahrens, *Balancing Act*, D BUS. (Aug. 31, 2021), <https://www.dbusiness.com/business-features/balancing-act/> [<https://perma.cc/PP2W-BR2Z>].

34. EIS Re-Evaluation, *supra* note 28, at 5.

35. *Id.*

36. Melanie Borrelli, ‘Possible Explosives’ Partially Shut Down Ambassador Bridge, I Detained, CTV NEWS WINDSOR (Oct. 4, 2021, 10:34 AM), <https://windsor.ctvnews.ca/possible-explosives-partially-shut-down-ambassador-bridge-1-detained-1.5610065> [<https://perma.cc/QY9E-VVZ8>]; *Explosives Scare Leads to Backups into Canada on Ambassador Bridge*, WWJ NEWSRADIO 950 (Oct. 4, 2021, 4: 02 PM), <https://www.audacy.com/wwjnewsradio/news/local/ambassador-bridge-closed-to-us-traffic-possible-explosives> [<https://perma.cc/Y2G5-KDJS>].

37. EIS Re-Evaluation, *supra* note 28, at 5.

38. Eric D. Lawrence, *Ambassador Bridge Rains Concrete Down on Windsor*, DET. FREE PRESS (Oct. 15, 2015, 9:34 AM), <https://www.freep.com/story/news/local/michigan/detroit/2015/10/15/windsor-closes-streets-near-ambassador-bridge/73978234/> [<https://perma.cc/A5W9-FDEK>].

C. Confronting Intense Opposition to the Gordie Howe International Bridge Project

The Gordie Howe International Bridge project's early history throws into sharp relief the long odds against its ever having gotten off the drawing board. When Republican Governor Rick Snyder took office on January 1, 2011, the bridge project, which as stated above was then known as the Detroit River International Crossing ("DRIC"), was thought to be dead in the water. In September 2010, the state Senate Majority Leader Mike Bishop blocked a floor vote on authorizing legislation, prompting Snyder's Democratic predecessor, Governor Jennifer Granholm, to charge:

Senate Republicans have bowed to special interests. They are irresponsible, discarding 10,000 jobs for Michigan workers and ignoring the needs of job providers. It's simply incredible that they turned down a no-risk project which had support from business, labor, former Governors Engler and Blanchard and the U.S. and Canadian governments. It's Exhibit A for why Michigan needs campaign finance reform.³⁹

In calling out "special interests," Governor Granholm presumably was referring principally to billionaire Manuel Moroun, the octogenarian owner of the Ambassador Bridge who along with family members prodigiously funded campaign coffers of lawmakers and lobbied legislators to kill the DRIC.⁴⁰ According to one report, during the 2009–10 election cycle, Moroun, who died in 2020,⁴¹ gave at least \$515,000 to

39. Press Release, State Mich. Former Governors, Governor Granholm Statement on DRIC (Dec. 2, 2010), https://www.michigan.gov/formergovernors/0,4584,7-212-96477_57648_21974-247896--,00.html [<https://perma.cc/W7QB-2MMZ>]; Jeff Bennett, *Plans for a New Detroit River Bridge Hit Roadblock*, WALL ST. J. (Sept. 16, 2010, 6:32 PM), <https://www.wsj.com/articles/SB10001424052748704394704575496254143664276> [<https://perma.cc/TX9S-VEDX>].

40. Huma Khan & Julie Percha, *Burning Bridges? U.S. Businessman in International Dispute Over Detroit Bridge*, ABC NEWS (July 22, 2010, 12:06 PM), <https://abcnews.go.com/Politics/ambassador-bridge-scuffle-us-businessman-row-us-canada/story?id=11227217> [<https://perma.cc/HX3N-8BAY>]; Luiza Ch. Savage, *Why Canada is Paying \$4 Billion For a New Detroit-Windsor Bridge*, CANADIAN BUS. (May 22, 2015), <https://archive.canadianbusiness.com/economy/4-billion-detroit-windsor-bridge/> [<https://perma.cc/9PMU-V3A4>].

41. Moroun had several family members who now own or control many entities, including the Detroit International Bridge Corp., the owner of the Ambassador Bridge. Throughout this article, I will collectively refer to them as "Moroun."

state-level politicians, with Bishop's political action committee receiving \$50,000 in October 2010.⁴²

In his inaugural State of the State address delivered on January 19, 2011, Governor Snyder surprised Lansing by bucking many in his own political party and embracing the bridge project, declaring:

To achieve success in today's world, it requires that we look beyond our borders. We must open ourselves to the promises and potential of the global marketplace. We must increase exports from Michigan farmers, manufacturers, and entrepreneurs. Last year, Canada was the top market for our products. In 2009, Michigan did roughly \$4 billion in trade with Canada. We also know that one out of every eight jobs in Detroit is in the export industry. . . Global demand for our ports of entry is expected to increase steadily with no signs of slowing. To satisfy growing demand, we must move forward towards building a new bridge from Detroit to Windsor, the Detroit River International River Crossing.⁴³

But Moroun fought back hard. On October 19, 2011, after Moroun spent \$6 million in television ads to oppose the bridge,⁴⁴ the Legislature once again halted the massive infrastructure project in its tracks when the state Senate Economic Development Committee voted 3–2 not to report to the full Senate a bill authorizing a second Detroit River crossing. All three “no” votes were Republican—and all three, like Bishop, had taken campaign contributions from Moroun.⁴⁵ The *Detroit Free Press* reported

42. Mossman, *supra* note 30.

43. Governor Rick Snyder, State of the State: On Free Trade: Increase Canada Trade with New Detroit River Bridge (Jan. 19, 2011) (transcript available at https://www.ontheissues.org/Archive/2011_State_Rick_Snyder.htm [<https://perma.cc/H652-9S7H>]).

44. David Eggert, *Proposal 6: Call for Public Votes on New Detroit-Windsor Bridge Defeated*, MLIVE (Nov. 7, 2012, 2:53 AM), https://www.mlive.com/politics/2012/11/michigan_proposal_6_call_for_v.html [<https://perma.cc/UZJ8-ZTJS>].

45. Jack Lessenberry, *More of Moroun's Lies in Bridge Battle*, DET. METRO TIMES (Nov. 9, 2011, 12:00 AM), <https://www.metrotimes.com/detroit/more-of-morouns-lies-in-bridge-battle/Content?oid=2148265> [<https://perma.cc/2UTJ-2XXK>]; *see also* Jack Lessenberry, *Death of Plan for New Bridge to Canada Leaves a Foul Odor*, TOL. BLADE (Nov. 4, 2011, 12:00 AM), <https://www.toledoblade.com/JackLessenberry/2011/11/04/Death-of-plan-for-new-bridge-to-Canada-leaves-a-foul-odor/stories/201111040005> [<https://perma.cc/Y26D-9XNB>]; Bill Shea, *Snyder Stirs DRIC Jobs Debate*, CRAIN'S DET. BUS. (Jan. 24, 2011), <https://www.crainsdetroit.com/assets/PDF/CD72429123.PDF> [<https://perma.cc/7242-9123>].

that the Moroun family's contributions included \$9,700 to six of the seven members of the Senate panel.⁴⁶ The legislators voted "no" even though: (i) the bridge addressed a critical transportation infrastructure need; (ii) the bridge was strongly supported by a broad coalition of political, labor, and business leaders across Michigan; (iii) Canada had already generously agreed to finance the project; and (iv) money spent in Michigan by Canada would be eligible for \$2.2 billion in federal transportation matching credits. Moroun's publicity and lobbying campaign against the bridge was based on misrepresentations.⁴⁷

The Legislature's apparent deference to Moroun's interests was again evinced by its adoption of appropriations "boilerplate" purporting to prohibit the Michigan Department of Transportation ("MDOT") from spending any money on the bridge project. Specifically, the Legislature stated:

(1) The department shall not expend any state transportation revenue for construction planning or construction of the Detroit River International Crossing or a renamed successor. In addition, except as provided in subsection (3), the department shall not commit the state to a new contract related to the construction planning or construction of the Detroit River International Crossing or a renamed successor unless the legislature has enacted specific enabling legislation to allow for the construction of the Detroit River International Crossing or a renamed successor.⁴⁸

Notwithstanding this "boilerplate" language, Governor Snyder continued to push the bridge project forward. Rather than seek specific enabling legislation, he took the measure of his own powers and determined that the Legislature had previously granted to the executive

//perma.cc/JDK9-TKU4]; *A New Bridge Across the Detroit River: Conflict of Interest?*, MICH. RADIO (Oct. 19, 2011, 10:59 AM), <https://www.michiganradio.org/politics-government/2011-10-19/a-new-bridge-across-the-detroit-river-conflict-of-interest> [https://perma.cc/T6RY-JQ3B]; Micheline Maynard, *Detroit's New Bridge Is Going Nowhere*, BLOOMBERG (Nov. 10, 2011, 11:15 AM), <https://www.bloomberg.com/news/articles/2011-11-10/detroit-s-new-bridge-is-going-nowhere> [https://perma.cc/7R4V-KCN2]; Paula Holmes-Greeley, Editorial, *Dollars and Politics: Senate Bridge Vote Raises Concerns*, MLIVE, (Oct. 25, 2011, 9:54 AM), https://www.mlive.com/opinion/muskegon/2011/10/editorial_dollars_and_politics.html [https://perma.cc/X54W-HKXL].

46. Phil Power, *Moroun's Money Writes Sad Tale for State*, BRIDGE MICH. (Oct. 25, 2011), <https://www.bridgemi.com/phils-column/morouns-money-writes-sad-tale-state> [https://perma.cc/7P3C-HJ9Z].

47. Lessenberry, *More of Moroun's Lies in Bridge Battle*, *supra* note 45.

48. Dep't of Transp. v. Riverview-Trenton R.R. Co., 332 Mich. App. 574, 582, 958 N.W.2d 246, 255 (2020) (citing 2011 Mich. Pub. Acts 130).

branch the statutory authority to enter into an inter-governmental agreement with Canada.⁴⁹ The result was the extensively-negotiated framework “Crossing Agreement” executed on June 15, 2012, by Her Majesty the Queen in Right of Canada, the newly created Windsor-Detroit Bridge Authority (“WDBA”), and the State of Michigan, as represented by Governor Snyder, MDOT, and the Michigan Strategic Fund.⁵⁰

Since its execution, the Crossing Agreement has been the contractual blueprint for the Gordie Howe International Bridge project, establishing its broad dimensions and contours. Specifically, the Crossing Agreement provided, among other things, that: (i) a Canadian Crown corporation, the WDBA, would be responsible for delivering the new international toll bridge (with tolls being collected only in Canada), which would be co-owned by Canada and Michigan; (ii) the WDBA would operate under the oversight of a jointly established International Authority with three members appointed by Canada and the WDBA and three members appointed by Michigan; (iii) the project would be a public-private partnership (“PPP” or “P3”),⁵¹ in which a private sector concessionaire would be retained by the WDBA to complete design work, provide financing, construct all project components, and maintain and operate the bridge for a period of 30 years; (iv) Michigan would not be responsible for paying any costs of the bridge project; and (v) Michigan would be responsible for certain project activities, including the acquisition of Michigan land needed for construction of the bridge, the United States port-of-entry, and the I-75 interchange.⁵²

The execution of the Crossing Agreement did not dissuade Moroun or his political allies from continuing to aggressively oppose the bridge project. In the months leading up the 2012 elections, Moroun and his family spent more than \$33 million to support Proposal 6,⁵³ which would have amended the Michigan constitution to require the approval of a majority of voters at a statewide election and in each municipality before

49. *See, e.g.*, Urban Cooperation Act of 1967, MICH. COMP. LAWS § 124.501 *et seq.*

50. Crossing Agreement, Can.-Mich., June 15, 2012, https://www.michigan.gov/documents/buildthisbridge/Agreement_389284_7.pdf [<https://perma.cc/CKA4-CSGV>].

51. A “public-private partnership,” PPP or P3, is a term of art in the infrastructure world, but it has no specific meaning, because such partnerships are infinite in their variety and each one is a creature of specific contractual terms and conditions. In general, unlike conventional delivery of infrastructure assets by the public sector, P3s rely on the private sector to finance projects at least in part and assume liability for certain key risks. *See, e.g.*, Hodge et al., *supra* note 6, at 1105-06.

52. Crossing Agreement, *supra* note 50.

53. Proposal 6 to Amend Michigan Constitution, no. 12-6 (proposed July 9, 2012) (amending art. 3 of MICH. CONST), https://www.michigan.gov/documents/sos/Full_Text_-_The_People_Should_Decide_399444_7.pdf [<https://perma.cc/7AEM-BPN9>].

any new bridge or tunnel between Michigan and Canada could be built.⁵⁴ The proposal, the most expensive ballot proposal in Michigan history,⁵⁵ was soundly defeated, fifty-nine percent to forty-one percent,⁵⁶ notwithstanding a scorched-earth propaganda campaign that a non-partisan watchdog group labeled “flagrantly foul” and consisting of false statements of fact.⁵⁷

The decisive defeat of Proposal 6 at the polls was followed by just a few months later by the achievement of one of the Gordie Howe International Bridge project’s most important milestones: the April 13, 2013, issuance of the Presidential Permit by the State Department.⁵⁸ The State of Michigan’s permit application had been pending for almost ten months when Governor Snyder announced at a celebratory press conference in Detroit that the U.S. federal government had green-lighted the Gordie Howe International Bridge project.⁵⁹ Moroun never relented in his efforts to preserve his border crossing monopoly, but with notable exceptions thereafter,⁶⁰ his battles over the bridge project were fought in courtrooms and corridors of power, not in public.

54. Joann Muller, *When Even A Billionaire Can’t Buy A State Law*, FORBES (Nov. 7, 2012, 3:27 PM), <https://www.forbes.com/sites/joannmuller/2012/11/07/when-even-a-billionaire-cant-buy-a-state-law/?sh=5200f6bcde6> [<https://perma.cc/J7WU-FN89>].

55. *Id.*

56. *Michigan International Bridge Initiative, Proposal 6 (2012)*, BALLOTEDIA, [https://ballotpedia.org/Michigan_International_Bridge_Initiative_Proposal_6_\(2012\)](https://ballotpedia.org/Michigan_International_Bridge_Initiative_Proposal_6_(2012)) [<https://perma.cc/W4VE-KYN9>] (last visited Jan. 3, 2022); Eggert, *supra* note 44.

57. See, e.g., Kent Walker, *The Detroit River International Crossing Bridge: A Stakeholder Analysis of How Once Wealthy Individual Could Exercise His Will Against Many*, ADMIN. SCIS. CAN. CONF. 1, 12 (Summer 2013), <https://scholar.uwindsor.ca/odette/pub/71> [<https://perma.cc/PMF3-HLEQ>] (One statement alleged, “The bridge to Canada: \$500 million just in interest payments, and with hidden costs - up to \$8 billion.” Even though it was undisputed Canada was financing the bridge project in its entirety, Moroun also claimed it would end up costing \$8 billion and force Michigan to lay off police and teachers and even tap senior citizen pensions to cover the cost.).

58. Proclamation No. 8278, 78 Fed. Reg. 75, 23327 (Apr. 18, 2013).

59. Todd Spangler, *U.S. Grants Permit to Build 2nd Detroit-Canada Bridge*, USA TODAY (Apr. 12, 2013, 7:55 AM), <https://www.usatoday.com/story/news/nation/2013/04/12/detroit-canada-bridge-presidential-permit/2076737/> [<https://perma.cc/9BZE-9XL4>].

60. In 2018, a Moroun-controlled entity, the Detroit International Bridge Company, paid for a commercial urging President Trump to revoke the Presidential Permit. The factually inaccurate ad ran on “Fox and Friends.” Melissa Nann Burke, *Ambassador Bridge Owner Urges Trump to Revoke Gordie Howe Permit; Ad Called ‘Misleading’*, DET. NEWS (June 20, 2018, 2:46 PM), <https://www.detroitnews.com/story/news/local/michigan/2018/06/20/ambassador-bridge-trump-revoke-permit/718143002/> [<https://perma.cc/3VZB-ZK3Q>]. Lobbying efforts in the Michigan Legislature to scuttle the Project by passing “poison pill” boilerplate language also continued. Kathleen Gray, *Lawmakers Want to Stop State Spending on Gordie Howe Bridge*, DET. FREE PRESS (June 12, 2019, 4:21 PM),

D. Procuring a Private Sector Partner

As stated, the Gordie Howe International Bridge project is a P3. As contemplated in the Crossing Agreement, the WDBA, the Canadian authority charged with delivering the bridge, oversaw a procurement process culminating in the retention of a private sector concessionaire, Bridging North America (“BNA”),⁶¹ responsible for designing the bridge, constructing all four project components (the bridge, the two ports-of-entry, and the I-75 interchange), operating and maintaining the bridge for a period of thirty years, and participating in the financing of the project. The procurement process was designed to spur private sector consortia to demonstrate that they can most efficiently deliver the bridge project at the lowest price, thereby providing the best value for money. The procurement process that culminated in the retention of BNA was as challenging as any other project stage.⁶² Procurement followed a decade-and-a-half of project planning, environmental review, and permitting. It began in 2015 shortly after the WDBA was operationalized and Governor Snyder and Canadian Prime Minister Stephen Harper held a press conference to announce the international crossing would be named after Gordie Howe, the Canadian-born hockey star who played 25 years for the Detroit Red Wings.⁶³

The first step in the procurement process was the July 20, 2015 issuance of 113-page Request for Qualifications (“RFQ”).⁶⁴ In describing in detail the bridge project and identifying evaluation categories, the RFQ’s purpose was to pre-qualify private-sector teams to design, build, finance, operate and maintain the Gordie Howe International Bridge project.⁶⁵ The issuance of the RFQ generated responses from six consortiums, each consisting of multiple international firms with expertise

<https://www.freep.com/story/news/politics/2019/06/12/house-gop-michigan-money-gordie-howe-bridge/1436278001/> [https://perma.cc/ZNA2-53YH].

61. BNA is an international consortium comprised of Dragados Co., Flour Corp., and the Aecon Group Inc.

62. Michigan—acting largely through MDOT—was intimately involved in all phases of procurement to, among other things, ensure that the procurement documents complied with expansive and complex federal aid eligibility requirements (“FAERs”). Michigan’s receipt of the \$2.2 billion in federal transportation matching credits referred to above is contingent on the project’s compliance with the FAERs.

63. John Gallagher, ‘Mr. Hockey’ Gets His Own Bridge, DET. FREE PRESS (May 14, 2015, 2:35 PM), <https://www.freep.com/story/money/business/michigan/2015/05/14/snyder-harper-bridge-detroit-windsor-gordie-howe-hockey/27310243/> [https://perma.cc/VBG5-URNX].

64. REQUEST FOR QUALIFICATIONS: GORDIE HOWE INTERNATIONAL BRIDGE, WINDSOR-DET. BRIDGE AUTH. (July 20, 2015), <https://www.gordiehoweinternationalbridge.com/u/files/Spotlight/en/WDBA%20RFQ.pdf> [https://perma.cc/2HUA-TBEC] [hereinafter REQUEST FOR QUALIFICATIONS].

65. *Id.*

in architecture, engineering, construction, finance, law, bridge operations, and more.⁶⁶ On January 20, 2016, the WDBA announced the names of three “short-listed respondents”—BNA and two other entities known as Legacy Link Partners (“Legacy Link”) and CanAm Gateway Partners (“CanAm Gateway”)—selected to move forward in the procurement process.⁶⁷ Then, on November 9, 2016, the WDBA issued the Request for Proposals for the massive project.⁶⁸ The RFP set out the conditions and specifications required to deliver the Gordie Howe International Bridge project and called on proponents to prepare and submit binding technical and financial proposals, including a fixed price and schedule.⁶⁹ After extensive consultation overseen by a “fairness monitor,” BNA and CanAm Gateway submitted voluminous proposals, each filling several dozen bankers boxes, and, on July 5, 2018, the WDBA announced that following a rigorous evaluation process, BNA was selected as the “preferred proponent.”⁷⁰ Less than two weeks later, on July 17, 2018, government officials from Washington, Ottawa, Lansing, Detroit, and Windsor gathered in the Delray neighborhood of Detroit to celebrate the groundbreaking for “advanced construction.”⁷¹ On September 28, 2018, after negotiating contract details, the WDBA and BNA entered into the \$5.7 billion, fixed-priced, 1,097 page Project

66. *6 Consortiums Answer Windsor-Detroit Bridge Authority RFQ*, ON-SITE (Oct. 14, 2015), <https://www.on-sitemag.com/construction/6-consortiums-answer-windsor-detroit-bridge-authority-rfq/1003846158/> [<https://perma.cc/ZUT4-SVBC>].

67. *Shortlist Announced to Build New Gordie Howe International Bridge*, CTV NEWS WINDSOR (Jan. 20, 2016, 3:26 PM), <https://windsor.ctvnews.ca/shortlist-announced-to-build-new-gordie-howe-international-bridge-1.2745348> [<https://perma.cc/JZU6-FMFX>].

68. John Gallagher, *Who Will Build Gordie Howe Bridge? Bids Requested*, DET. FREE PRESS (Nov. 10, 2016, 6:08 AM), <https://www.freep.com/story/money/business/michigan/2016/11/10/bridge-authority-issues-bid-request-gordie-howe-span/93554060/> [<https://perma.cc/J2R9-RUH2>].

69. REQUEST FOR PROPOSALS: GORDIE HOWE INTERNATIONAL BRIDGE, WINDSOR-DET. BRIDGE AUTH. (Nov. 10, 2016), [https://www.gordiehoweinternationalbridge.com/u/files/Procurement/Documents/105446695_v3_Gordie%20Howe%20International%20Bridge%20-%20Public%20Request%20for%20Proposals%20\(2\).PDF](https://www.gordiehoweinternationalbridge.com/u/files/Procurement/Documents/105446695_v3_Gordie%20Howe%20International%20Bridge%20-%20Public%20Request%20for%20Proposals%20(2).PDF) [<https://perma.cc/YR77-7PWN>].

70. R.J. King, *Bridging North America to Build Detroit-Windsor Gordie Howe International Bridge*, D BUSINESS (July 5, 2018), <https://www.dbusiness.com/daily-news/bridging-north-america-to-build-detroit-windsor-gordie-howe-international-bridge/> [<https://perma.cc/4FQX-9LJJ>].

71. Corey Williams, *Groundbreaking Ceremony Held for New International Bridge*, AP NEWS (July 17, 2018), <https://apnews.com/article/canada-oh-state-wire-gordie-howe-mn-state-wire-vt-state-wire-24b7a7c147cb4c5ea57af1b94ffda5db> [<https://perma.cc/F5NB-JXG5>]; Blake Alsup & Louis Aguilar, *Officials Hail Gordie Howe Bridge Groundbreaking*, DET. NEWS (July 17, 2018, 9:17 AM), <https://www.detroitnews.com/story/news/local/detroit-city/2018/07/17/gordie-howe-bridge-groundbreaking-rick-snyder/789495002/> [<https://perma.cc/R6EB-H2PF>].

Agreement in which BNA committed to complete all four project components by the end of November 2024 and thereafter maintain and operate the Gordie Howe International Bridge.⁷² Three bedrock principles undergirded the negotiation and drafting of the Project Agreement: (i) ensuring Canadian taxpayers receive “good value” for the money spent on the bridge project, *i.e.*, its on-time delivery of a high-quality infrastructure asset at the best price; (ii) efficiently allocating risks between the public and private sectors; and (iii) mitigating or eliminating the risk of the bridge project’s not being completed. On October 5, 2018, one week after the execution of the Project Agreement, Michigan Governor Snyder, Canadian Prime Minister Justin Trudeau, and dozens of other officials participated in a formal groundbreaking ceremony.⁷³

The Gordie Howe International Bridge project’s competitive procurement process is widely considered to have been a success, one that relied on close stakeholder collaboration, overcame unprecedented complexities, effectively allocated risk between BNA and the WDBA, and used a delivery model that was calculated as saving Canadian taxpayers \$562.8 million (CAD).⁷⁴

III. DEFINING PROJECT MANAGEMENT OVERSIGHT

There is little scholarly literature on infrastructure “project oversight,” even though much scholarship broadly comments on infrastructure project success. A thorough review of scholarship in law journals, policy journals, and major databases did not illuminate a consistent or helpful definition of the term. One article defined a “high-oversight regime” as one “in which the government oversees the contractor’s operations with evaluation teams, site inspections, expenditure justification forms, and progress,” distinguishing this from a “low-oversight regime” meaning with no active supervision.⁷⁵ Another paper refers to broad oversight as contract

72. PROJECT AGREEMENT FOR GORDIE HOWE INTERNATIONAL BRIDGE SCHED. 9, WINDSOR-DETROIT BRIDGE AUTH.-BRIDGING N. AM. GEN. P’SHIP, Sept. 28, 2018, [https://www.gordiehoweinternationalbridge.com/u/files/Procurement/Documents/103646563_v\(5\)_Gordie%20Howe%20International%20Bridge%20-%20Public%20Project%20Agreement%20and%20Schedules%20-%20Consolida...pdf](https://www.gordiehoweinternationalbridge.com/u/files/Procurement/Documents/103646563_v(5)_Gordie%20Howe%20International%20Bridge%20-%20Public%20Project%20Agreement%20and%20Schedules%20-%20Consolida...pdf). [https://perma.cc/36AQ-4UCQ] [hereinafter Project Agreement].

73. JC Reindl, *Snyder, Trudeau Want to Speech Up Construction of Gordie Howe Bridge*, DET. FREE PRESS (Oct. 5, 2018), <https://www.freep.com/story/money/2018/10/05/gordie-howe-bridge-justin-trudeau/1533348002/>.

74. CANADIAN COUNCIL FOR PUBLIC-PRIVATE PARTNERSHIPS, GORDIE HOWE INTERNATIONAL BRIDGE PROJECT: CANADA-U.S. BORDER CROSSING: A MODEL FOR BINATIONAL P3S (2020).

75. Eduard Calvo et al., *Oversight and Efficiency in Public Projects: A Regression Discontinuity Analysis*, 65 MGMT. SCI. 5651 (2019). In this study, the authors purport to

management tools that “alleviate” the “adverse selection” of service providers during procurement and the “moral hazard during the project execution.”⁷⁶ The lack of a commonly accepted, or even helpful, definition of “project management oversight” affords the opportunity to create one. Thus, used here, the term means watchful, responsive, affirmatively engaged supervision of the actions and conduct of project co-owners, contractors, and other stakeholders intended to improve the delivery of an infrastructure project and increase the likelihood of its success.

In practice, an effective oversight system allows project stakeholders during each stage of a project’s lifecycle to, simply put, “know what is going on” and remedy problems as they arise, which they inevitably will arise on any infrastructure project, large or small. Those with hands-on experience in infrastructure projects know effective oversight when they see it.⁷⁷ This may look like: Governmental officials conducting rigorous due diligence to make sure that decisions to authorize and finance an infrastructure project before or during the procurement process are wise ones and that do not entail unreasonable risk; decision-making itself by project participants that is the outgrowth of attentive study, consultation, and deliberation; project owners having sufficient expertise, reporting protocols, access to information, and the commercial and legal sophistication to verify compliance with contractual obligations and take remedial actions, as needed; project stakeholders adopting useful performance metrics and communicating transparently, regularly, and candidly about issues as they arise, all buying into the philosophy that “sunlight is the best disinfectant;”⁷⁸ elected leaders and their staffs always asking questions and penetrating the infrastructure world’s specialized

examine 262,875 projects, over seventy-one federal agencies, and 54,739 contractors, to implicitly conclude that oversight is harmful in that it marginally increases delays and costs overruns. The analysis does not withstand serious scrutiny. As stated, it is not based on meaningful definition of oversight. It does not consider the need to tailor oversight regimens to accommodate diverse types of projects. Most fundamentally, the “study” does not consider any of the “real-world” abuses, risks, and adverse consequences that would plague projects without strong oversight.

76. Leonardo M. Giuffrida & Gabriele Rovigatti, *Can the Private Sector Ensure the Public Interest? Evidence from Federal Procurement 1*, 7 (Ctr. for Eur. Econ. Rsch., Working Paper No. 411, 2017).

77. See generally *Jacobellis v. Ohio*, 378 U.S. 184, 197 (1964) (Stewart, J., concurring) (“I shall not today attempt further to define the kinds of material I understand to be embraced within that shorthand description [of hard-core pornography]; and perhaps I could never succeed in intelligibly doing so. But I know it when I see it, and the motion picture involved in this case is not that.”).

78. LOUIS BRANDEIS, WHAT PUBLICITY CAN DO, *in* OTHER PEOPLE’S MONEY AND HOW THE BANKERS USE IT 92 (1914) (“Publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman.”).

nomenclature, to stay abreast of project developments and address operational deficits; and each project partner ensuring its own operational functionality and visibility into all project activities. In short, an effective oversight regimen is defined by widespread awareness about the status of a project and its risks, each project's stakeholder being accountable for its own actions, and governance that constrains all project stakeholders to honor their contractual and other obligations.

IV. CRITERIA FOR DETERMINING PROJECT SUCCESS

If the term "project management oversight" is defined to mean the watchful and responsive supervision of the actions and conduct of project co-owners, contractors, and other stakeholders intended to improve the delivery of an infrastructure project and increase the likelihood of its success, then this stipulative definition, begs an important question: When is a project successful? Stated another way, what are the criteria for a successful infrastructure project, that is successful project outputs, as opposed to project management performance or success?⁷⁹ This question is vital. If what constitutes a successful infrastructure project is not carefully considered, it will not be possible to craft a comprehensive, effective oversight plan.

There is significant academic literature on what constitutes a successful infrastructure project.⁸⁰ Unfortunately, a review of this scholarship establishes infrastructure project success as a "vague concept," but it is necessarily multi-factorial.⁸¹ Most commentators, but not all of them,⁸² reject the narrow, dated perspective that "success" should

79. See Anton de Wit, *Measurement of Project Success*, 6 INT'L J. PROJECT MGMT. 164, 164 (1988) ("[i]n any discussion on success, it is essential that a distinction is made between project success and the success of the project management effort, bearing in mind that good project management can contribute toward project success").

80. See, e.g., Robert F. Cox et al., *Management's Perception of Key Performance Indicators for Construction*, 129 J. CONSTR. ENG'G & MGMT. 142, 143 (2003) (identifying six indicators of success highly significant to the construction industry, including quality, control, on-time completion, safety, and productivity); Albert P. C. Chan et al., *Framework of Success Criteria for Design/Build Projects*, 18 J. MGMT. ENG'G 120, 124-26 (2002) (dividing success factors into "hard" criteria like time, cost, quality, profitability, technical performance, completion, productivity, and environmental sustainability and "soft" criteria like satisfaction, lack of conflict, aesthetics, social and professional image); D. K. H. Chua et al., *Critical Success Factors for Different Project Objectives*, 125 J. CONSTR. ENG'G & MGMT. 142, 147 (1999) (identifying sixty-seven "critical success factors").

81. Wai Soon Han et al., *Reviewing the Notions of Construction Project Success*, 7 INTL J. BUS. MGMT. 90, 94 (2012).

82. See Kjetil Holgeid & Mark Thompson, *A Reflection On Why Large Public Projects Fail*, GOVERNANCE LARGE-SCALE PROJECTS: LINKING CITIZENS AND THE STATE 2 (2013) ("Project Success: The project is completed on-time and on-budget, delivering the expected

be determined by reference to the “iron triangle” criteria of finishing a project on-time, within budget, and according to specifications. “The premise here,” argues one researcher, “is that some megaprojects—although completed on time, within budget and specification—if appraised in broader terms can also represent projects that were delivered in the wrong place, at the wrong time, serving only the narrow set of stakeholders and yielding unsustainable outcomes.”⁸³ An emerging view is that success criteria can conflict with each other. For example, a contractor rushing to complete a construction schedule may be incentivized to cut corners on quality. Similarly, the goal of containing costs may be achieved at the expense of the health, safety, and welfare of workers or nearby communities. As summarized by one P3 expert:

Those seeking to achieve more accurate on-time and on-budget results, for instance, usually fail to acknowledge that this may have resulted in goalpost shifting. Financial schemes may well result in improved ‘on-time’ and ‘on-budget’ performance, and yet not be anywhere near maximum efficiency in terms of unit costs. The former focus is on project delivery and managing, the latter focus is on power and ultimately, what gets done by whom and for whom. What is important here is that each technical domain (whether engineering, finance, or management) is placed into a broader context of politics, institutions, and power.⁸⁴

Not only do success criteria sometimes conflict, but any evaluation of their importance and whether they have been satisfied depends on one’s perspective:

As the project success could be assessed by different stakeholders namely clients, managers, contractors, workers, and end-user, the relevant criteria, therefore,

value; Project Failure: The project is either terminated or not completed on-time, or not on budget, or not providing the value aimed for.”).

83. Harry T. Dimitriou et al., *Mega Transport Projects—Beyond the ‘Iron Triangle’: Findings from the OMEGA Research Programme*, PROGRESS PLAN. 1, 5 (Nov. 2013); see also Roger Atkinson, *Project Management: Cost, Time and Quality, Two Best Guesses and Phenomenon, It’s Time to Accept Other Success Criteria*, 17 INT’L J. PROJECT MGMT. 337, 339 (1999) (the “Iron Triangle”—cost, time, and quality—should not be the “end all, be all” of project management, particularly since cost and time success are measured against an estimate made when the project is least understood).

84. Hodge et al., *supra* note 6, at 1114.

must represent different views (Stuckenbruck, 1986). Bryde & Robinson (2005) show that client puts more emphasis on the need of other stakeholders whilst contractor puts more emphasis on project cost and duration. Being the main person in any project, the perspective of client has drawn more attention compared to other stakeholders. For example, Frodell (2008) depicts an empirical result that shows success measures like keeping project on time, within budget, maintenance costs and project goals as well as ensuring profitability are important criteria. At the meantime, Ellatar (2009) suggests a trilogy perspective framework on construction project. As suggested, client's perspective (e.g. time, cost, functionality, end result, quality, aesthetic value, profitability, marketability, less aggravation), designer's perspective (e.g. satisfied client, quality, cost and profit, professional related issues like staff fulfillment, marketable product, less construction problem, no liability, socially accepted, client pays and well defined scope of work) and contractor's perspective (e.g. time, cost, quality, free from claims, clearly defined expectation from all parties, client satisfaction, as well as less surprises during project) are prominent to increase the likelihood of project success.⁸⁵

Given that when assessing project success, one must consider the objectives and perspective of all stakeholders throughout a project lifecycle (and that perceptions of success may change over time), any belief that one can measure the success of a project is arguably an 'illusion.'⁸⁶

However, project owners, contractors, and other stakeholders must work together to agree on measures of success, because absence of harmonized priorities is a common characteristic of projects that fail.⁸⁷

Those who have worked on the Gordie Howe International Bridge project for the last several years understand that any assessment of its success will be multi-factorial, will be incomplete, and is likely to change

85. Wai Soon Han et al., *supra* note 81, at 93; *see also* CS Lim & M Zain Mohamed, *Criteria of Project Success: An Exploratory Re-examination*, 17 INT'L J. PROJECT MGMT. 243, 247 (1999) ("project success is dependent on perspectives").

86. de Wit, *supra* note 79, at 169.

87. David James Bryde & Lynne Robinson, *Client Versus Contractor Perspectives on Project Success Criteria*, 23 INT'L J. PROJECT MGMT. 622, 629 (2005).

over the course of its lifecycle. Nevertheless, consistent with literature on this subject, all Gordie Howe International Bridge project participants—including its owners (Canada and Michigan), the WDBA, and BNA—will gauge “success” by asking the following questions, among others:

Will the project be completed? The fate of the Gordie Howe International Bridge project was far from certain until relatively recently, long after the execution of the Crossing Agreement and the issuance of the Presidential Permit. In intervening years, many existential threats to the bridge project have been overcome by, among other things: (i) the WDBA’s spearheading an extraordinarily complex procurement process that witnessed the de-risking of the project and convinced the private sector of its commercial viability; (ii) the defeat in courts in the United States of no fewer than five sprawling, scorched-earth lawsuits,⁸⁸ each of which was filed by entities or people affiliated with Moroun and intended to kill the project;⁸⁹ (iii) Michigan’s reaching an extensively-negotiated agreement with the City of Detroit to sell city-owned land, assets, and

88. See *Durhal v. Governor*, No. 317754 (Mich. Ct. App. Mar. 17, 2014) (order dismissing claims brought by state legislator alleging that Governor Snyder, MDOT, and the MSF lacked the authority to enter into the Crossing Agreement); *Latin Ams. for Soc. & Econ. Dev. v. Adm’r of Fed. Highway Admin.*, 756 F.3d 447 (6th Cir. 2014) (affirming lower court dismissal of claims alleging that issuance of the bridge project’s environmental impact statement and record of decision violated the National Environmental Protection Act and the Administrative Procedures Act); *Detroit Int’l Bridge Co. v. Gov’t of Can.*, 883 F.3d 895 (D.C. Cir. 2018) (affirming lower court dismissal of claims against the Government of Canada and several federal agencies, seeking to have the Crossing Agreement declared invalid); *Crown Enters., Inc. v. State*, 920 N.W.2d 586 (Mich. 2018) (order denying application for leave to appeal appellate court’s opinion affirming dismissal of claims seeking injunctive and declaratory relief as to the MDOT’s right to condemn property in reliance on the Crossing Agreement); *Dep’t of Transp. v. Riverview-Trenton R.R. Co.*, 956 N.W.2d 228 (Mich. 2021) (order denying application for leave to appeal appellate court’s opinion affirming dismissal of consolidated lawsuits in which Moroun-affiliated entities sought to prevent MDOT from acquiring properties located in the bridge project footprint by alleging no fewer than 18 “necessity” challenges addressing, among other things, the legality of the Crossing Agreement, the legality of WDBA’s reimbursement of costs incurred by MDOT, and whether BNA’s construction, operations, and maintenance of the bridge through toll collection constituted an illegal “commercial enterprise”).

89. The presiding trial court judge in the condemnation litigation cited in the preceding footnote observed that Moroun has “a long history of taking action to delay the building of the Gordie Howe International Bridge,” that a discovery motion was “just another example of their attempt to delay the construction of this bridge,” that the motion was “inappropriate” and “another example of [Moroun’s] long history in attempting to frustrate the building of the Gordie Howe International Bridge.” See Brief in Support of Motion to Disqualify Assigned Judge at 3-4, *Dep’t of Transp. v. Riverview-Trenton R.R. Co.*, 958 N.W.2d 246 (Mich. Ct. App. 2020) (No. 17-000536) (filed by a Moroun-controlled entity on May 30, 2018). Moroun also unsuccessfully filed in Canada several lawsuits against Gordie Howe International Bridge project owners and/or stakeholders.

streets located in the Michigan footprint in exchange for more than \$48 million used for neighborhood relocation programs, job training and health monitoring;⁹⁰ (iv) Michigan's acquiring the 636 privately-owned, residential, commercial, or tax-reverted parcels of property in the Project's footprint needed for construction;⁹¹ (v) Michigan's defeating repeated efforts by Moroun to enact legislation that would have purported to prohibit MDOT from incurring project-related expenses reimbursed by the WDBA;⁹² and (vi) Canada's conditioning Moroun's building of a new bridge on the demolition of the Ambassador Bridge.⁹³

Will the project get built safely? The safety and well-being of all workers are of paramount importance to project participants. Long gone are the days when deaths or injuries were considered acceptable "costs" of delivering infrastructure.⁹⁴ BNA has adopted rigorous precautions and tracks safety metrics closely, as does the WDBA and MDOT. Likewise, there is a closely monitored regulatory regime to ensure the health, safety, and well-being of residents living near the project's footprint. Project participants are in regular contact with community members to confirm the absence of noise, emissions, vibrations, and other hazards.

Will the project benefit the communities most directly impacted by it? The Crossing Agreement arguably contemplated and provided a

90. Charles E. Ramirez, *Duggan: Howe Bridge Agreement Reached*, DET. NEWS (June 23, 2017, 10:29 AM), <https://www.detroitnews.com/story/news/local/detroit-city/2017/06/23/howe-bridge/103133660/> [<https://perma.cc/M7HE-3Z7J>]; John Gallagher, *Community Benefits Deal Removes Major Obstacle to Gordie Howe Bridge Project*, DET. FREE PRESS (June 23, 2017, 1:42 PM), <https://www.freep.com/story/money/business/john-gallagher/2017/06/23/gordie-howe-bridge-delray-neighborhood/423686001/> [<https://perma.cc/T7HU-5JWY>].

91. The land acquisition, which took appropriately seven years to complete (due in large part to Moroun's opposition in court), was one of the most far-reaching, complicated exercises of the government's eminent domain power in Michigan history.

92. Most of legislative battles with Moroun in recent years centered on legislative boilerplate. Specifically, in its 2013 transportation appropriations bill, the Legislature expressly allowed MDOT to incur bridge-related costs so long as they were "subject to full and prompt reimbursement from Canada" and reported to various governmental officials. 2013 Mich. Pub. Acts (no. 59, Art. XVII, Pt. 2, §§ 384–85). Moroun has repeatedly attempted to have this boilerplate amended in subsequent annual appropriation bills.

93. In opposing the Gordie Howe International Bridge project, Moroun has consistently claimed that he intended to "twin" the Ambassador Bridge, as opposed to replace it. Yet, there is no need, or a business case, for a third bridge that spans the Detroit River. Jack Lessenberry, *Moroun's Second Bridge? Don't Hold Your Breath*, DET. METRO TIMES (Sept. 20, 2017, 1:00 AM) <https://www.metrotimes.com/detroit/morouns-second-bridge-dont-hold-your-breath/Content?oid=5701758> [<https://perma.cc/48YK-NYJ7>].

94. See, e.g., ADAM HOCHSCHILD, *KING LEOPOLD'S GHOST 170–71* (1998) (describing the "major human disaster" associated with the building of a railroad in the Belgian Congo during the 1890s when hundreds of laborers died, succumbing to accidents, dysentery, smallpox, beriberi, malaria, and beatings).

framework for addressing all fundamental challenges that the Gordie Howe International Bridge project would confront except one: community benefits.⁹⁵ Some senior project leaders initially believed that neither the RFP nor the Project Agreement required the concessionaire to deliver a potentially costly community benefits plan. Governor Snyder, other project participants, and community leaders aggressively advocated in favor of a community benefits plan, arguing that failure to include one in the project would create insurmountable political obstacles and be highly inequitable. The bridge will land in the disadvantaged neighborhoods of Delray in Detroit and Sandwich in Windsor. Hundreds of people live in Delray. Most residents are older, and many live with health conditions including diabetes and lung ailments. In a variety of ways, these communities have been, in the words of one commentator, “irrevocably sundered” by the Gordie Howe International Bridge project.⁹⁶ Fairness and decency dictate they should get something in return for the disruptions that bridge project has caused.⁹⁷ Ultimately, Canada funded a robust and thoughtful bi-national community benefits plan spelled out in Schedule 36 of the Project Agreement, one that provides for, among many other things, the implementation of workforce development strategies, home repairs, community organization investments, landscaping, and transportation enhancements.⁹⁸ It also agreed to fund in large part the \$48 million agreement that funded neighborhood relocation, job training, and health monitoring programs, which the City of Detroit administers.

Will the project maintain its favorable reputation? The lopsided 2012 defeat of Proposal 6 arguably reflected positively on the Gordie Howe International Bridge project’s public reputation at the time. Since its formation, the WDBA and Michigan have worked in tandem with an eye toward making sure the bridge project’s good reputation endures and is well-earned. How have we done this? Quite simply, by acting in a manner that demonstrates, time and again, in a multitude of different ways,

95. When the Crossing Agreement was executed, the only discussion of the issue was contained in the so-called “green sheets” attached to the end of the Federal Highway Administration’s Record of Decision adopting the Final Environmental Impact Statement. See Proposed Detroit River International Crossing Wayne County, Michigan, Record of Decision, 74 Fed. Reg. 5025 (Jan. 28, 2009), <https://www.partnershipborderstudy.com/pdf/2009-01-14%20DRIC%20Final%20ROD.pdf> [<https://perma.cc/WAG7-GKPA>]. The green sheets required adoption of certain “community enhancements,” but they were *de minimus* and did not address core concerns like road improvements, job training, air quality, and home improvements.

96. Erik Gunn, *Detroit’s Push for Community Benefits*, PROGRESSIVE MAG. (Dec. 1, 2019), <https://progressive.org/magazine/detroits-push-for-community-benefits-gunn/> [<https://perma.cc/EL2U-6ZZJ>].

97. *Id.*

98. Project Agreement, *supra* note 72, sched. 36.

the Gordie Howe International Bridge project has a conscience and cares deeply about the public's well-being and opinions.⁹⁹ The community benefits package makes this clear, as does: (i) the bridge project's non-stop outreach to community members and their elected leaders; (ii) the candor and honesty that defines the project stakeholders communications with the public; (iii) the fact that MDOT relocated hundreds of residents and businesses from the bridge project's Michigan footprint without controversy or complaints of mistreatment; (iv) the inclusion of rigorous aesthetic and environmental guidelines in the Project Agreement that guarantees that neighborhoods abutting the ports-of-entry will be cleaner and greener; (v) the Gordie Howe International Bridge project's decision to build an architecturally stunning cable stay crossing that will accommodate pedestrians and cyclists; (vi) project stakeholders making sure inevitable road closings and demolitions are effectively communicated and cause as little disruption as possible; and (vii) the Project Agreement requiring BNA to significantly upgrade overpasses and local streets. But, as Warren Buffett famously told his son Howie, "It takes twenty years to build a reputation and five minutes to ruin it."¹⁰⁰ The Gordie Howe International Bridge project must continue to work diligently to maintain the high esteem in which it is now held. Failure to deliver promised community benefits, for example, would harm the project's reputation, as would not honoring the other terms of the Project Agreement, including ones that most directly impact the public.

Will the project be completed on-time? During its planning and procurement phases, the expected completion date of the Gordie Howe International Bridge project was a moving target, regularly being pushed back in time. For several years, politicians in both Michigan and Canada repeated like a mantra a 2020 completion date. But the conclusion that the bridge would open to traffic in that year was ultimately little more than political wish fulfillment. In my opinion, the only projected completion date that ever counted was the fully vetted one stated in Schedule 9 of the

99. In stark contrast, Moroun long ago lost the public's trust. See Jack Lessenberry, *The Morouns: As Outrageous as Ever*, LESSENBERRY LINK (Sept. 28, 2021), <https://lessenberryink.com/2021/09/28/the-morouns-as-outrageous-as-ever/> [<https://perma.cc/U6YA-X26Z>]; Tom Perkins, *How the Morouns Became Detroit's Least Trustworthy Billionaire Family*, CURBED DET. (Jan. 6, 2020, 11:31 AM), <https://detroit.curbed.com/2020/1/6/21051665/moroun-family-detroit-history-michigan-central-station> [<https://perma.cc/LM2N-M5TU>].

100. William Green, *I've Followed Warren Buffett for Decades and Keep Coming Back to These 10 Quotes*, OBSERVER (May 4, 2015, 1:21 PM), <https://observer.com/2015/05/ive-followed-warren-buffett-for-decades-and-keep-coming-back-to-these-10-quotes/> [<https://perma.cc/LM2N-M5TU>].

Project Agreement.¹⁰¹ It requires BNA to substantially complete all components of the bridge project by the end of November 2024. BNA's materially missing that deadline would be problematic inasmuch as it would, among other things: harm the long-awaited project's reputation; create opportunity costs and other risks arising out of the delayed realization of the bridge project's economic and other benefits; complicate the planned opening of the ports-of-entry; and increase BNA's financing costs.

Will the project be completed on budget? As stated, the Project Agreement executed by the WDBA and BNA is a "fixed cost" contract, which means that it is for a sum certain (\$5.7 billion (CAD)), as opposed to a "cost-plus" contract.¹⁰² The Canadian government has budgeted \$3.8 billion (CAD) to pay for the design-build phase of the project and an additional \$1.9 billion (CAD) to pay for the subsequent operation-maintenance phase.¹⁰³ The \$5.7 billion price tag includes financing costs and so-called "availability payments" made to BNA after the project's completion.¹⁰⁴ BNA's inability to deliver the project for the agreed upon price could have significant budgetary, political, and other consequences, including the inefficient and suboptimal reallocation of taxpayer dollars.¹⁰⁵ It would also suggest a failure to achieve one of the key objectives of the Project Agreement: value for money.¹⁰⁶

101. Project Agreement, *supra* note 72, sched. 9.

102. Under this cost-plus approach, a buyer reimburses the seller for all costs incurred and also pays a negotiated profit.

103. *Contract Value Overview of Gordie Howe International Bridge*, *supra* note 23.

104. For a high-level description of Gordie Howe International Bridge project's financial model, see GORDIE HOWE INTERNATIONAL BRIDGE CASE STUDY, GLOBAL INFRASTRUCTURE HUB (Nov. 30, 2020), <https://www.github.org/resources/showcase-projects/gordie-howe-international-bridge/> (webpage no longer available).

105. Paul Terna Gbahabo & Oluseye Samuel Ajuwon, *Effects of Infrastructure Project Cost Overruns and Schedule Delays in Sub-Saharan Africa*, 7 EUROPEAN J. INTERDISC. STUD. 47 (Jan. 1, 2017).

106. The cost of infrastructure projects is often greatly increased when contractors that win competitive procurement processes are able to successfully renegotiate their contracts. Contractors often adopt adversarial strategies of profit maximization by alleging monetary claims contemplated in their contracts arising out of, for example, the COVID-19 pandemic, resulting changes in law, or actions taken by the project owner said to trigger "compensation events." Assertion of these claims may constitute a *de facto* attempt to renegotiate the project agreement by winning through litigation cost and price concessions that it could not extract during the competitive procurement process. See Eduardo Engel, Ronald D. Fischer & Alexander Galetovic, *When and How to Use Public-Private Partnerships in Infrastructure: Lessons from the International Experience* 21-22 (Nat'l Bureau of Econ. Resch., Working Paper No. 26766, 2020), https://www.nber.org/system/files/working_papers/w26766/w26766.pdf [<https://perma.cc/V54A-ZAQF>] (noting that renegotiations of P3 project agreements are "pervasive" and that the opportunity to engage them allows contractors to strategically bid "less at a competitive auction and win the

Will the project meet applicable quality and durability standards?

The Project Agreement contains many terms and technical schedules that require BNA deliver a bridge and all other project components that meet strict quality standards. For example, the Project Agreement's design specifications contemplate that the bridge must have a lifespan of 125 years. BNA must follow applicable standards promulgated by MDOT, the Federal Highway Administration ("FHWA"), and the American Association of State Highway Transportation Officials, as well as the Canadian Highway Bridge Design Code, to guarantee the bridge is built to safely convey traffic and prevent displacement, cracking, and moving. Similarly, the Project Agreement requires BNA to implement a robust quality management system to allow project owners to confirm that requisite documentation has been generated, requisite inspections have occurred and that all quality issues have been identified and resolved.¹⁰⁷ Any failure to satisfy these rigorous contractual requirements could not only significantly increase the long-term costs of maintaining the project components, but also pose a threat to public safety.

Will the project serve its intended public purposes? As stated above, the project is being built for four key reasons: (i) provide new border crossing capacity to meet increased long term travel demand; (ii) provide highway-to-highway connectivity to enhance the continuous flow of people and goods between the United States and Canada; (iii) improve operations and processing capabilities at the border; and (iv) provide reasonable and secure crossing options leading to network redundancy. While the bridge will clearly get built, thereby providing redundancy and highway-to-highway connectivity, it is too early to tell whether all these goals will be achieved. Sophisticated projections predict that commercial traffic at the Detroit-Windsor trade corridor will increase dramatically over the next three decades, but if those projections ultimately prove false, if traffic levels at the border were to fail to rise as expected, then the ultimate need for, and economic assumptions undergirding, a project with the contracted design specifications could be called into question. Further, lower-than-expected toll revenue could necessitate the redirection of taxpayer dollars away other important programs and purposes. (In the context of privately financed infrastructure projects, depressed toll revenues have caused concessionaires and highway operators to file for bankruptcy.) Also, the goal of enhancing border operations might not be achieved if the Canadian government or the U.S government were to fail

concession, in the expectation that in a later opportunistic renegotiation it can recover from having bid less.").

107. Project Agreement, *supra* note 72, at §§ 3(b), 4.1, 11.1, 11.2, 21.1, Schedule 6, § 9, Schedule 7, §§ 7.3(b) and 10.2.

to invest in emerging biometrics, cryptography and other technologies that facilitate seamless and secure boarder travel management.

V. EXAMPLES OF INFRASTRUCTURE PROJECT FAILURE AND THE NEXUS BETWEEN FAILURE AND POOR OVERSIGHT

Those of us deeply involved in infrastructure projects appreciate their fragility. Project overseers review risk registers dozens or hundreds of pages long; they itemize project threats such as: force majeure events; underground obstructions; supply chain interruptions; labor shortages; low liquidity ratios; wildly fluctuating exchange rates; and quality deficiencies. We compile spreadsheets identifying scores of permits that must be obtained from a constellation of agencies at multiple levels of government. Political winds of change may usher in new elected leaders who, concerned about their legacies, do not champion projects they did not launch. We know that litigation is often unpredictable and that an unsuccessful condemnation lawsuit over one parcel of property could capsize an entire project.

Research studies find infrastructure projects routinely experience cost overruns and are delivered late. A research investigation looking at 258 infrastructure projects worldwide reported that 90% of them experienced cost overruns averaging 27.6%.¹⁰⁸ In the realm of P3s, contract renegotiations are common, perhaps as high as 40–75%, according to one study of projects in Europe.¹⁰⁹ Project agreement renegotiations have been found to be even more pervasive in Latin America.¹¹⁰ A study of thirty–one traditional (non–P3) infrastructure projects in Australia found that they were on average completed 23.5% behind time.¹¹¹

Any student of history or attentive reader of newspapers and trade journals appreciates that infrastructure projects regularly fail and sometimes notoriously so.¹¹² It has always been this way, even when it

108. Bent Flyvbjerg, Mette K. Skamris holm & Søren L. Buhl, *How Common and How Large are Cost Overruns in Transport Infrastructure Projects?*, 23 *TRANSP. REVS.* 71 (2003).

109. Raden Murwantara Soeipto & Koen Verhoest, *Contract Stability in European Road Infrastructure PPPs: How Does Governmental PPP Support Contribute to Prevent Contract Renegotiation?*, 20 *PUB. MGMT. REV.* 1145 (2018).

110. Engel, Fischer & Galetovic, *supra* note 106, at 20.

111. *Id.* at 17.

112. See generally Vahid Shahhosseini, Mohammad Reza Afshar & Omid Amiri, *The Root Causes of Construction Project Failure*, *SCIENTIA IRANICA I* (Aug. 2017); Victor S. Teglasi, *Why Transportation Mega-Projects (Often) Fail? Case Studies of Selected Transportation Mega-Projects in the New York City Metropolitan Area* (May 2012) (Master's Thesis, Columbia University), <https://doi.org/10.7916/D89029XD> [<https://>

comes to projects that history seems to have vindicated. For more than eight years, between 1881 and 1889, France futilely attempted to construct a canal through what was then Columbia's province of Panama. In his masterful book, *The Path Between the Seas*, David McCullough chronicles how engineering miscalculations, a lack of due diligence, mudslides, construction delays, tropical diseases, and a high worker mortality rate (the death toll ran to forty a day) caused the French effort to build the Panama Canal to file for bankruptcy, causing 800,000 investors to lose their savings.¹¹³

The highway-building program of Robert Moses, the "master builder" of metropolitan New York City, is now widely seen as an unsuccessful effort to reduce road congestion, because it did not take into account "latent demand." In his biography of Moses, *The Power Broker*, Robert A. Caro, wrote:

During the last two or three years before [the entrance of the United States into World War II], a few planners had . . . begun to understand that, without a balanced system [of transportation], roads would not only not alleviate transportation congestion but would aggravate it. Watching Moses open the Triborough Bridge to ease congestion on the Queensborough Bridge, open the Bronx-Whitestone Bridge to ease congestion on the Triborough Bridge and then watching traffic counts on all three bridges mount until all three were as congested as one had been before, planners could hardly avoid the conclusion that "traffic generation" was no longer a theory but a proven fact: the more highways were built to alleviate congestion, the more automobiles would pour into them and congest them and thus force the building of more highways—which would generate more traffic and become congested in their turn in an ever-widening spiral that contained the most awesome implications for the future of New York and of all urban areas.¹¹⁴

perma.cc/7Y7C-CFJV]; Kasra Daheshpour & Siân Herbert, *Infrastructure Project Failures in Colombia* (K4D Helpdesk Rep., Brighton, UK: Inst. Dev. Studs., 2018); Rose Luke et al., *The Failure of Transport Megaprojects: Lessons from Developed and Developing Countries* (Pan-Pac. Conf. vol. XXXIV: Designing New Bus. Models in Developing Econs., Conference Paper, 2017).

¹¹³ DAVID McCULLOUGH, *THE PATH BETWEEN THE SEAS: THE CREATION OF THE PANAMA CANAL, 1870–1914*, ch. 6 (Soldiers Under Fire) & ch. 7 (Downfall) (1977).

¹¹⁴ ROBERT A. CARO, *THE POWER BROKER: ROBERT MOSES AND THE FALL OF NEW YORK* 897, 515, 911 (1974).

Similarly, Moses built new parkways on Long Island in the 1930s and 40s, but “every time a new parkway was built, it quickly became jammed with traffic, [and] the load on the old parkways was not significantly relieved.” Neither did Moses’s building of the Brooklyn-Battery Tunnel relieve congestion on the Queens-Midtown Tunnel and three East River bridges, as expected.¹¹⁵

Sometimes ambitious projects fail to get off the ground. This was the case with Sidewalk Toronto, a forward-looking urban “innovation district” that would have been built and funded by Sidewalk Labs, a New York-based subsidiary of Google.¹¹⁶ Sidewalk Labs and senior Canadian officials, including Prime Minister Trudeau, announced the multi-billion dollar project to great fanfare in 2017.¹¹⁷ Sidewalk Labs sought to fully develop a neighborhood with “smart city” technology such as heated sidewalks and other bike infrastructure, an underground pneumatic tube system for garbage removal, high-quality mass *timber* buildings for more sustainable living and working, streets dedicated to autonomous vehicles, and “dynamic” curbs designed to be flexible spaces that respond to real-time traffic conditions. Sidewalk Labs spent more than \$50 million developing a “master innovation development plan” for the district,¹¹⁸ but it was never implemented. Sidewalk Labs pulled the plug on the project at the outset of the COVID–19 pandemic in May 2020.¹¹⁹ Project post-mortems attributed the project’s demise to, among other things, data privacy concerns, mistrust of Big Tech, and Sidewalk Labs’ alleged lack

115. *Id.* at 911.

116. I worked as a Sidewalk Labs consultant on this project for 15 months.

117. Benjamin Schneider, *Alphabet Announces Plan to Turn Toronto Neighborhood into Living Laboratory*, BLOOMBERG (Oct. 17, 2017, 5:43 PM), <https://www.bloomberg.com/news/articles/2017-10-17/toronto-announces-plan-to-turn-waterfront-neighborhood-into-living-laboratory> [<https://perma.cc/7N3T-SQL7>]; Morgan Sharp, *Alphabet to Develop High-Tech Waterfront Site in Toronto*, REUTERS (Oct. 17, 2017), <https://www.reuters.com/article/ctech-us-alphabet-canada-development-idCAKBN1CM265-OCATC> [<https://Perma.cc/27UJ-9M7J>]; Alex Bozickovic, *Google’s Sidewalk Labs Signs Deal for ‘Smart City’ Makeover of Toronto’s Waterfront*, GLOBE & MAIL (Oct. 17, 2017), <https://www.theglobeandmail.com/news/toronto/google-sidewalk-toronto-waterfront/article36612387/> [<https://perma.cc/A2PD-SDL7>].

118. SIDEWALK LABS, I MASTER INNOVATION PLAN & DEVELOPMENT PLAN: SIDEWALK TORONTO (2019), https://storage.googleapis.com/sidewalk-toronto-ca/wp-content/uploads/2019/06/23135619/MIDP_Volume1.pdf [<https://perma.cc/X34L-9UT9>].

119. Ian Austen & Daisuke Wakabayashi, *Google Sibling Abandons Ambitious City of the Future in Toronto*, N.Y. TIMES (May 7, 2020), <https://www.nytimes.com/2020/05/07/world/americas/google-toronto-sidewalk-labs-abandoned.html> [<https://perma.cc/2MFU-ECV6>]; Moira Warburton, *Alphabet’s Sidewalk Labs Cancels Toronto’s ‘Smart City’ Project*, REUTERS (May 7, 2020), <https://www.reuters.com/article/us-canada-sidewalk/alphabets-sidewalk-labs-cancels-toronto-smart-city-project-idUSKBN22J2FN> [<https://perma.cc/GGH7-RECP>].

of transparency.¹²⁰ These assessments echoed earlier criticisms that also raised the specter of “surveillance capitalism.”¹²¹ But ultimately the Sidewalk Toronto project foundered on the rocky shoals of stakeholder misalignment, economics, and a concern that dealing with several governmental stakeholders in Canada and their intermediary (an entity known as Waterfront Toronto) would make obtaining regulatory approvals of innovations too difficult.

Other infrastructure projects can conclude construction but still end up in bankruptcy, as evidenced in recent years by several P3 toll roads, which are usually (but not always) financed in part by taxpayer dollars. In September 2014, the operator of the Indiana Toll Road filed for bankruptcy, less than a decade after entering into a seventy-five year concession agreement with the administration of Governor Mitch Daniels.¹²² A principal cause of the bankruptcy was faulty traffic projections that resulted in dramatic overestimations of toll revenue available to service debt.¹²³ The Indiana Toll Road is noteworthy because at the time of its 2006 sale to investors for \$3.8 billion it was the largest infrastructure privatization deal in United States history, but many privately-financed toll roads have filed for bankruptcy protection, including San Diego’s South Bay Expressway, South Carolina’s Southern Connector, and State Highway 130 outside Austin, Texas.¹²⁴ Those failures can also be traced to overly optimistic traffic projections.¹²⁵

Another high-profile infrastructure project that has performed sub-optimally, to say the least, is the California high-speed bullet train. Golden State voters in 2008 approved the project, which was expected to cost \$33 billion and contemplated a 220-mph train from Los Angeles to San

120. Elma Hajric, *The Demise of Sidewalk Labs in Quayside, Toronto*, MEDIUM (Sept. 4, 2021), <https://medium.com/@elmahjc/the-demise-of-sidewalk-labs-in-quayside-toronto-2ffd842c660d> [<https://perma.cc/2K4V-DUE5>].

121. Ellen P. Goodman & Julia Powles, *Urbanism Under Google: Lessons from Sidewalk Toronto*, 88 FORDHAM L. REV. 457 (2019).

122. Perry Chiaramonte, *Railed Toll Road Privatization Leaves Indiana in Driver’s Seat*, FOX NEWS (Oct. 5, 2014, 11:44 AM), <https://www.foxnews.com/us/failed-toll-road-privatization-leaves-indiana-in-drivers-seat> [<https://perma.cc/3BHT-2FD8>].

123. Angie Schmitt & Payton Chung, *The Indiana Toll Road and the Dark Side of Privately Financed Highways*, STREETS BLOG USA (Nov. 18, 2014), <https://usa.streetsblog.org/2014/11/18/the-indiana-toll-road-and-the-dark-side-of-privately-financed-highways/> [<https://perma.cc/4AFA-JSGD>].

124. *Id.*; see also James Lovegrove, *SH 130 Toll Road Operator Files for Bankruptcy*, TEX. TRIB. (Mar. 2, 2016), <https://www.texastribune.org/2016/03/02/sh-130-toll-road-files-bankruptcy/> [<https://perma.cc/4NX2-8GGU>].

125. *Texas Toll Road Failure Raises Question of PPP Viability*, NEWSPAPER (Mar. 11, 2016), <https://www.thenewspaper.com/news/49/4914.asp> [<https://perma.cc/37C8-NX9H>].

Francisco beginning in 2020.¹²⁶ However, the project price tag is now \$100 billion, leaving the State short about \$80 billion.¹²⁷ Rising costs have been driven by delays in moving underground utilities, long-standing problems buying all of the land along the right of way, and hundreds of contractor “charge orders”—amendments to the 2013 construction contract that modifies the project’s design and in turn the contractors’ scope of work—approved by the California High-Speed Rail Authority, which was created in 2008 solely to deliver the rail project.¹²⁸ The rail project has also been plagued by residential complaints of displacement, rodent infestation, unremoved construction debris, decreased air quality, and excessive noise from construction activity.¹²⁹ The relationship between the state rail authority and the construction contractors has grown confrontational; many of the change orders are disputed.¹³⁰ The bullet train no longer has a scheduled completion date.

A similarly confrontational relationship has developed between the State of New York and the international consortium of construction companies that built the Mario M. Cuomo Bridge, which replaced the Tappan Zee Bridge over the Hudson River and was completed in 2018. The consortium filed more than fifteen major disputes. It is seeking \$961 million in cost overruns, arguing that the New York State Thruway Authority mandated changes to the bridge design, and that those changes—along with a crane collapse for which it was not responsible and winter weather—forced it to accelerate work and increase costs.¹³¹ The company recently sent a unorthodox letter to New York Governor Kathy Hochul asking her to help resolve the disputes, adding that in their “collective 400 years of operation, our member companies have never

126. Ralph Vartabedian, *Cost Overruns Hit California Bullet Train Again Amid A New Financial Crunch*, L.A. TIMES (Oct. 8, 2021, 5:00 AM), <https://www.latimes.com/california/story/2021-10-08/california-high-speed-rail-faces-new-cost-overruns> [<https://perma.cc/4QM9-SP9P>].

127. *Id.*; see also Ralph Vartabedian, *Democrats in California and D.C. Clash Over How State’s High Speed Rail Should Be Powered*, L.A. TIMES (July 22, 2021, 7:32 PM), <https://www.latimes.com/california/story/2021-07-22/california-democrats-increasingly-divided-over-bullet-train> [<https://perma.cc/Y3ZJ-FMJD>].

128. Vartabedian, *supra* note 126.

129. Ralph Vartabedian, *Bullet Train Leaves a Trail of Grief Among the Disadvantaged of the San Joaquin Valley*, L.A. TIMES (Oct. 29, 2021), <https://www.latimes.com/california/story/2021-10-29/california-bullet-train-impacts-disadvantaged-communities-san-joaquin-valley> [<https://perma.cc/PJ5R-CZKK>].

130. Vartabedian, *supra* note 126.

131. Jon Campbell & Thomas C. Zambito, *Thruway Official Rejects Almost All of Cuomo Bridge Builder’s \$960M in Claims*, LOHUD (July 8, 2021, 5:03 AM), <https://www.lohud.com/story/news/2021/07/08/mario-cuomo-bridge-thruway-official-rejects-960-m-builders-claims/7827428002/> [<https://perma.cc/3TGD-LWJG>].

experienced this level of disregard from a project client.”¹³² The Cuomo bridge conflict is akin to other disputes arising out of struggling projects in which construction companies attempt to avail themselves of favorable contract terms to win sizeable payments above and beyond fixed cost bids.¹³³

Perhaps the most notorious infrastructure project debacle in the last several decades is Boston’s Central Artery/Tunnel Project, commonly known as the Big Dig. One of the largest and most challenging highway projects in United States history, the Big Dig was conceived in 1982 to help improve mobility in heavily congested downtown Boston by depressing I-93 into a 1.5-mile tunnel and constructing a separate tunnel connecting I-90 to Logan International Airport.¹³⁴ Ten years after the project’s completion, a reporter summarized why the Big Dig is widely considered to have been a fiasco:

It didn’t just cost a lot of money. The copy-and-paste phrase on reporters’ computers was that it was “plagued by cost overruns,” ballooning from \$2.6 billion to nearly \$15 billion (\$24 billion, counting interest on the debt). It didn’t simply take more time than expected; it was eight years behind schedule by the time it was done. And it didn’t just have flaws. There seemed to be mistakes

132. Letter from Tappan Zee Constructors to Kathleen C. Hochul, Governor of New York State (Sept. 9, 2021), available at: <https://www.politico.com/f/?id=0000017b-e194-d947-a1fb-ed9e71b10000> [<https://perma.cc/NF5M-JEPB>].

133. Thus, Crosslinx, the company building Toronto’s light rail transit system, took what it called an “extraordinary step” and sued two Ontario provincial agencies for their “refusal to declare COVID-19 an emergency” and pay \$134 million (CAD) alleged owed pursuant to the terms of their project agreement. In *‘Extraordinary Step,’ Company Building Eglinton Crosstown Hits Province with Lawsuit*, CBC NEWS (Oct. 8, 2020, 10:14 AM), <https://www.cbc.ca/news/canada/toronto/eglinton-crosstown-lawsuit-1.5755066> [<https://perma.cc/R6EB-C7MT>]. The government fired back by alleging Crosslinx is attempting to use the COVID-19 pandemic to excuse its years of deficient performance and delays. Phil Verster, *Metrolinx CEO Addresses Litigation Initiated by Crosslinx Transit Solutions Regarding Eglinton Crosstown LRT Project*, METROLINX NEWS (Oct. 8, 2020), <https://blog.metrolinx.com/2020/10/08/metrolinx-ceo-addresses-litigation-initiated-by-crosslinx-transit-solutions-regarding-eglinton-crosstown-lrt-project/> [<https://perma.cc/S4MT-W5DU>]. After a judge agreed with Crosslinx’s position, the government and Crosslink entered into a \$325 million (CAD) settlement that resolved many claims, but not the COVID claim. *Media Statement: Metrolinx, Infrastructure Ontario and Crosslinx Transit Solutions Settle COVID and Technical Claims as Eglinton Crosstown Line Moves Forward*, INFRASTRUCTURE ONT. (Dec. 22, 2021), <https://www.infrastructureontario.ca/Media-Statement-Solutions-settle-COVID-Eglinton-Crosstown-Line-moves-forward/> [<https://perma.cc/DKT6-72JP>].

134. Christopher McFadden, *7 Big Facts About the “Big Dig”*, INTERESTING ENG’G (Dec. 16, 2019), <https://interestingengineering.com/7-big-facts-about-the-big-dig/> [<https://perma.cc/4EUH-96MC>].

at every turn, making the price tag even more laughable, from design blueprint that didn't line up properly, to the faulty mixing of concrete, to, most tragically, a ceiling collapse that killed a car passenger in one of the new tunnels.¹³⁵

Viewed retrospectively, the Big Dig now has won some grudging appreciation, particularly since it has reduced traffic jams and improved Boston's neighborhoods, "making them more beautiful and accessible."¹³⁶ Still, the Big Dig will forever be defined in the public's mind as a project beset by manifold design, engineering, and construction failures that required contractors to continually improvise and make modifications that caused the size of the bill to increase geometrically, saddling taxpayers with a bill for which they are still paying.

The failures on the Big Dig project were attributable in large part to bad oversight. A report explains that as early as 1991:

[T]he state's inspector general warned of the "increasingly apparent vulnerabilities... of [Massachusetts's] long-term dependence on a consultant" whose contract had an "open-ended structure" and "inadequate monitoring." The main deficiency, as later... reports detailed, was that [the state's long-term consultants]—as "preliminary designer," "design coordinator," "construction coordinator," and "contract administrator"—were often in charge of checking their own work. If, say, the team noticed in managing construction that a contract was over budget because of problems rooted in preliminary design, it didn't have much incentive to speak up.¹³⁷

Another analysis of the Big Dig similarly concluded that the its massive cost escalation was attributable to, among other things, a lack of "rigorous oversight" and the absence during the design and construction phases of a "collaborative, integrated project-management team that

135. Anthony Flint, *10 Years Later, Did the Big Dig Deliver?*, BOSTON GLOBE (Dec. 29, 2015, 9:54 AM), <https://www.bostonglobe.com/magazine/2015/12/29/years-later-did-big-dig-deliver/tSb8PIMS4QJUEtsMpA7Spl/story.html> [<https://perma.cc/3XLY-7F8J>].

136. Justine Hofherr, *Can We Talk Rationally About the Big Dig Yet?*, BOSTON.COM (Jan. 5, 2015), <https://www.boston.com/cars/news-and-reviews/2015/01/05/can-we-talk-rationally-about-the-big-dig-yet/> [<https://perma.cc/M2DY-UWMH>].

137. Nicole Gelinias, *Lessons of Boston's Big Dig*, CITY J., (2007), <https://www.city-journal.org/html/lessons-boston%E2%80%99s-big-dig-13049.html> [<https://perma.cc/3UES-Z6PZ>].

involved all participants in decision making.”¹³⁸ A former official in the Massachusetts Office of the Inspector General concluded that, primarily as a result of its failed oversight on the Big Dig, “FHWA issued a series of directives and cautions for megaproject oversight across the nation, demanding more detailed financial reports and ordering regional FHWA officers to keep a much closer eye on large transportation projects in their districts.”¹³⁹

Unsurprisingly, a common denominator among many unsuccessful projects is a lack of effective oversight. While not fully developed, this theme nevertheless snakes through analyses of, and reporting on, projects that do not satisfy criteria conventionally used to determine success.¹⁴⁰ The leader of a union that represents transportation engineers and inspectors decried the lack of oversight on the Cuomo bridge and other New York State infrastructure projects: “multiple billion-dollar projects are currently being built or have been completed by a single contractor, with no on-site oversight by state inspectors working on behalf of the public.”¹⁴¹ Traffic projections that have underpinned the growth of privately financed toll roads are shielded from public view,¹⁴² and they are neither peer reviewed nor vetted by government officials.¹⁴³ The cost overruns plaguing the California bullet-train project have been attributed to poor oversight at both the state and federal levels.¹⁴⁴ Massive cost overruns and construction

138. Virginia Greiman, *The Big Dig: Learning from a Mega Project*, ASK MAG. 47, 50–51 (July 15, 2010), https://appel.nasa.gov/wp-content/uploads/2013/04/469423main_ASK_39s_big_dig.pdf [<https://perma.cc/9273-4RLZ>]

139. Wendy Haynes, *Boston’s Big Dig Project: A Cautionary Tale*, BRIDGEWATER REV. 3, 6 (2008), https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1211&context=br_rev [<https://perma.cc/JL3S-B8WG>].

140. See generally Robert Epstein & Jacqueline Greenberg Vogt, *History Shows Infrastructure Plans Need Better Oversight*, LAW360 (Sept. 20, 2017), <https://www.law360.com/articles/965812/history-shows-infrastructure-plans-need-better-oversight> [<https://perma.cc/5KHY-XN4G>].

141. Wayne Spence, *Commentary: Public Infrastructure Projects Need Independent Oversight*, TIMES UNION (Apr. 27, 2021), <https://www.timesunion.com/opinion/article/Commentary-Public-infrastructure-projects-need-16130635.php> [<https://perma.cc/Z9LY-8QB7>].

142. Schmitt & Chung, *supra* note 123.

143. Angie Schmitt & Payton Chung, *The Great Traffic Projection Swindle*, STREETS BLOG USA (Nov. 20, 2014), <https://usa.streetsblog.org/2014/11/20/the-great-traffic-projection-swindle/> [<https://perma.cc/7D3H-7JHD>].

144. Matthew Renda, *Cost Overruns, Poor Oversight Plague California Bullet Train*, COURTHOUSE NEWS SERV. (Nov. 15, 2018), <https://www.courthousenews.com/cost-overruns-poor-oversight-plague-california-bullet-train/> [<https://perma.cc/U5G7-9E5D>]; Gubernatorial Statement on California High-Speed Rail Authority: Its Flawed Decision Making and Poor Contract Management Have Contributed to Billions in Cost Overruns and Delays in the System’s Construction, PUB. LETTER 2018-108 (Nov. 15, 2018), <https://www.auditor.ca.gov/reports/2018-108/index.html> [<https://perma.cc/QF28-K9U5>];

delays that bedeviled the recently opened Berlin Brandenburg Airport have been attributed in part to a dysfunctional supervisory board, which met rarely, was guided by politics, lacked requisite technical expertise, and received “filtered information.”¹⁴⁵ Finally, according to a Canadian Broadcast Corporation, the British Columbia significantly overpaid for the multi-billion dollar Port Mann Bridge, because there was not rigorous verification of invoicing, timing, and completion of work.¹⁴⁶ Thus, the causal nexus between infrastructure project failure and deficient oversight is a clear one.

Similarly, it is well established that robust and rigorous oversight contributes to project success. The FHWA applauded five successful transportation megaprojects which demonstrate robust oversight and collaborative leadership.¹⁴⁷ First in 2002, the State of Utah completed a \$1.59 billion reconstruction of interstate I-15 in Salt Lake City, which at the time, was the “largest single design-build highway contract in the United States,” and it was completed ahead of schedule and under budget.¹⁴⁸ The project gained the support of the Governor of Utah, who identified transportation issues as critical, surveyed the public demonstrating that “Utah citizens understood the need for the project and would prefer a more aggressive, shorter scheduled project,” and demonstrated collaborative leadership through the “partnership between UDOT [Utah Department of Transportation] and FHWA, and UDOT created a project management team, separate from its traditional and

U.S. DEP’T TRANSPORT., REPORT NO. ST2020015, IMPROVED FRA DECISION MAKING AND FINANCIAL OVERSIGHT PROCESSES COULD HAVE REDUCED FEDERAL RISKS FROM THE CALIFORNIA HIGH SPEED RAIL PROJECT (Jan. 22, 2020), <https://www.oig.dot.gov/sites/default/files/FRA%20High%20Speed%20Intercity%20Passenger%20Rail%20Risk%20and%20Oversight%20Final%20Report.pdf> [<https://perma.cc/27AY-GDHS>]; Ralph Vartabedian, *Audit of California High-Speed Rail Finds Inadequate Federal Oversight*, L.A. TIMES (Jan. 24, 2020, 4:31 PM), <https://www.latimes.com/california/story/2020-01-24/dot-audit-california-high-speed-rail-finds-inadequate-federal-oversight> [<https://perma.cc/ZTU3-HDKK>].

145. JOBST FIEDLER & ALEXANDER WENDLER, *BERLIN BRANDENBURG AIRPORT, in LARGE INFRASTRUCTURE PROJECTS IN GERMANY* 132 (Genia Kostka & Jobst Fiedler eds., 2016).

146. Natalie Clancy, ‘*Weak Oversight*’ Plagued B.C. Megaproject, Which Insiders Believe Cost Taxpayers Millions, CBC NEWS (Sept. 07, 2017 2:00 AM), <https://www.cbc.ca/news/canada/british-columbia/weak-oversight-plagued-b-c-mega-project-which-insiders-believe-cost-taxpayers-millions-1.4144535> [<https://perma.cc/KJV4-3N3T>].

147. *Collaborative Leadership: Success Stories in Transportation Mega Projects*, U.S. DEP’T TRANSP. FED. HIGHWAY ADMIN. (2004), https://www.fhwa.dot.gov/majorprojects/lessons_learned/collaborative.pdf. [<https://perma.cc/Q452-4A7A>].

148. *Id.* at 14.

established processes, to encourage “an environment for creativity and innovation.”¹⁴⁹

Second, Salt Lake City delivered “the best transportation of any Olympic games” during the 2002 Winter Games.¹⁵⁰ This success was the result of “transportation professionals associated with the planning for the Utah infrastructure quickly [coming] together to develop partnerships between federal, state, and local stakeholders to ensure the success of the Winter Games.”¹⁵¹ These partnerships created a “sense of teamwork and cooperation” which informed the public, demonstrated visible progress, and delivered on promises.¹⁵²

Third, the Alameda Corridor project successfully consolidated 90 miles of rail and 200 roadway crossings into a 20-mile high capacity transit corridor between the Port of Los Angeles and Long Beach, California.¹⁵³ This project succeeded due to flexible leadership at the local and federal level, creative and willing advocates on Capitol Hill, the Ports in Los Angeles and Long Beach championing the project, and humility from project leaders.¹⁵⁴

Fourth, the Big I project successfully replaced the junction of two major interstate highways in New Mexico in 2002, establishing a national record for the most rapid completion of an urban freeway interchange in 22 months and 3 weeks.¹⁵⁵ The project’s success can be attributed to the “good working relationship between [the] designer, owner and constructors” which “allowed flexibility on suggestions/requests to be integrated into the project.”¹⁵⁶ Additionally, local government collaborated to quickly respond to most “Big I accidents within five minutes or less by placing police and fire officials in [the] construction zone.”¹⁵⁷

Fifth, and finally, the Hyperfix Project successfully rehabilitated Interstates 65 and 70 in Indianapolis “30 days ahead of schedule due to extensive planning,” multiple agencies’ involvement in the collaborative process, and proactive communication to the public early and often.¹⁵⁸

In addition to the five examples of successful oversight presented by the FHWA, international infrastructure megaprojects have also

149. *Id.* at 17–18.

150. *Id.* at 36.

151. *Id.* at 25.

152. *Id.* at 34.

153. *Id.* at 37.

154. *Id.* at 43–44.

155. *Id.* at 48.

156. *Id.*

157. *Id.*

158. *Id.* at 57, 60.

demonstrated that robust and rigorous oversight is essential to project success. In building the Qinghai-Tibet Railway, the highest and longest plateau railway in the world, the Chinese Ministry of Railways, the People's Republic of China, and the Qinghai-Tibet Railway Company collaborated to prioritize "national unity and cohesion."¹⁵⁹ Further, a case study of the Highway Durango Mazatlan demonstrates that infrastructure projects are successful when "the owners and the project delivery teams [are] committed to identifying and resolving problems as early as possible."¹⁶⁰ These examples of successful domestic and international infrastructure oversight further demonstrate that project success is dependent on proactive, rigorous oversight.

VI. CRITICAL PROJECT OVERSIGHT MECHANISMS

This, of course, means that planners who want to avoid the pitfalls of unsuccessful infrastructure projects must think carefully about how to conceive and implement fulsome oversight practices. Unfortunately, there is no statutory or other conventionally followed road map that points the way toward effective oversight of infrastructure projects. What we have instead is a patchwork of legislative initiatives and mechanisms that, even when viewed as a whole, may not increase the likelihood of a specific project's success. Some states have enacted statutes creating public-private partnership oversight bodies.¹⁶¹ The expansive Federal Acquisition Regulations purport to lay out standards for federal government procurement practices, but those standards are vague and applied in a highly discretionary manner by "acquisition teams" led by "contracting officers."¹⁶² The problem of effectively overseeing the quality of goods

159. Qinghua He et al., *Developing a List of Key Performance Indicators for Benchmarking the Success of Construction Megaprojects*, J. CONSTR. ENG'G & MGMT. 9 (Feb. 2021).

160. Carla Lopez del Puerto & Jennifer S. Shane, *Keys to Success in Megaproject Management in Mexico and the United States: Case Study*, J. CONSTR. ENG'G & MGMT. 6 (Dec. 2014).

161. For example, in 2009, Massachusetts established "a special public-private partnership infrastructure oversight commission to comment on and approve all requests for proposals for design-build-finance-operate-maintain or design-build-operate-maintain services." MASS. GEN. LAWS ch. 6C, § 73 (2021). Several other states have created similar oversight organizations. KEVIN PULA, NAT'L CONF. STATE LEGISLATURES, PUBLIC-PRIVATE PARTNERSHIPS FOR TRANSPORTATION: CATEGORIZATION AND ANALYSIS OF STATE STATUTES 32-37 (2016), https://www.ncsl.org/Portals/1/Documents/transportation/P3_state_statutes2.pdf [<https://perma.cc/84NV-TNCP>] (comparing state P3 oversight mechanisms).

162. The FAR system is promulgated pursuant to 41 U.S.C. § 13. See 48 C.F.R. §§ 1.101, 1.103(a). It establishes four standards for acquisitions: (1) satisfaction of the customer in terms of cost, quality, and timeliness of the delivered product or service; (2)

and services procured at the state level seems worse.¹⁶³ Federal statutes authorizing infrastructure may contemplate oversight, but they do not purport to create a workable oversight apparatus and touch on the issue only superficially. Thus, the few oversight provisions contained in the infrastructure bill signed by President Biden in November 2021 are aspirational, address only narrow issues like geomatic data and transportation management plans, delegate broad authority to administrative agencies, and err on the side of streamlining infrastructure initiatives rather than effectively overseeing them.¹⁶⁴ The Inspector General Act of 1978 helpfully created Inspector General offices in multiple departments and agencies, authorizing them “to make such investigations and reports relating to the administration of the programs and operations of the applicable establishment,” but these discretionary investigative powers apply only to *ex post* oversight.¹⁶⁵ As indicated in the above discussion of the Big Dig, some states (but not Michigan) also have Inspector General offices.¹⁶⁶ Finally, the U.S. House Committee on Transportation and Infrastructure and U.S. Senate Committee on Transportation and Infrastructure have jurisdiction over infrastructure,¹⁶⁷ but they have not exercised their powers in manners calculated to broadly improve project oversight. Thus, a meaningful understanding of infrastructure oversight cannot be obtained by surveying statutory or regulatory law.

minimization of administrative operating costs; (3) conducting business with integrity, fairness, and openness; and (4) fulfillment of public policy objectives. 48 C.F.R. § 1.102(b). *See generally* 48 C.F.R. § 1.102(d), 48 C.F.R. § 1.602-2 (delegating broad, discretionary, and ill-defined authority to “acquisition teams” and “contracting officers”).

163. *See* LYKE THOMPSON & MARJORIE SARBAUGH-THOMPSON, CHECKS AND BALANCES IN ACTION: LEGISLATIVE OVERSIGHT ACROSS THE STATES 1 (2019) (“[m]ost states do little or nothing to monitor state contracts, often because they lack the power to do so.”).

164. *See* Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 §§ 11301–19 (2021).

165. Inspector General Act of 1978, Pub. L. No. 95-452, 92 Stat. 1101 (1978).

166. *See Directory of State and Local Inspector General Agencies*, ASSOC. INSPECTORS GEN., <http://inspectorsgeneral.org/useful-links/directory-of-state-and-local-government-oversight-agencies/> [<https://perma.cc/MR7P-K6BH>] (last visited Jan. 3, 2022).

167. *See* H. COMM. ON TRANSPORTATION AND INFRASTRUCTURE, 117TH CONG., COMMITTEE RULES (Comm. Print 2021); *see also* S. COMM. ON TRANSPORTATION AND INFRASTRUCTURE, 117TH CONG., COMMITTEE RULES (Comm. Print 2021) (mirroring senate rules).

A. Contractual and Other Oversight Mechanisms on the Gordie Howe International Bridge Project

Instead, operational and governance mechanisms that facilitate effective infrastructure oversight can be identified by examining the practices of complex infrastructure projects that have met their objectives. Based on my experiences over most of the last decade, I believe that the Gordie Howe International Bridge project offers valuable lessons to project managers and policymakers. True, the project has not yet been completed, let alone on time or on budget, but many critical milestones have already been successfully achieved. The fact is that the Gordie Howe International Bridge project's oversight mechanisms are robust. They increase the likelihood that the project will succeed and that decision-making will be transparent and effectively vetted. Vigorous project oversight was an imperative woven into the warp and weft of the Crossing Agreement. To wit, the framework agreement:

(1) Contemplates that the WDBA, the Canadian Crown corporation responsible for delivering the project, must oversee the private sector concessionaire retaining to design, construct, finance, operate, and maintain the project;¹⁶⁸

(2) Provides that the operations of the WDBA must be overseen by a nine-member board of directors;¹⁶⁹

(3) Ensures project oversight by the Canadian government by conditioning the design, construction, financing, operation, and maintenance of project components on funding "approved by Canada" and are "subject to all procedures and approvals required by Canada for the payment of funds, including appropriation by" the Parliament of Canada;¹⁷⁰

(4) Establishes the binational International Authority ("IA"), stating that the WDBA must consult with the IA, which is charged with approving land acquisition in Michigan and critical procurement documents, including the RFQ, RFP, and the Project Agreement;¹⁷¹

(5) Affirmatively vests with the IA post-procurement oversight responsibilities defined as maintaining "on-going monitoring of the compliance by the [WDBA] with the Crossing Agreement and the Concessionaire with the Public-Private Agreement[,]" *i.e.*, the Project Agreement;¹⁷²

168. Crossing Agreement, *supra* note 50, art. IX, §§ 1-3.

169. *Id.* art. V, § 3.

170. *Id.* art. II, IV, § 7 & VIII, § 1.

171. *Id.* art. V, § 4 & VI, § 5.

172. *Id.* art. VI, § 5.

(6) Requires the procurement process to be overseen by a “fairness monitor,”¹⁷³ which is an independent third party whose role is to observe the procurement process, provide related feedback on fairness issues, and provide an unbiased and impartial opinion on the fairness of the observed procurement process;¹⁷⁴

(7) Requires the WDBA to consult with Michigan, a project co-owner and partner, throughout the procurement process;¹⁷⁵ and

(8) As suggested, *supra*, n. 62, ensures oversight by the FHWA and MDOT by requiring that project components in the United States – including the bridge, I-75 interchange, and a large part of the port-of-entry – must comply with the FAERs, the exhaustive regulatory regime, so money spent by Canada in Michigan can be eligible for \$.2.2 billion in federal transportation matching credits.¹⁷⁶

Just as the Crossing Agreement is drafted in a manner that fosters and recognizes the importance of oversight, so too is the Project Agreement between the WDBA and BNA. The Project Agreement mandates, among other things: (i) numerous governance, technical, and operations committees; (ii) a multi-tiered, multi-party quality management system; (iii) reporting and disclosure protocols; (iv) inspection and information access rights; (v) financial audits; and (vi) the generation and production of numerous reports regarding many topics.¹⁷⁷ It also requires the appointment of an “independent certifier” to confirm BNA’s contractual right to payments for work performed.¹⁷⁸

The Gordie Howe International Bridge project is also overseen by many entities not mentioned in the Crossing Agreement or a party to the Project Agreement, including: (i) elected and other community leaders with whom project participants are in regular dialogue to candidly discuss community benefits, public health, environmental, and other project-related concerns; (ii) numerous governmental agencies – such as the U.S. State Department, the U.S. Customs and Border Protection, the General Services Administration, Federal Aviation Authority, the Michigan

173. *Id.* art. V, § 5.

174. *Standard Acquisition Clauses and Conditions Manual, Fairness Monitoring* 1.50, PUB. SERVS. & PROCUREMENT CAN., <https://buyandsell.gc.ca/policy-and-guidelines/supply-manual/section/1/50> (last visited Jan. 3, 2022).

175. Crossing Agreement, *supra* note 50, art. V, § 4.

176. *Id.* at art. IX, § 5.

177. Project Agreement, *supra* note 72, at § 10 (Committees), § 11 (Standard of Performance & Quality Assurance), § 22.7 (Monitoring of Progress), § 32 (Access, Monitoring and Remedial Rights), § 37.9, (Audit), § 53.1 (Accessibility of Project Information), § 59 (Mandatory Reports, Records, Audit, and Information), sched. 7 (Quality Management) & sched. 8 (Records & Mandatory Reports).

178. *Id.* at § 24 & sched. 32.

Department of Environment, Great Lakes, and Energy, the Great Lakes Water Authority, and the Detroit Water and Sewage Department – all of which have jurisdiction over certain project activities and from which the project has had to obtain key permits; (iii) Congress, which must ultimately appropriate the funds needed to operate and maintain the U.S. port-of-entry after the bridge opens to traffic; and (iv) banks and other lenders, which have helped finance the project and, therefore, have contractual oversight rights.¹⁷⁹

B. Examples of “Real World” Commitment to Project Oversight on the Gordie Howe International Bridge Project

But “oversight” is not just an ornamental word that adorns the bridge project agreements. It must be a sturdy through line that connects and supports all aspects and phases of the Gordie Howe International Bridge project. It must be an ethos put into practice on a daily basis. The need for proactive oversight, and its most evident hallmarks—transparency, information sharing, consultation, second-guessing, skepticism, due diligence, inclusive problem-solving, and partnership—have defined the bridge project. Were they to look close enough, observers would see oversight everywhere.

I have known this first-hand. Again, for the last nine years, I have been responsible for overseeing all aspects of Michigan’s participation in the Gordie Howe International Bridge project. In this role, I have reported to the Michigan Executive Office of the Governor and have been widely and correctly perceived as the governor’s “eyes and ears” on the ground. But I have access to material information needed to understand the project’s manifold challenges and complications. Many probing questions have been answered by the WDBA and the Government of Canada. Sometimes information has been imparted in formal update meetings; at other times, I have obtained insights as a result of impromptu one-on-one telephone conversations or at informal lunches. The WDBA and I have often together kicked proverbial tires, exploring opportunities, and confronting inevitable challenges.

Indeed, much of the history of the Project has been one of proactive oversight. The Project was initially in the ministerial portfolio of Transport Canada for over a decade, until it was transferred to Infrastructure Canada (“INFC”) in 2015 following the election of a new federal government. But the Canadian government’s oversight of the WDBA specifically and the Project in general has been conscientious. During procurement, Transport Canada and INFC reported to

179. *Id.* at sched. 30.

multiple federal oversight committees and boards, including deputy minister committees, the Treasury Board committee of federal ministers, and the Minister of Finance and Prime Minister, for various approvals to enable the project to proceed. These were subsequent to the legislative approvals that enabled Canada to enter into the Crossing Agreement, obtain requisite governmental approvals, provide funding, and undertake other pre-procurement efforts. Due diligence efforts for all aspects of the project, including land acquisition risks, legal challenges, and advance construction efforts, relied on internal and external expertise including close collaboration by INFC with the WDBA and other project stakeholders, including Michigan. During procurement, regular updates to Central Agencies (Finance Canada, Treasury Board of Canada Secretariat, and Privy Council Office), Deputy Minister Committees, Treasury Board, Minister of Finance and Prime Minister, were conducted to ensure thorough assessments of evolving risks and risk mitigations and clear implications of various courses of action. As procurement advanced and certain milestones were reached, such as RFQ and shortlisting RFP bidders, various risk assessments were conducted to inform project governance committees and elected ministers of risks, risk responses, and implications to ensure alignment with government priorities and objectives. Thanks to the ongoing due diligence efforts and continued focus on the strong merits of the project for Canada, Michigan, and other stakeholders, and transparent engagement with project governance, Canada remained fully supportive of the project through multiple governments which enabled the project to advance through the various milestones “gates.” These included RFQ issuance, RFP issuance, the short-listing of the “preferred proponent” and eventually execution of the Project Agreement, also known as “financial close.”¹⁸⁰

180. The oversight practices pertaining to the Gordie Howe International Bridge project and MDOT’s typical “design-bid-build” projects are markedly different. The Director of MDOT reports directly to the Governor. Article V, § 28 of the Michigan Constitution of 1963 establishes the six-member State Transportation Commission (“STC”) to “establish policy for the state transportation department transportation programs and facilities, and such other public works of the state, as provided by law.” MICH. CONST. art. V, § 28 (1963). The STC, which currently meets quarterly, has historically reviewed and approved MDOT contracts and its five-year transportation plan, which has been generated and updated annually since 1998. *See Commissions, Councils & Committees*, MICH. DEP’T TRANSP., https://www.michigan.gov/mdot/0,4616,7-151-9623_31969---,00.html [<https://perma.cc/9GHF-SE9M>] (last accessed Jan. 6, 2021); *2019-2023 Five-Year Transportation Program*, MICH. DEP’T OF TRANSP. (2019), https://www.michigan.gov/documents/mdot/MDOT_5_Year_Plan_2019-23_DRAFT_628310_7.pdf [<https://perma.cc/FM7C-VX2J>]; *Strategic Planning*, MICH. DEP’T TRANSP., https://www.michigan.gov/mdot/0,4616,7-151-9621_14807---,00.html [<https://perma.cc/F4BR-9QKP>] (last accessed Jan. 6, 2021). The State Administrative Board must approve MDOT contracts valued at

Project participants' shared commitment to close oversight was also evidenced during the procurement process by negotiated governance protocols regarding FAER compliance. Maintaining that compliance, which as stated is a condition precedent to Michigan's eligibility for approximately \$2.2 billion in federal transportation matching credits, is a core tenet of the Crossing Agreement, one that Canada has prioritized and embraced. However, the WDBA lacked a deep understanding of the FAERs. The Crossing Agreement did not clearly describe the process by which Michigan and Canada would ensure that procurement documents adhere to the FAERs. After some disagreement about the nature of Michigan's role in the procurement process, the WDBA and Michigan entered into a series of face-to-face discussions in Brighton, Michigan that culminated in the 2016 execution of a written Acknowledgment of Implementation of Crossing Agreement ("Acknowledgment") that established document review groups, granted Michigan access to "commercially confidential meetings" between BNA and the WDBA, and effectively gave MDOT broad consultation rights and the ability to review and comment on all procurement documents, including the RFQ, RFP, and the Project Agreement. While the WDBA could have perceived Michigan's demands as intrusive and acted accordingly, the WDBA embraced Michigan's oversight role and honored the spirit of the Acknowledgment by advising Michigan of problems as they arose and taking to heart concerns expressed by Michigan.

The deliberations of the International Authority are yet another manifestation of the Gordie Howe International Bridge project's commitment to oversight. The Crossing Agreement does not define the parameters of the International Authority's oversight role, particularly

\$500,000 or more. See State Administrative Board, Res. 2019-1 (July 16, 2019), https://www.michigan.gov/documents/micontractconnect/FandC_Threshold_resolutions_-_present_to_past_402185_7.pdf [<https://perma.cc/DNT7-NWLS>]. As the above "boilerplate" discussion indicates, the appropriations power of the Michigan Legislature gives it standing to dictate MDOT policy and perform discretionary oversight activities, including holding hearings and making requests for information. Michigan's House of Representatives and Senate each has transportation, infrastructure, and other dedicated oversight committees, but none has shown sustained interest in conducting effective oversight at the system or project level. The Michigan Office of the Auditor General, the STC, and the Michigan Legislative all have the authority to audit MDOT and its projects. Finally, and perhaps most importantly, FHWA oversees MDOT projects to ensure their compliance with federal aid eligibility requirements. See *Stewardship and Oversight Agreement*, FED. HIGHWAY ADMIN. & MICH. DEP'T OF TRANSP. (May 2015), https://www.michigan.gov/documents/mdot/MDOT_RevisedStewardship_415074_7.pdf [<https://perma.cc/QJZ8-49ED>]. Further, when federal money is involved, the Federal Transit Administration, the Federal Aviation Authority, and the Federal Rail Administration oversee MDOT's regulatory compliance on, respectively, transit, rail, and airport projects. See, e.g., *id.*

during the post-procurement phase of the project. Were it so inclined, the WDBA could have attempted to marginalize the International Authority by rarely holding meetings. But International Authority meetings are regularly sponsored and held by the WDBA. More importantly, those meetings are, and always have been, lively forums for discussion. The six members of the International Authority are free to, and do, ask penetrating questions about the status of the bridge project; meeting attendees, including Michigan representatives, provide candid and fulsome answers. International Authority meetings are also attended by representatives of the Canadian government, which presumably means that the substance of International Authority discussions is communicated to policymakers in Ottawa.

C. Examples of Effective Project Oversight on the Gordie Howe International Bridge Project

The success of any specific project can be attributed, and is attributable, to a myriad of factors, many of which are outside the control of project planners. Currency or commodity price fluctuations may make completing a project, let alone completing it on budget, impossible.¹⁸¹ Supply chain disruptions or labor shortages could adversely impact a project's schedule.¹⁸² A change of political leadership, or political decision-making, could sink a project.¹⁸³ The list goes on.

But, in the case of Gordie Howe International Bridge project, there is clear and unambiguous relationship between effective oversight, on the one hand, and the project's early successes, on the other. Most obviously, without effective oversight, the competitive procurement process would not have concluded successfully and the construction currently well under way would not have commenced.

The Gordie Howe International Bridge project is unique in that Canada is generously financing the project in its entirety, but many of the

181. Jordan Press, *Gordie Howe Bridge Cost May Rise \$2B as a Result of Low Loonie, Trudeau Told*, CBC NEWS (Jan. 4, 2016, 3:23 PM), <https://www.cbc.ca/news/canada/windsor/gordie-howe-bridge-cost-may-rise-2b-as-a-result-of-low-loonie-trudeau-told-1.3388954> [<https://perma.cc/ZJ9G-C56F>].

182. Jane Hider, *Supply Chain Shortages Continue to Impact Construction*, CORRS CHAMBERS WESTGARTH (Sept. 1, 2021), <https://www.corrs.com.au/insights/supply-chain-shortages-continue-to-impact-construction> [<https://perma.cc/X5B9-2PPV>].

183. Kate Zernike, *Christie Stands by His Decision to Cancel Train Tunnel*, N.Y. TIMES (Apr. 10, 2012), <https://www.nytimes.com/2012/04/11/nyregion/christie-stands-by-his-decision-to-cancel-trans-hudson-tunnel.html> [<https://perma.cc/H5JE-BXHE>]; Cezary Podkul, *Chris Christie's Tunnel Tango*, PROPUBLICA (Aug. 13, 2015, 11:49 AM), <https://www.propublica.org/article/chris-christies-tunnel-tango> [<https://perma.cc/6GPN-Y6H8>].

existential risks that confronted the project (and discussed above) arose in Michigan. Michigan is where the project had to acquire 636 separate parcels of property, approximately twenty of which were owned by Moroun. Michigan is where Moroun engaged in scorched-earth litigation intended to topple the project.¹⁸⁴ Michigan is where Moroun tried to use his considerable influence in the Legislature to prevent MDOT from incurring project-related costs. Michigan is where it was necessary to receive Detroit City Council approval of an extensively negotiated agreement to acquire city-owned land, assets, and streets located in the project's Michigan footprint. Michigan was largely or fully responsible for mitigating or eliminating these and other risks. Yet Canada reasonably could not have been expected to proceed with the project had it not been satisfied that Michigan had done, or was likely to do, its job. With billions of dollars at stake, Canada was not going to take a flyer on Michigan's ability to timely and effectively de-risk the project.

Canada's confidently (and bravely) allowing the procurement to proceed notwithstanding the continued existence of risks managed by Michigan was attributable to its proactive oversight of land acquisition and pending lawsuits. The oversight allowed Canada to make fully informed judgments about the likelihood of Michigan's timely and otherwise successfully obtaining properties needed for the project. Canada's Michigan-based attorneys conducted independent and extensive analyses to confirm that the Crossing Agreement—which lay at the heart of many of Moroun's lawsuits—would withstand legal scrutiny. The same attorneys regularly consulted with Michigan's special assistant attorneys general ("SAAGs") to satisfy themselves that the Moroun litigation was being handled properly. The WDBA and Michigan participated in regular, all-day work sessions at the offices of the SAAGs to obtain a shared understanding of the status of land acquisition and respond to WDBA concerns about its pace. The WDBA requested, and MDOT provided, comprehensive metrics and spreadsheets to facilitate the tracking of the status of each of the 636 parcels located in the Michigan project footprint. Canada was advised of legislative risks as soon as they arose. I talked regularly with the WDBA, Transport Canada, and INFC to provide thorough updates on matters within Michigan's bailiwick. The INFC inquired regularly about Detroit politics and how to best engage Detroit Mayor Mike Duggan whose support was needed to obtain city-owned parcels and other assets. The WDBA itself attended many meetings with the mayor, further educating itself about how to address the city's concerns and win Detroit City Council approval of property and asset transfers.

184. The Wayne County Circuit Court docket for Moroun's consolidated necessity challenges contains at least 710 entries.

Thus, throughout the freight procurement process, Canadian stakeholders were on high alert, deeply involved, deeply curious, and deeply informed about goings-on in Michigan. Information obtained by our interlocutors was used to brief senior decision-makers in Ottawa. Again, this proactive oversight by Canada is what gave Canada the confidence it needed to commence and continue the ultimately successful procurement process.

Effective oversight also contributed to another project success: the inclusion of a comprehensive community benefits plan in the Project Agreement.¹⁸⁵ As stated, there was initial reluctance to spend additional sums of money to affirmatively help the communities most directly impacted by the Gordie Howe International Bridge project. Some at the WDBA and in Ottawa seemed to believe that community benefits, no matter how laudable, were not a conventional infrastructure cost for which Canadian taxpayers should be liable. There was little previous precedent for community benefits in Canada, unlike in the United States where project sponsors routinely provided them and incorporated them into budgeted development costs.¹⁸⁶ However, in consulting with Canada about the procurement process, Governor Snyder, Michigan's International Authority members and other Michigan project participants forcefully advocated in favor of community benefits, defending the position that they were both equitable and politically necessary. Michigan explained, for example, that the project would be unable to maintain a constructive relationship with the City of Detroit if the project were to rebuff local demands for community benefits. Canada listened and agreed to incorporate into the RFP, and then the Project Agreement, a workforce development and participation program and a \$20 million (CAD) neighborhood infrastructure plan for host communities in Windsor, Ontario and the Delray neighborhood of Detroit.¹⁸⁷ The project's

185. Project Agreement, *supra* note 72, sched. 36.

186. The following studies suggest that community benefits packages were broadly understood to be an important component of infrastructure projects first in the United States and later in Canada. SUMMARY AND INDEX OF COMMUNITY BENEFIT AGREEMENTS, PUB. L. CTR., TULANE UNIV. (2011), <https://law.tulane.edu/sites/law.tulane.edu/files/Files/TPLC/summary-and-index-community-benefit-agreements.pdf> [<https://perma.cc/NCQ2-VBR9>]; DINA GRASER, ATKINSON FOUNDATION, COMMUNITY BENEFITS IN PRACTICE AND IN POLICY: LESSONS FROM THE UNITED STATES AND THE UNITED KINGDOM (2016), https://ccednet-rcdec.ca/sites/ccednet-rcdec.ca/files/atkinson_cbreport_fa.pdf [<https://perma.cc/2BHH-Z4EX>]; CARDUS, COMMUNITY BENEFITS AGREEMENTS: TOWARD A FAIR, OPEN, AND INCLUSIVE FRAMEWORK FOR CANADA (2015), <https://www.cardus.ca/research/work-economics/reports/community-benefits-agreements-toward-a-fair-open-and-inclusive-framework-for-canada/> [<https://perma.cc/NZG6-5AT7>].

187. *Community Benefits of Gordie Howe International Bridge*, GORDIE HOWE INT'L BRIDGE, <https://www.gordiehoweinternationalbridge.com/en/community-benefits-section> [<https://perma.cc/HCL5-QZ9J>] (last visited Jan. 3, 2022).

community benefits plan has been widely applauded by Michigan political leaders and has received several awards.¹⁸⁸ The development of the plan was a model of collaboration among the WDBA, Michigan, and many community leaders and stakeholders. The elements of the plan were determined only after the WDBA, working arm-in-arm with Michigan, conducted a survey that identified the communities' priorities and explained why certain requests could not be granted for legal or other reasons. No project participant acted alone. Every participant in the community benefit discussions vetted assumptions held by other participants. Consensus emerged, and the result was a project success of which we are all proud.

These and other oversight successes were hard-won, made possible only by project partners' willingness to scale steep learning curves. Canadian and Michigan cultures differ markedly; together, we grew to appreciate that our dissimilarities must be better understood and accommodated. I personally discovered a need to better acclimate myself to government's sometimes frustratingly slow rhythm, satisfying myself when needles moved inexorably, albeit slowly, in the right direction. Like chemists in a lab, project partners were constantly experimenting with ways to break down operational chokepoints, sussing out who will listen to whom, how to achieve win-win results, and what long-term goals should prevail over short-term exigencies. A vital lesson absorbed is that participants must work as a team, particularly when seeds of dissension are sown in the project firmament. Problem-solving often proved tricky given understandable resentments arising out of the fact that Canada is financing the Gordie Howe International Bridge project in its entirety. Michigan actors occasionally took umbrage when they perceived Canada was attempting to interfere with decision-making that was thought to be rightfully theirs. From time-to-time, the flow of information has been constricted, unintentionally or otherwise making oversight more challenging. A lack of familiarity with applicable law in foreign jurisdictions often created misunderstandings that had to be scraped like old, peeling paint. Over time, I grew to appreciate that tetchy squabbles could best be resolved by reminding myself and others that we all ultimately looked to the same star when navigating our courses: the completion of a transformational, architecturally stunning bridge. Like

188. *CPRS National Announces the Winners of the 2020 Awards of Excellence*, CANADIAN PUB. RELS. SOC. (Oct. 2, 2020), <https://www.cprs.ca/AoE2020> [https://perma.cc/4AQT-ATFR]; Dave Battagello, *Public-Private Project Award Presented to Gordie Howe Int'l Bridge*, WINDSOR STAR (Mar. 8, 2021), <https://windsorstar.com/news/local-news/award-presented-to-gordie-howe-international-bridge> [https://perma.cc/GU8B-ER4Y].

powerful smelling salts, this shared goal time and again has reawakened project participants to the need to get the job done.

VII. PEOPLE AND LEADERSHIP AS DRIVERS OF EFFECTIVE PROJECT OVERSIGHT

As this discussion suggests, effective project oversight is about more than carefully diagrammed organizational charts, multistakeholder technical task forces, terms of reference, and audit protocols. These oversight mechanisms—irrespective of whether they are established by statute, contract, or governance committee—are foundational, important stores of weapons to deploy when endeavoring to successfully deliver a project. But these oversight mechanisms are not self-executing. Which is why effective oversight remains ultimately about people—how they think, problem solve, interact, and, most importantly, lead. No oversight plan can compensate for uninformed or unwise leadership. Any oversight mechanism, no matter how well-conceived it may be, will be ineffective if politics, bureaucratic inertia, or fecklessness prevent it from being put to use. Effective oversight requires:

Alignment. A project will not succeed, and oversight will not be possible, if the goals of project stakeholders do not align or at least greatly overlap. Those goals must be clearly articulated in framework agreements (like the Crossing Agreement) or project agreements whose remedial provisions incentivize compliance with their terms. If contractors and owners do not achieve alignment, then oversight will inevitably become unworkably adversarial and litigious, as opposed to collaborative.

Humility. Socrates is frequently quoted as saying, perhaps apocryphally, “the only true wisdom is in knowing you know nothing.” The person who humbly recognizes the limits of his or her knowledge is less likely to proudly cling to or defend assumptions, to draw lines in the intellectual sand, to act blindly. When one party defensively reacts to criticism, tempers must be cooled by colleagues who breathe deeply, who know that no one holds a monopoly on wisdom or facts, who step into others’ shoes, who listen.

Communication. Problems fester unaddressed in dark corners when they are not broadly discussed. It often does no good for a board or management team to identify a concern if its discussions are siloed. If project partners trust each other, communication channels among stakeholders will open and crisscross like the rail lines on the New York City subway map. As a result, challenges will be exposed.

Curiosity. Too often meetings are inert affairs when attendees sit in silence watching a narrated PowerPoint presentation. Project gatherings

should be intellectual wrestling matches, with questions peppered and new theories and solutions postulated. They should be attended by people who, in historian Richard Hofstadter's words, truly "relish[] the play of the mind for its own sake, and [find] in it one of the major values in life."¹⁸⁹ Project leaders who delight in intellectual activity facilitate issue spotting and resolution.

Awareness. When assessing the status of a project, everyone must have a seat at the table. Lawyers of all stripes. Civil and design engineers. Project managers. Financial whizzes. Technicians. Environmental watchdogs. Community activists. Regulators. Administrators. Their collective presence means that those responsible for overseeing a project have ready access to, and know to avail themselves of, sophisticated expert advice and consultants who help make sure problems are viewed from multiple and competing perspectives.

Proactivity. If issues arise, they must be attacked. They cannot linger. They must be quickly resolved at technical or operational levels or quickly escalated. Project participants cannot have a bureaucratic mentality. They cannot come to work with a "punch the clock" mentality. They must feel liberated to "speak truth to power" and disagree with their bosses. Project partners must reach out to and interact with each other, not only in formalized, ritualistic "workshops" but over meals and while commuting to and from work.

Continuity. Megaprojects take years, sometimes decades, to plan and complete. They will inevitably, therefore, suffer from attrition. The significance of personnel turnover—whether at senior political or operational levels—should not be underestimated, however. Each time a longtime employee or service provider with a particularized skill set leaves a project, planners may have to scurry to compensate for the resulting loss of institutional memory and expertise. These efforts are frequently unsuccessful and, as a result, problems once seen may go unperceived or ignored. Top-notch personnel should be properly incentivized to stay on the job. The causes of inordinate turnover in any workplace must be understood and remedied.

Sophistication. Effective project oversight is less likely if those doing the overseeing lack legal, technical, operational, or commercial sophistication and relevant experience. It is that sophistication and experience that allows project participants to ask the right questions, formulate wise strategies, contextualize challenges, and forge needed consensus. A complicated P3 project, for example, cannot be properly overseen if project leaders themselves lack P3 experience or do not

189. RICHARD HOFSTADTER, *ANTI-INTELLECTUALISM IN AMERICAN LIFE* 30 (1963).

appropriately avail themselves of lawyers and other experts who themselves have significant P3 experience.

Relationship-Building. Zoom, emails, and lawyerly demand letters and notices have their place, but challenging issues are identified and resolved far more often when project participants break bread or drink beers together. That is how trust is built. That is when interpersonal barriers are lowered. Is the person on the other side of a negotiating table also a friend? Does my interlocutor know me well enough to have confidence that I will be true to my word? If the answer to these questions is “yes,” then relationships are built, and project oversight becomes considerably easier.

Leadership. Overseeing a multi-billion dollar, sprawling infrastructure project requires rising to logistical and operational challenges that reasonably may be compared to those confronted by planners of military campaigns. It is to me self-evident that wars cannot be won without distinguished leadership. Thus, throughout my participation on the Gordie Howe International Bridge project, I have often thought of Dwight D. Eisenhower’s famous essay in which he limned on the combinations of characteristics that make a leader.¹⁹⁰ The essay is divided into captioned subparts in which Eisenhower provides anecdotal examples of people whose leadership he greatly admired. Thus, he devotes several paragraphs to General George C. Marshall’s “selfless dedication” to the mighty task of running two wars simultaneously, one in Europe and the other in the Pacific.¹⁹¹ However, it is in his treatment of George Washington where Eisenhower crystallizes what he sees as timeless markers of exceptional leadership. Describing the Revolutionary War hero and the United States’ first president, Eisenhower wrote: “Here was an almost sublime embodiment of the finest qualities of leadership: dedication, stamina, courage, honesty, intelligence, fairness, patience, capacity to plan, consideration for others, pride leavened with humility and, perhaps most important of all, the ability to inspire other men.”¹⁹² Significantly, Eisenhower concludes his essay by observing that leadership must be exercised at every level of any endeavor: “In the Army,” Eisenhower instructs, “good leadership must go down through the ranks to the youngest corporal.”¹⁹³

190. Dwight D. Eisenhower, *What is Leadership?*, READER’S DIGEST (June 1965) https://www.eisenhowerlibrary.gov/sites/default/files/file/what_is_leadership.pdf [<https://perma.cc/6C58-X24X>].

191. *Id.* at 49.

192. *Id.* at 50–51.

193. *Id.* at 53.

The same is true when it comes to effectively overseeing infrastructure projects. Of course, high-ranking elected or appointed leaders must take actions necessary to do what they can to increase the likelihood of a project's success, actions that might include: (i) making wise and appropriately expeditious policy decisions; (ii) immersing themselves in its details; (iii) project knowledge that extends beyond canned talking points; (iv) effecting necessary project management changes; (v) appointing qualified board directors; and (vi) interfacing regularly with counterparts. But an infrastructure project will only succeed if its “foot soldiers” – technical experts, staff attorneys, and lower-ranking civil service administrators – also strive to personify the leadership qualities that Eisenhower saw in George Washington. They too, like their bosses, should take the bull by the horn, square their shoulders, and step out and speak up if they identify a problem, all with courage and conviction.¹⁹⁴

194. The need for on-the-job dynamism by project participants is particularly acute with regard to *sui generis*, complicated undertakings like the Gordie Howe International Bridge project. In contrast, most governmental entities charged with delivering conventional infrastructure assets have adopted governance and oversight protocols designed to ensure that best practices are followed irrespective of who is working on a project at any specific time. For example, at MDOT, the processes for road and bridge procurement, design, and construction are well-established and must comply with the department's widely promulgated policies and procedures (addressing general contract execution and oversight). See generally 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION 1-112, MICH. DEP'T OF TRANSP. (2020), https://www.michigan.gov/documents/mdot/MDOT_2020_Construction_Specifications_Book_WEB_728364_7.pdf [<https://perma.cc/6HL2-69DG>]; ENGLISH ROAD DESIGN MANUAL, MICH. DEP'T OF TRANSP. (2021), <https://mdotjboss.state.mi.us/stdplan/englishroadmanual.htm> [<https://perma.cc/YWH2-KYAP>]; ENGLISH BRIDGE DESIGN MANUAL, MICH. DEP'T OF TRANSP. (2021), <https://mdotjboss.state.mi.us/stdplan/englishbridgemanual.htm> [<https://perma.cc/VEM8-ESAH>]; 2022-2026 FIVE-YEAR TRANSPORTATION PROGRAM, MICH. DEP'T OF TRANSP. (2021), https://www.michigan.gov/documents/mdot/Five-Year_Transportation_Program_713823_7.pdf [<https://perma.cc/EZ4H-Z2JW>]; PROJECT SCOPING MANUAL, MICH. DEP'T OF TRANSP. (2019), https://mdotcf.state.mi.us/public/docs/design/files/scopingmanual/Scoping_Manual.pdf [<https://perma.cc/DZ5R-7CDW>]; DOCUMENTATION GUIDE, MICH. DEP'T OF TRANSP. (2019), https://mdotwiki.state.mi.us/images_construction/6/6a/Documentation_Guide_Final_Draft_07-29-19.pdf [<https://perma.cc/EC2M-8XQ4>]; MATERIAL QUALITY ASSURANCE PROCEDURES MANUAL, MICH. DEP'T OF TRANSP. (2021), https://www.michigan.gov/documents/mdot/2021_MQAP_Final_728007_7.pdf [<https://perma.cc/8U8W-F83A>]. Considered *in toto*, those requirements generally dictate: (1) who at MDOT will participate in the design, scheduling, and planning of a project; (2) how a project will be competitively bid; (3) what criteria will be used when evaluating bids submitted by construction companies; (4) when and how the contractor will be paid for work; (5) the manner in which MDOT field staff and the contractor will interact during the construction of a project; and (6) what quality assurance documents—like Inspectors Daily Reports—must be generated, what material testing must be performed and by whom. To a meaningful extent, MDOT's uniform oversight practices routinize project management, thereby decreasing the likelihood of human error, bad judgment, or underperformance.

The Gordie Howe International Bridge project has already enjoyed many “wins.” Moroun’s lawsuits have been defeated. One of the most comprehensive and complex competitive procurement processes ever undertaken was completed when BNA and the WDBA executed the Project Agreement. In humanely relocating hundreds of residents and business owners from their properties, and in committing to deliver a carefully considered and prodigiously financed community benefits plan, the Gordie Howe International Bridge project has proven repeatedly that it has a fierce social conscience. Construction is moving ahead. But, as with any megaproject, a myriad of budgetary, quality, scheduling and other obstacles must be surmounted before history will deem the Gordie Howe International Bridge project to be a smashing, unambiguous success. I believe this likely will be history’s judgment. Why? Because those of us who labor on the Gordie Howe International Bridge project see the need to recommit ourselves every day to a shared mission of purposefully working together to oversee and deliver a critically needed, once-in-a-generation infrastructure asset – one that will power economic growth, generate thousands upon thousands of new jobs, and prove anew that by working together, we can still accomplish great things.

VIII. CARL LEVIN: INSPIRATION FOR PROACTIVE OVERSIGHT IN MICHIGAN

Growing up, one of my favorite television shows was *Columbo*. If it’s possible for a fictional TV character to be a role model, it was for me the Los Angeles police lieutenant who played cat and mouse with wealthy murder suspects, disarming them with his rumpled, inquisitive manner. “Oh, just one more thing,” he said to his quarry, feigning befuddlement, before checkmating him or her. When I was still in high school, I volunteered on Carl Levin’s first U.S. Senate campaign in 1978 and then worked in his Washington, D.C. office, in part because I saw a little—no, a lot—of Columbo in him. Like Columbo, Senator Levin was not sartorially splendid; his hair was uncoifed, his posture a bit stooped. But the full weight of his unimpeachable character easily made up for what he may have lacked in panache.

In authoring this article, I have often thought of Senator Levin. I thought in particular about the hours-long tour of his beloved Detroit Riverfront the two of us took together in a golf cart, after sickness descended upon him and he could no longer easily walk. On that day, we spoke about the memoir he was writing with, if not a fierce urgency, then with a sober appreciation that he had a lot to say but little time remaining in which to say it. In the book, published just a few months before his

death in 2021, Senator Levin discusses at length and with pride his distinguished and productive chairmanship of the Permanent Senate Subcommittee on Investigations, the same subcommittee that Senator Joe McCarthy disgraced with his demagogic fearmongering during the early 1950s. Senator Levin, a Democrat, penned the following passage about the subcommittee's bipartisanship, a subject about which we spoke when we wended our way along the riverfront:

It was not always possible to reach agreement on every part of a report, and there were times we had differences on recommendations for reforms, but we were clear that we wanted the facts, wherever that search might lead and regardless of whose toes we stepped on.

The more we operated in this way, the more my staff valued working with their Republican counterparts. They realized that when they investigated with only fellow Democrats, they were too often operating in an echo chamber. They missed certain facts and issues key to fashioning the type of bipartisan appeal that can facilitate meaningful reform. When they worked with staff who held different views than their own, they would uncover more facts, dig more deeply into issues, challenge unspoken assumptions, and interpret what happened with a more sophisticated understanding. In fact, it was the crucible in which each side challenged the other – in respectful, constructive ways – that produced investigative findings that were more thorough, thoughtful, and accurate than they otherwise would have been.¹⁹⁵

It has occurred to me that these observations crystallize many of the civic virtues we saw Senator Levin practice over the course of his lengthy career, particularly when—reading glasses perched toward the end of his nose—he cross-examined witnesses appearing before his committees. Forging alignment on key goals. Intellectual humility and curiosity. In-

195. CARL LEVIN, *GETTING TO THE HEART OF THE MATTER: MY 36 YEARS IN THE SENATE* 242 (2021). In this book, Sen. Levin describes chairing the Permanent Subcommittee on Investigations as the “capstone of my career in terms of congressional investigation.” *Id.* at 240. He narrates the subcommittee's exposure of, among other abuses, money laundering, unfair practices of credit card companies, derivatives, offshore tax-dodging, and skyrocketing executive pay.

depth knowledge and awareness of a subject matter. Communications as the mother's milk of building trust and fostering issue resolution. Yet, these are among the same civic virtues that we must collectively practice, not only to effectively oversee specific infrastructure projects, but to formulate wise and forward-looking policies and avail ourselves of the historic opportunities that the Biden infrastructure legislation has afforded us.

In Michigan, we can become a leader in the realms of infrastructure delivery and policy formation. On the heels of the 2016 issuance of Governor Snyder's comprehensive 21st Century Infrastructure Commission report,¹⁹⁶ which contains a 50-year vision for improving the state's infrastructure system across water, transportation, energy, and communications assets, the state Legislature enacted a well-conceived law that created the Michigan Infrastructure Council.¹⁹⁷ To my knowledge, no other state has a comparable statute, which contemplates that the Michigan Infrastructure Council would be a "one-stop-shop" within state government for addressing Michigan's infrastructure needs by, among other things: (i) developing a multiyear strategy for funding infrastructure asset management; (ii) coordinating infrastructure goals and priorities across asset classes and regions; (iii) tracking progress on established performance goals; and (iv) undertaking research on a wide-variety of topics related to asset management, including financing models, emerging technologies, and best practices.¹⁹⁸ The Michigan Infrastructure Council has begun work and receives an annual appropriation in the state budget. But its potential has not been fully realized. While the body has, quite significantly, shed light on Michigan's water infrastructure problems, its membership to date does not include, for example, needed financial and procurement experts from the public and private sectors. It has yet to foster a culture of accountability or a broad understanding of infrastructure challenges and criteria for success. The Michigan Infrastructure Council begs for additional staffing and dynamic leaders, for champions who—like Carl Levin—get the bit between their teeth, deeply immerse themselves in the world of public works, ask and answer tough questions, and advocate for change. I can think of no better way to honor the memory of the senator than to operationalize the Michigan Infrastructure Council in a manner that fully respects his inspirational commitment to enhancing

196. 21ST CENTURY INFRASTRUCTURE COMMISSION REPORT FOR GOVERNOR RICK SNYDER (2016), https://www.michigan.gov/documents/snyder/21st_Century_Infrastructure_Commission_Final_Report_1_544276_7.pdf [<https://perma.cc/XV7X-Z2L3>].

197. 2018 Mich. Pub. Acts 323.

198. *Id.* at § 4.

the quality of all of our lives. Our doing so would be a large step in the direction of creating what is sorely missing in the infrastructure world: an analytic bureaucracy whose mission would be to research infrastructure policy and financing, better understand why specific projects succeed or fail, and educate the public and government officials about the need for close oversight and what that actually looks like.

IV. CONCLUSION

Infrastructure projects, notwithstanding the steel and concrete that scaffolds them, are fragile. A successful project can mean many things to many people. There are multiple—often conflicting—criteria used to assess whether a project is a success. Irrespective of what criteria are used, infrastructure projects can fail, and fail ignominiously, for varied reasons. They may never get past the planning stages. They may be delivered far behind schedule, way over budget, or with quality deficits. Planners may run roughshod over the sensibilities of the communities most directly impacted by a project, ultimately losing political or popular support. Implementing an effective oversight regime increases the likelihood of any individual project's "success," however the word is defined.

The gargantuan Gordie Howe International Bridge project is a useful lens through which to examine infrastructure oversight, a subject that has not been widely studied notwithstanding its importance. Foundational project documents like the Crossing Agreement and the Project Agreement contain or establish a plethora of useful oversight mechanisms and bodies. Key project partners like the WDBA, BNA, INFC, and Michigan have further refined oversight protocols by, among other things, forming technical and liaison committees and refining governance structures. But, when it comes to oversight, the Gordie Howe International Bridge project teaches one particularly important lesson: effective oversight ultimately depends on intellectually proactive and commercially and legally sophisticated people who place a premium on communications and are top-notch leaders.

The Gordie Howe International Bridge project is committed to making sure this type of fulsome oversight continues, which is why I believe history will ultimately herald it as one of this century's most successful and ambitious public works projects. Still, difficult challenges that will inevitably arise must still be confronted and overcome. Thus, it is incumbent upon all of us connected with the Gordie Howe International Bridge project—at all governmental and operational levels—to continue to keep our "eyes on the prize," engage in aggressive oversight, and

otherwise be ever vigilant until (and after) the new crossing opens to traffic.