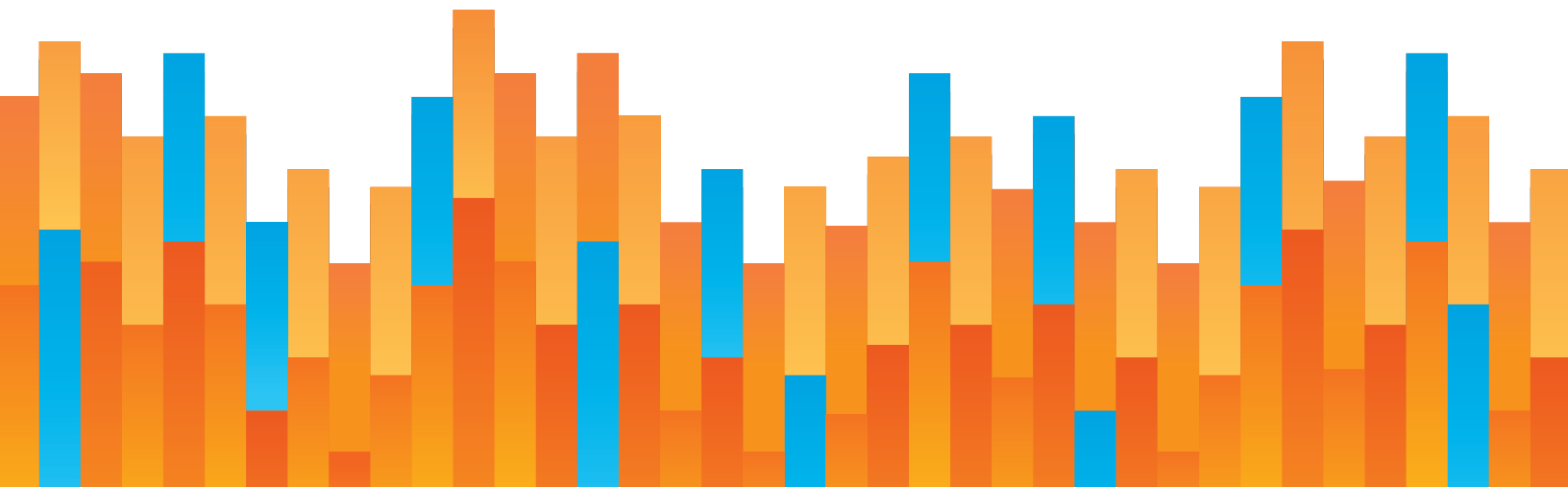




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ANNUAL PRIVATIZATION REPORT: SURFACE TRANSPORTATION

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PART 1

OVERVIEW

Long-term public private partnerships (P3s) for surface transportation projects have been used by governments for the past 60 years. As documented by José A. Gómez-Ibáñez and John Meyer, the phenomenon began in the 1950s and 1960s, as France and Spain emulated the model pioneered by Italy prior to World War II.¹ Italy's national motorway systems were developed largely by investor-owned or state-owned companies operating under long-term franchises (called concessions in Europe). In exchange for the right to build, operate and maintain the highway for a period ranging from 30 to 70 years, the company could raise the capital needed to build it (typically a mix of debt and equity). The model spread to Australia and parts of Asia in the 1980s and 1990s, and to Latin America in the 1990s and 2000s.

Nearly all the projects in those regions from the 1950s to 1980s were financed based on the projected toll revenues to be generated once the highway was in operation. Some projects went bankrupt as a consequence of reduced traffic and revenues during severe economic downturns (e.g., the oil price shock of 1974), leading to nationalization of some companies. In the late 1990s and early 2000s, however, the governments of France, Italy, Portugal and Spain all privatized their state-owned toll road companies and formalized the toll concession P3 model. Australia has allowed several concession company entities to go through liquidation, with the assets (in each case major highway tunnels) being acquired by new operators at a large discount from the initial construction cost.

¹ Gómez-Ibáñez, José A. and John R. Meyer. "Going Private: The International Experience with Transport Privatization." Brookings Institution, 1993. Web. <https://trid.trb.org/view/405691> 6 June 2019.



Other governments in Europe adopted a different form of highway concession. Generally not favoring the use of tolls, they created the concept of availability payments as a means to finance long-term concession projects.



Other governments in Europe adopted a different form of highway concession. Generally not favoring the use of tolls, they created the concept of availability payments as a means of financing long-term concession projects. In this structure, the company or consortium selected via a competitive process negotiates a stream of annual payments from the government sufficient (the company expects) to cover the capital and operating costs of the project, and make a reasonable profit. The capital markets generally find such a concession agreement compatible with financing the project, via a mix of debt and equity. Since no toll revenues are involved, this model applies to a much broader array of transport and facility projects, including rail transit and public buildings. In the highway sector, nearly all long-term concession P3 projects in Canada, Germany, the U.K., and a number of Central and Eastern Europe countries have been procured and financed as availability payment (AP) concessions.²

In a small but growing number of cases—major bridges, as well as highway reconstruction that includes the addition of express toll lanes, for example—governments collect the toll revenues and use the money to help meet their availability payment obligations.³ These cases are called “hybrid” concessions in this chapter.

Eight of the top 10 worldwide P3s that reached financial close in 2019 use availability payments, continuing a growing trend over the last six years. The growing use of AP

² “PPPs on German Federal Trunk Roads.” Joint Workshop on Financing Transport Infrastructure, Geneva. 10 September 2013. Lecture.

³ “Public-Private Partnership (PPP) Procurement: A Guide for Public Owners.” Build America Bureau, U.S. Department of Transportation, *Transportation.gov*. 2019. Web. https://www.fhwa.dot.gov/ipd/pdfs/PPP/toolkit/PPP_procurement_guide_0319.pdf 27 June 2019.

concessions has enabled P3s for projects that do not generate their own revenues, as well as hybrid concessions (discussed above) in which toll revenues help the government cover the costs of its AP obligations.

Many P3 project components, steps or procedures are abbreviated using acronyms. The following abbreviations will be used throughout this paper to refer to the different P3 contracts or P3 procedures.

- AP: Availability Payment
- BOO: Build-Operate-Own
- BOT: Build-Operate-Transfer
- DBF: Design-Build-Finance
- DBFOM: Design-Build-Finance-Operate-Maintain
- DBFM: Design-Build-Finance-Maintain
- DBOM: Design-Build-Operate-Maintain
- P3: Public Private Partnership
- PAB: Private Activity Bond(s)
- RFI: Request for Information
- RFP: Request for Proposals
- RFQ: Request for Qualifications
- RR: Revenue Risk
- TOT: Toll-Operate-Transfer

PART 2

PRIVATE HIGHWAY PROJECTS

In surface transportation policy, P3s are far more common than privatized roads. However, there are several private highways and bridges in the U.S. Table 1 lists these facilities and details about them.

TABLE 1: PRIVATE ROADWAYS AND BRIDGES

Roadway/Bridge Name	State	Project Type	Owner	Value \$(M)	Year Constructed
Adams Avenue Parkway	UT	Bypass	Adams Avenue Parkway Inc.	\$8.9 (2001)	2001
Alabama River Parkway Bridge	AL	Bridge	American Roads, LLC	\$12.0 (1998)	1998
Ambassador Bridge	MI to Canada	Bridge	Detroit International Bridge Company	\$1.5 to \$3.0 (2010)	1929
Black Warrior Parkway Bridge	AL	Bridge	American Roads, LLC	\$25.0 (1998)	1998
Downbeach Express	NJ	Bridge	Margate Bridge Company	NA	1929

Roadway/Bridge Name	State	Project Type	Owner	Value \$(M)	Year Constructed
Emerald Mountain Expressway	AL	Bridge	American Roads, LLC	\$4.0 (1994)	1994
Foley Beach Express	AL	Highway	American Roads, LLC	\$25.0 (2000)	2000
Fort Frances- International Falls International Bridge	MN to Canada	Bridge	Boise Inc./ Resolute Forest Products	NA	1912
Grosse Ile Toll Bridge	MI	Bridge	Grosse Ile Bridge Company	\$3.9 (2003)	1913
Orchard Pond Parkway	FL	Highway	Orchard Pond Parkway, LLC	\$17.0 (2016)	2016
Rio Grande City– Camargo International Bridge	TX to Mexico	Bridge	Starr Camargo Bridge Company	NA	1966
South Norfolk Jordan Bridge	VA	Bridge	Figg/American Infrastructure	\$0.140 (2019)	2011

Table 1 does not include toll roads or bridges that provide access to private communities, resorts or tourist destinations only.
Source: “Toll Facilities in the United States.” April 2018. FHWA.DOT.gov.

The **Adams Avenue Parkway** is a one-mile private toll road in Washington Terrace, Utah that provides direct access from local communities to I-84.⁴ The route bypasses the original circuitous route to the Interstate, avoiding traffic lights, low speed limits and congestion.

Drivers pay a toll directly after crossing the **Alabama River Parkway Bridge** to access the Montgomery Expressway, also known as the Alabama River Parkway, from Northeast Montgomery near SR 152.⁵ The 12.5-mile Montgomery Expressway carries SR 143 from Montgomery to the northern residential suburbs of Coosada, Millbrook and Prattville.

⁴ “Home.” *AdamsAvenueParkway.com*, Adams Avenue Parkway, Inc. Web. <http://adamsavenueparkway.com/index.htm> Accessed 26 February 2020.

⁵ “About Us.” *MontgomeryExpressway.com*, American Roads, LLC. Web. <https://www.montgomeryexpressway.com/About.aspx> Accessed 26 February 2020.

The **Ambassador Bridge** provides a direct connection between Detroit, Michigan and Windsor, Ontario. The bridge connects Highway 3 in Canada with I-96 in Michigan and is the only route between Detroit and Windsor that allows large trucks: the lanes on the Detroit-Windsor Tunnel, the only other road crossing between the cities, are physically too narrow.

The **Black Warrior Parkway Bridge**, also known as the Tuscaloosa Bypass, is a private toll bridge over the Black Warrior River west of downtown Tuscaloosa, Alabama. The bridge, located near the Tuscaloosa National Airport, connects downtown with the city's northern and western suburbs.

The **Downbeach Express Toll Bridge** in Margate, New Jersey provides a connection between Margate City on Absecon Island and the New Jersey mainland via Margate Boulevard, which is also maintained by toll revenue.⁶ The bridge allows drivers in Margate to avoid a route north through Atlantic City or south through Longport to access the mainland and the Garden State Parkway.

The 1.75-mile **Emerald Mountain Expressway** consists of a toll bridge over the Tallapoosa River and a road that connects Rifle Range Road and Wares Ferry Road in the northeast suburbs of Montgomery, Alabama.⁷ The expressway bypasses a much lengthier 45- to 60-minute drive via US 231 by providing a direct 15-minute route between the communities of Emerald Mountain and eastern Montgomery.

The **Foley Beach Express (FBE)** is an arterial highway and tolled bridge that connects the Alabama communities of Gulf Shores and Orange Beach to more-northern parts of Baldwin County, extending 14 miles north to Foley. A second untolled connecting road, the Baldwin Beach Express, originates near the northern terminus of the FBE, and extends another 13 miles to I-10.⁸ Paralleling SR 59, the highway has higher travel speeds and offers better travel time reliability during the peak tourist season.

⁶ "Home." *DownBeachExpress.com*, Margate Bridge Company. Web. <http://www.downbeachexpress.com> Accessed 26 February 2020.

⁷ "Home." *EmeraldMountainExpressway.com*, American Roads, LLC. Web. <https://www.emeraldmountainexpressway.com> Accessed 26 February 2020.

⁸ "Home." *BeachExpress.com*, American Roads, LLC. Web. <https://beachexpress.com> Accessed 26 February 2020.

The **Fort Frances-International Falls International Bridge** is a privately-owned toll bridge that connects Fort Francis in Ontario with International Falls, Minnesota.⁹ The bridge carries US 53 and US 71 to Highway 11 and Highway 71 in Canada, both part of the Trans-Canada Highway.

The private **Grosse Ile Toll Bridge** connects Grosse Ile, the largest island on the Detroit River with mainland Michigan.¹⁰ The island, located south of Detroit and home to over 10,000 residents, is also connected to the mainland by the non-tolled Wayne County Bridge.

The **Orchard Pond Parkway** in northern Leon County acts as a bypass of Tallahassee, Florida, connecting the communities to the northwest and northeast of the city.¹¹ The eastern end of the parkway is at CR 155, while the western end terminates at CR 157.

The **Rio Grande City–Camargo International Bridge** is a privately owned and operated bridge that spans the Rio Grande and connects Rio Grande City, Texas to Camargo in Mexico.¹² On the United States side, the bridge provides access via local streets to US 83.

The **South Norfolk Jordan Bridge** carries State Route 337 between the Virginia cities of Portsmouth and Chesapeake over the Southern Branch Elizabeth River.¹³ The cities are also connected by the Midtown and Downtown tunnels north of the bridge and a vehicular bridge farther south.

⁹ “Non-Interstate System Toll Bridges and Tunnels in the United States.” The Office of Highway Policy Information. *FHWA.DOT.gov*. 5 April 2018. Web. <https://www.fhwa.dot.gov/policyinformation/tollpage/page07.cfm> 26 February 2020.

¹⁰ “History.” *GrosselleBridge.com*, Grosse Ile Bridge Company. Web. <http://grosseilebridge.com/history/> Accessed 26 February 2020.

¹¹ “About.” *OrchardPondParkway.com*. Orchard Pond Parkway, LLC. Web. <https://www.orchardpondparkway.com> Accessed 26 February 2020.

¹² “Non-Interstate System Toll Bridges and Tunnels.” *FHWA.DOT.gov*.

¹³ “South Norfolk Jordan Bridge.” *SNJB.net*. United Bridge Partners. Web. <https://snjb.net> Accessed 26 February 2020.

PART 3

INTERNATIONAL SURFACE TRANSPORTATION INFRASTRUCTURE: 2019

3.1

LARGEST INTERNATIONAL SURFACE TRANSPORTATION P3S

Part 3 provides an overview of worldwide P3 activity in 2019.¹⁴ It was a banner year for Global P3 activity with nine project closings worth more than \$1 billion each, all occurring outside of the United States. Table 2 displays the 10 largest agreements, which were compiled using information from *Inframation* and *Inspiratia*, two news publications that provide P3 data resources.¹⁵

¹⁴ “Global Surface Transportation PPP Deals, January 1, 2018–June 27, 2019.” *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/> 25 June 2019.

¹⁵ “Largest Global PPP Deals, January 1, 2018–December 31, 2018.” *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/> 25 June 2019.

TABLE 2: LARGEST GLOBAL SURFACE TRANSPORTATION DEALS OF 2019

Project	Location	Country	Value \$ (B)	Type	Duration	Concessionaire
Cross River Rail P3	Queensland	Australia	\$3.71	DBFM-AP	25 Years	Pacific Partnerships/DIF/Royal BAM/Ghella
Sydney Metro City & Southwest P3	New South Wales	Australia	\$2.53	DBFOM-AP	14 Years	MTR/CDPQ/Marubeni/Plenary/Pacific Partnerships
Phnom Penh-Expressway P3	Kandal, Kampong Speu, Koh Kong	Cambodia	\$1.80	DBFOM-RR	54 Years	The China Road and Bridge Corporation
Silvertown Tunnel P3	England	United Kingdom	\$1.71	DBFM-AP	30 Years	AEIP III/BAM P3 PGGM/Ferrovial, Macquarie/SK Group
Hurontario Light Rail P3	Ontario	Canada	\$1.47	DBFOM-AP	30 Years	AMICO/Astaldi Group/Hitachi/John Laing/Salini Impregilo/Transdev
Américo Vespucio Oriente Toll Road Concesion	Santiago	Chile	\$1.20	DBFOM-RR	45 Years	Aleatica/Sacyr
Uruguayan Central Rail P3	Central Uruguay	Uruguay	\$1.10	DBFOM-AP	22 Years	Berkes/Groupe NGE/Grupo Saceen/Sacyr
A9 Amstelveen - Ouderkerk Amstel P3	Amsterdam	Netherlands	\$1.04	DBFM-AP	21 Years	FCC Construcción/Macquarie/Siemens
Autopista al Mar 1 Highway P3	Antioquia	Colombia	\$1.00	DBFOM-AP	25 Years	Concay/Sacyr/Strabag SE
Rumichaca-Pasto Highway	Nariño and Cauca	Colombia	\$0.785	DBFOM-RR	25 Years	Herdoíza Crespo Construcciones/Sacyr

Source: 2019 Transaction list from *Inframation Infrastructure News*

Following are brief explanations of each project.

The DBFOM **Cross River Rail P3**, procured by the Queensland Government, is a 6.3-mile, 10.2-kilometer stretch of twin rail tunnels under central Brisbane and the Brisbane River.¹⁶ The project, which reached financial close in June 2019, will expand commuter rail access to Brisbane with four new underground stations and two station renovations.

The Sydney **Metro City & Southwest P3**, granted by the Government of New South Wales as a DBFOM project to complete the second stage of the Sydney Metro City and Southwest Project, reached financial close in December 2019.¹⁷ Connecting to the initial northwest line, this P3 will expand rapid transit into downtown Sydney and its southwest suburbs.

The **Phnom Penh to Sihanoukville Expressway DBFOM P3**, a four-lane, 190.6-km or 118.4-mile expressway project granted by the Government of Cambodia, reached financial close in May 2019.¹⁸ The expressway will connect the nation's capital of Phnom Penh to the coastal city of Sihanoukville.

The **Silvertown Tunnel P3**, awarded by Transport for London, the government organization that runs mass transit for Greater London, is a 30-year DBFM deal that makes use of availability payments.¹⁹ The tunnel project, which will provide a much-needed vehicular crossing under the River Thames in East London, reached financial close in November 2019.

The **Hurontario Light Rail P3**, granted by Infrastructure Ontario and Metrolinx, is a 30-year DBFOM deal that closed in October 2019.²⁰ The new 20-km or 12.4-mile light rail line will connect Mississauga and Brampton in Greater Toronto and see 22 new light rail stops.

¹⁶ "Cross River Rail (Brisbane)." *Inframation Infrastructure*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/3963236/i-595-37-5--stake-sale-2019.shtml> 26 February 2020.

¹⁷ "Sydney Metro City & Southwest (Sydney Metro Stage Two)." *Inframation Infrastructure, Transactions*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/1535286/sydney-metro-city-and-southwest-sydney-metro-stage-two.shtml> 26 February 2020.

¹⁸ "Phnom Penh to Sihanoukville Expressway." *Inframation News*. 2019. *InframationNews.com*. Web. https://www.inframationnews.com/deals/3317361/phnom-penh-to-sihanoukville-expressway.shtml?_cb=login_5e571ef25dc0d 26 February 2020.

¹⁹ "Silvertown Tunnel PPP." *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/1436712/silvertown-tunnel-ppp.shtml> 26 February 2020.

²⁰ "Hurontario LRT P3." *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/1531131/hurontario-lrt-p3.shtml> 26 February 2020.

The Américo Vespucio Oriente Toll Road Concession, granted by the Chilean Ministry of Public Works, is a 45-year DBFOM contract that uses several funding mechanisms.²¹ The 9.3-km or 5.8-mile road will nearly complete Santiago's underground ring-road with a three-lane tunnel to the northeast of the city. The project reached financial close in May 2019.

The Uruguayan Central Rail P3 is a 22-year DBFOM availability payment contract granted by Uruguay's Ministry of Transport and Public Works that reached financial close in October 2019.²² The new railway, meant for both freight and passenger rail, will link the city of Paso de los Toros in central Uruguay with the capital of Montevideo in the south.

The A9 Amstelveen-Ouderkerk Amstel P3, granted by the Dutch Ministry of Transport, Public Works and Water Management, is a 21-year DBFM P3 using availability payments that reached financial close last December.²³ The fifth phase of a road-widening program around greater Amsterdam, this project will see road work between Badhoevedorp and Holendrecht in Amstelveen, both south of Amsterdam.

The Autopista al Mar 1 Highway P3 is a 25-year DBFOM project that uses availability payments and was granted by the Colombian National infrastructure Agency.²⁴ The highway will connect the large city of Medellín to Santa Fe de Antioquia, a smaller community to the northeast. The project reached financial close in March 2019.

²¹ "Américo Vespucio Oriente Highway (AVO I)." *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/757888/am-rico-vespucio-oriente-highway-avo-i.shtml> 26 February 2020.

²² "Uruguayan Central Rail Project (Ferrocarril Central)." *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/2402086/uruguayan-central-rail-project-ferrocarril-central.shtml> 26 February 2020.

²³ "A9 Amstelveen – Ouderkerk Amstel (Holendrecht junction – Badhoevedorp junction) PPP." *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/1055103/a9-amstelveen---ouderkerk-amstel-holendrecht-junction---badhoevedorp-junction-ppp.shtml> 26 February 2020.

²⁴ "Highway to the Sea 1 (Autopista al Mar 1) Highway." *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/984498/highway-to-the-sea-1-autopista-al-mar-1-highway.shtml> 26 February 2020.

The Rumichaca-Pasto Highway, which reached financial close last August, is a 25-year DBFOM project granted by the Colombian National Infrastructure Agency.²⁵ The new construction in the Nariño and Cauca departments are part of corridor Santiago de Cali to smaller communities and the international border with Ecuador at Rumichaca.

3.2

COUNTRIES REACHING FINANCIAL CLOSE ON FIRST P3

In 2019, two countries reached financial close on their first surface transportation P3: Cambodia and Bosnia. Cambodia's Phnom Penh Expressway P3 was the fourth largest P3 to reach financial close in 2019, valued at \$1.8 billion and consisting of a 54-year DBFOM concession with the China Road and Bridge Corporation.²⁶ Bosnia reached financial close on a 30-year DBFM P3 for the Banja Luka-Doboj Motorway Service Station valued at \$506 million.²⁷ Table 3 details these two projects.

TABLE 3: COUNTRIES THAT REACHED FINANCIAL CLOSE ON FIRST P3 IN 2019

Country	Location	Project	Value (\$B)	Type	Duration	Concessionaire
Cambodia	Kandal, Kampong Speu, Koh Kong	Phnom Penh-Expressway P3	\$1.80	DBFOM-RR	54 Years	The China Road and Bridge Corporation
Bosnia	Republika Srpska	Banja Luka-Doboj Motorway Service Station P3	\$0.506	DBFM-AP	30 Years	Brčko Gas

Source: 2019 Transaction list from *Inframation Infrastructure News*

Table 4 summarizes the surface transportation P3s that reached financial close by region, and provides a value of all P3s within a region. For context, Asia saw the largest amount with 31 surface transportation P3s reaching financial close in 2019, but 22 of those projects were in India. Also, all of Oceania's P3s were in Australia and consisted of one rolling stock, one road and two rail projects, explaining the high value of \$7.048 billion for only four projects.

²⁵ "Rumichaca – Pasto Highway." *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/983603/rumichaca---pasto-highway.shtml> 26 February 2020.

²⁶ "Phnom Penh to Sihanoukville Expressway." *Inframation News*.

²⁷ "Banja Luka-Doboj Motorway Service Station PPP." *Inframation News*. 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/3793201/banja-luka-doboj-motorway-service-station-ppp.shtml> 26 February 2020.

TABLE 4: GLOBAL SURFACE TRANSPORTATION P3S IN 2019

Region	Number of P3 Financial Closes	Value \$(B)
Africa	1	\$0.066
Asia	31	\$9.233
Europe	11	\$5.913
Latin America	14	\$7.048
Oceania	4	\$7.821
Canada	7	\$5.069
United States	5	\$2.622

Source: 2019 Transaction list from *Inframation Infrastructure News*

PART 4

U.S. HIGHWAY CONCESSIONS, 2019

4.1

LARGEST U.S. HIGHWAY P3S

Over the past 35 years, 36 U.S. P3s have reached financial close. While not impressive by international standards, the pace of P3 projects has accelerated over the past 10 years. Table 5 provides an overview of the FY 2019 U.S. highway concession market, listed in order of the investment value of each project. The length of each lease is provided for existing toll roads now leased to private concessionaires.

In most new construction projects, the concession conforms to a DBFOM contract with terms ranging from 30 to 70 years. Since 2012, the major trend in highway concessions has reportedly migrated away from toll-revenue-based financing toward AP-based financing. However, of the 36 highway projects in Table 5, 25 are financed based on toll revenues alone. Of the others, only six were financed on a pure AP basis, with five larger AP concessions all involving new toll revenues that will supplement the state's revenue sources. The total dollar value of the 36 concessions is \$46 billion, of which 68.3% is generated based on toll revenue financing, with the other 31.7% financed based on the states' (and in the case of Goethals Bridge, the Port Authority of New York and New Jersey's) AP commitments.

“
...of the 36 highway projects in Table 5, 25 are financed based on toll revenues alone.
 ”

TABLE 5: LARGEST U.S. LONG-TERM HIGHWAY CONCESSIONS AS OF 12/31/19

Project	Location	Value (\$ B)	Type	Most Recent Closing	Concessionaire
Indiana Toll Road	Indiana	\$5.725	66-year lease, toll	05/15	IFM Global Infrastructure Fund/California Public Employees' Retirement System/Allstate
1-4 Ultimate Managed Lanes	Orlando, FL	\$2.877	DBFOM, AP/toll	09/14	Skanska/Granite/Lane
I-635 LBJ Managed Lanes	Dallas, TX	\$2.645	DBFOM, toll	06/10	Cintra/Meridiam
Transform 66 P3 (Outside the Beltway I-66)	Fairfax County/Prince William County, VA	\$2.41	DBFOM, toll	11/17	APG/Cintra/Ferrovial/John Laing/Meridiam Infrastructure North America II
North Tarrant Express (Phase I and 2W)	Fort Worth, TX	\$2.122	DBFOM, toll	12/09	Cintra/APG/Meridiam
Midtown Tunnel	Norfolk, VA	\$2.089	DBFOM, toll	04/12	Skanska/Macquarie
I-495 HOT Lanes	Fairfax County, VA	\$2.068	DBFOM, toll	05/07	Transurban/Fluor
I-595 Managed Lanes	Fort Lauderdale, FL	\$1.834	DBFOM, AP/toll	10/09	ACS Infrastructure

Project	Location	Value (\$ B)	Type	Most Recent Closing	Concessionaire
Chicago Skyway	Chicago, IL	\$1.830	89-year lease, toll	02/16	The Canadian Pension Plan Investment Board/ Ontario Municipal Employees Retirement System/ Ontario Teachers' Pension Plan
Goethals Bridge	New York City, NY	\$1.436	DBFM, AP/toll	11/13	Macquarie/Kiewit
PR-22/PR-5	Puerto Rico	\$1.436	DBFOM, toll	05/13	Abertis/Goldman Sachs
SH 183 Managed Lanes	Dallas – Fort Worth, TX	\$1.415	DBF + OM, AP/toll (pass through)	11/14	Kiewit
North Tarrant Expressway Phase 3A	Fort Worth, TX	\$1.409	DBFOM, toll	06/16	Cintra/Meridiam/APG
I-75 Modernization Segment 3 P3	Michigan	\$1.400	DBFM, AP	11/18	AECOM/Ajax/Dan's Excavating Inc/Jay Dee/John Laing
SH 130 Segments 5-6	Texas	\$1.328	DBFOM, toll	03/08	SH 130 Concession Co.
ORB East End Crossing	Louisville, KY	\$1.319	DBFOM, AP/toll	03/13	Walsh/Vinci/Bilfinger Berger
Colorado I-70 East P3	Denver, CO	\$1.271	DBFOM, toll	12/17	Kiewit/Meridiam/Jacobs Engineering Group/WSP
Rapid Bridge Replacement	Pennsylvania	\$1.118	DBFM, AP	03/15	Plenary Walsh
Port of Miami Tunnel	Miami, FL	\$1.113	DBFOM, AP	10/09	Meridiam/Bouygues Travaux Publics
SH 288 Toll Lanes	Harris County, TX	\$1.064	DBFOM, toll	05/16	ACS/Infrared/Shikin & Binui/Northleaf/Clal Insurance/Star America
1-95 Express Lanes	Virginia	\$0.923	DBFOM, toll	07/12	Transurban/Fluor
Presidio Parkway	San Francisco, CA	\$0.852	DBFOM, AP	06/12	Meridiam/ HOCHTIEF PPP Solutions

Project	Location	Value (\$ B)	Type	Most Recent Closing	Concessionaire
I-95 Express Lanes Fredericksburg Extension	Virginia	\$0.830	DBFOM, toll	07/19	Transurban Group
SR 125, South Bay Expressway	San Diego, CA	\$0.658	DBFOM, toll	07/11	SANDAG
Portsmouth Bypass	Portsmouth, OH	\$0.646	DBFOM, AP	03/15	ACS, Infrared, Star
I-77 Managed Lanes	Charlotte, NC	\$0.636	DBFOM, toll	05/15	Cintra/Aberdeen/John Laing
Northwest Parkway	Denver, CO	\$0.603	DBFOM, toll	11/07	Brisa/Companhia de Concessões Rodoviárias (CCR)
Pocahontas Parkway	Richmond, VA	\$0.597	99-year lease, toll	06/06	DBi Services, Macquarie
I-69 Upgrade	Indiana	\$0.560	DBFOM, AP	05/17	INDOT
I-395 P3	Virginia	\$0.554	DBFOM, toll	06/17	Transurban/Fluor
Dulles Greenway Tollroad	Loudoun County, VA	\$0.350	BOO, toll	02/17	Macquarie
Southern Connector, SC	Greenville, SC	\$0.240	DBFOM (63-20)*, toll	08/12	SCDOT
91 Express Lanes	Orange County, CA	\$0.208	DBFOM, toll	11/03	OCTA
US 36 HOT Lanes, Phase 2	Colorado	\$0.208	DBFOM, toll	02/14	Plenary/Ames/Granite
Camino Columbia Bypass	Laredo, TX	\$0.085	DBFOM, toll	06/99	TXDOT

Source: "US Highway PPP Deals" Inframation, Acuris.

* Before PABs were authorized, non-profit corporations labeled 63-20s allowed a project to be financed with tax-exempt bonds. Since PABs are preferable, 63-20s are no longer used.

The continued expansion and redevelopment of U.S. highways with P3s provides cause for optimism in two different ways. First, it suggests that the more aggressive developers of new toll projects have an exit option after the project is operational and demonstrating traffic and revenue results. These purveyors may want to shift their capital to new projects.

Second, it shows that P3s can be successful in attracting much-needed investment in replacing the U.S.' first-generation, largely non-tolled Interstate highways (which are nearing the end of their useful life). Such projects should be particularly attractive to pension fund investments, since they are lower-risk than greenfield projects. Pension funds may also be seen as more politically acceptable to legislators and the public than global investment firms seeking higher rates of return.

4.2

2019 HIGHWAY P3S

Between October 2018 and December 2019 (overlap of FY 2019 and CY 2019), four U.S. highway P3 deals reached financial close as reflected in Table 6. Each project is detailed below the table.

TABLE 6: U.S. HIGHWAY CONCESSIONS, 2019

Project	Location	Value \$ (B)	Type	Duration	Date	Concessionaire
North Tarrant Express Toll Road, Segment 3C	Texas	\$0.9	DBFOM	52 Years	Aug. 2019	NTE Mobility Partners
I-95 Express Lanes Fredericksburg Extension	Virginia	\$0.6	DBFOM	68 Years	July 2019	Transurban Group
Michigan I-75 Modernization	Michigan	\$0.8	DBFM-AP	30 Years	Nov. 2018	Oakland Corridor Partners
Belle Chasse Bridge	Louisiana	\$0.1	DBFOM	30 Years	Dec. 2019	Plenary
I-595 Express Lanes 37.5% stake sale	Florida	\$1.2	Private-to-private	35 Years*	Dec. 2019	Teachers Insurance and Annuity Association

* Original length of contract that reached financial close in 2009

- The DBFOM **North Tarrant Express Toll Road Segment 3C** project expands I-35W north from US 287 approximately eight miles to Eagle Parkway, providing another route between Fort Worth’s downtown and its growing northern suburbs.²⁸ This newest project segment of the toll road, which reached financial close in August 2019, follows segments 3A and 3B, all part of an agreement between the Texas Department of Transportation (TxDOT) and the consortium North Tarrant Express (NTE) Mobility Partners. NTE Mobility Partners consists of APG Group and Ferrovial, while Meridiam Infrastructure North serves as an equity provider.
- The DBFOM **I-95 Express Lanes Fredericksburg Extension** will extend the express lanes approximately 10 miles to the vicinity of Route 17, at I-95 Exit 133, in Stafford County, Virginia.²⁹ The project may include new express lane access points and seven new bridge structures. The Commonwealth Transportation Board awarded the contract to Transurban Group; financial close was reached in July of 2019. The \$565-million project is expected to be completed in 2022.
- The **DBFM Michigan I-75 Modernization** project will see the reconstruction and modernization of a six-mile segment of I-75 in suburban Detroit.³⁰ The modernization project consists of the addition of an HOV/General Purpose Lane, existing lane reconstruction and improved drainage between M-102 and 12 Mile Road. The Michigan Department of Transportation awarded the contract to Oakland Corridor Partners, a team comprising AECOM, Ajax, Dan’s Excavating Inc, Jay Dee and John Laing. The \$828.6-million AP DBFM project, which reached financial close in November 2018, will utilize approximately \$600 million in PABs and have a duration of 30 years.
- The **DBFOM Belle Chasse Bridge and Tunnel Replacement** project will replace a 52-year-old bridge and a 65-year-old tunnel that each provided one direction of an intercoastal waterway crossing on SR 23, south of New Orleans. The new, tolled, bridge will provide additional capacity that will accommodate traffic in both

²⁸ “North Tarrant Express Toll Road Segment 3C.” *Inframation News*. 2020. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/3748201/north-tarrant-express-toll-road-segment-3c.shtml> 15 January 2019.

²⁹ “I-95 Express Lanes Fredericksburg Extension.” *Inframation News*. 2020. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/2618886/i-95-express-lanes-fredericksburg-extension.shtml> 15 January 2020.

³⁰ “Michigan I-75 Modernization PPP.” *Inframation News*. 2020. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/2406771/michigan-i-75-modernization-p3.shtml> 15 January 2020.

directions.³¹ The Louisiana Department of Transportation and Development awarded the contract to Plenary Infrastructure Belle Chasse. The \$137-million DBFOM project reached financial close in December 2019.

- In December 2019, ACS Group sold three-quarters of its remaining 50% equity interest in **I-595 Express Lanes** in Florida to Teachers Insurance and Annuity Association (TIAA), equating to 37.5% of total equity in the project.³² ACS Group initially sold a 50% stake to TIAA in 2011. With their remaining 12.5% equity stake, ACS Group will continue to have an active role in management of the reversible express lanes. From 2024 to the end of the concession term, ACS Group will operate and maintain the express lanes through an operating company, I-595 Express LLC.

³¹ “Belle Chasse Bridge and Tunnel Replacement P3.” *Inframation News*. 2020. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/2615506/belle-chasse-bridge-and-tunnel-replacement-p3.html> 9 March 2020.

³² “I-595 (37.5% Stake) Sale (2019).” *Inframation News*. 2020. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/3963236/i-595-37-5--stake-sale-2019.html> 15 January 2020.

PART 5

FEDERAL POLICY ON P3 CONCESSIONS

5.1

OVERVIEW OF FINANCING TOOLS

Federal support for surface transportation P3s comes largely from different entities within the Federal Highway Administration (FHWA) in the United States Department of Transportation (USDOT). The Center for Innovative Finance Support (CIFS) (previously the Office of Innovative Program Delivery), which provides vital support for P3s, is housed within the larger Office of Innovative Program Delivery; both entities are units of FHWA. The center was created during the George W. Bush administration and expanded under both the Obama and Trump administrations, developing a large array of educational and analytical materials to assist state DOTs and others in getting up to speed on innovative finance and P3s in transportation infrastructure. Table 7 details the programs and tools provided by the center.

CIFS provides detailed information on two federal financing programs that have been used by many P3 highway and transit projects: Transportation Infrastructure Finance and Innovation Act (TIFIA) loans and Private Activity Bonds (PABs). Neither program is available *only* for P3 projects, but any project seeking to use them must have dedicated revenue sources able to provide debt service payments for the loans and bonds.

TABLE 7: CENTER FOR INNOVATIVE FINANCE SUPPORT TOOLS

Program Category	Tool	Purpose
Publications	Fact Sheets	Provides overview of key P3 elements
	Primers	Details in-depth explanations of specific elements of P3 projects
	Model Contract Guides	Provides overview of P3 contracting process and best practices
	Other Guides	Covers miscellaneous topics from the federal review process and financing
	Reports, Discussion Papers	Provides in-depth analysis of policies, case studies and other policy assessments
Analytical Tools	P-3 Value	Provides spreadsheet-based calculation tools for conducting feasibility assessments of potential P3 projects including risk assessment, value for money, benefit/cost analysis and financial analysis
	P-3 Screen	Provides a checklist of key factors and analyses involved in making decisions about possible P3 procurements
Webinars	Recordings	Documents and recordings that enhance toolkit materials
Programs	SEP-15	Explains experimental new process for the FHWA to evaluate P3 project delivery with four major components: contracting, compliance with environmental requirements, right-of-way acquisition and project finance
	Build America Bureau	The Bureau provides access to credit and grants
	TIFIA	Transportation Infrastructure Finance and Innovation Act provides credit assistance to select projects of regional importance
	PABs	Provides tax-exempt debt instruments authorized by USDOT on behalf of private entities for highway and freight projects
	Railroad Rehabilitation & Improvement Financing	The programs allow USDOT to provide direct and indirect loans of up to \$35.0 billion to finance development of railroad infrastructure.
	BATIC Institute	The BATIC Institute facilitates coordination and information-sharing of public projects

Source: The Center for Innovative Financial Support's website: <https://www.fhwa.dot.gov/ipd/PPP/>

PABs are especially useful to P3 projects because they are tax-exempt bonds that would not normally be available to projects that expect to earn a return on equity investments.³³ Congress authorized them for P3 transportation projects on the grounds that, since these projects serve the public, there should be a level playing field on bond interest rates between projects developed by public sector and private sector entities. Thus, revenue bonds issued for P3 projects as PABs will carry interest rates similar to those available for the revenue bonds of state toll agencies.

Congress created the TIFIA program to provide low-interest credit support for projects with dedicated revenue sources that can qualify for investment-grade ratings. Although the law currently allows a TIFIA loan to cover up to 49% of a project's total cost, the TIFIA office within DOT has not awarded any loans exceeding 33%. (USDOT officials note that a project would have to be "truly exceptional" to receive a loan exceeding 33%.)³⁴ This is consistent with the law's original intent that TIFIA provide gap financing rather than being a project's primary source of debt finance. It also enables a given TIFIA budget allocation to support a larger total number of projects. Accordingly, TIFIA loans often are subordinated debt, which means senior loans or bonds are the first to receive project revenues. Only in the event of bankruptcy does the TIFIA loan shift to having equal status with other creditors.

Several legislators have grown frustrated with the TIFIA office, which is treating the loan acceptance process as a discretionary grant process in which only the best projects receive funding.³⁵ Congress intended TIFIA to be a check-the-box process in which all projects that met basic criteria received funding. Several states have expressed the need for Congress to create clarifying legislation to force the TIFIA office to provide funding as intended. However, thus far Congress has not passed such legislation.

Table 8 lists all current PABs and TIFIA loans for P3 highway and bridge projects through the end of calendar year 2019.

³³ Vining, Aidan, Anthony Boardman and Finn Poschmann. "Public Private Partnerships in the U.S. and Canada: Case Studies and Lessons." *International Public Procurement Conference Proceedings*, 3. 2004. Web. https://www.researchgate.net/publication/237477965_PUBLIC-PRIVATE_PARTNERSHIPS_IN_THE_US_AND_CANADA_CASE_STUDIES_AND_LESSONS1 1 July 2019.

³⁴ "TIFIA Loans FAQs." Build America Bureau, U.S. Department of Transportation. *Transportation.gov*. 2017. Web. <https://www.transportation.gov/buildamerica/programs-services/tifia/faqs> 1 July 2019.

³⁵ U.S. Senate Finance Committee Staff. In person interview. 17 June 2017.

TABLE 8: HIGHWAY AND BRIDGE PROJECTS FINANCED BY TIFIA AND PABS

Project	Year Financed	TIFIA (\$M)	PABs (\$M)	Total Project (\$M)
Pocahontas Parkway (VA)	2007	\$150	\$0	\$597
SH 130, 5 & 6 (TX)	2007	\$430	\$0	\$1,328
I-495 HOT Lanes (VA)	2008	\$589	\$589	\$1,938
I-595 Express (FL)	2009	\$603	\$0	\$1,834
Port of Miami Tunnel (FL)	2009	\$341	\$0	\$1,073
NTE Phases 1 and 2W (TX)	2010	\$650	\$398	\$2,122
LBJ Express (TX)	2010	\$850	\$615	\$2,615
South Bay Expressway (CA)	2011	\$140	\$0	\$658
Midtown Tunnel (VA)	2012	\$422	\$675	\$2,089
Presidio Parkway II (CA)	2012	\$150	\$0	\$365
I-95 Express (VA)	2013	\$300	\$253	\$923
NTE Phase 3A, 3B and 3C (TX)	2013	\$531	\$276	\$1,665
Goethals Bridge (NY/NJ)	2013	\$474	\$453	\$1,436
US 36, Colorado Phase 2 (CO)	2014	\$60	\$21	\$208
I-69 Indiana (IN)	2014	\$0	\$244	\$560
I-4 Ultimate (FL)	2014	\$949	\$0	\$2,877
East End Bridge (IN)	2015	\$162	\$508	\$1,319
PA Rapid Bridge Replacement (PA)	2015	\$0	\$722	\$1,118
I-77 Express Lanes (NC)	2015	\$189	\$100	\$636
Portsmouth Bypass (OH)	2015	\$209	\$227	\$634
SH 288 Toll Lanes (TX)	2016	\$357	\$273	\$1,064
I-395 Express Lanes (VA)	2017	\$0	\$233	\$554
Transform 66 (VA)	2017	\$1,229	\$737	\$3,724
Central 70 (CO)	2018	\$416	\$115	\$1,271
I-75 Modernization Segment 3 (MI)	2018	\$0	\$610	\$725
I-95 Fredericksburg Express Lanes (VA)	2019	\$0	\$277	\$830
NTE Phase 3C (TX)	2019	\$0	\$654	\$662
TOTAL		\$10,430	\$7,980	\$38,549

Source: Projects financed by TIFIA. [Transportation.gov](https://www.transportation.gov). Private Activity Bonds. [Transportation.gov](https://www.transportation.gov).

As the table shows, \$10.43 billion in TIFIA loans led to more than \$38.5 billion in project activity over the past 15 years. PABs had a similar effect: \$7.98 billion in PABs helped make

that \$30+ billion in project activity a reality. Compare TIFIA and PABs to federal grants that provide 50%–90% of a project’s cost: If a grant covers 70% of the project costs, to receive the same benefit of \$10.43 billion of TIFIA loans, grants would need to total more than \$27.0 billion to achieve an equivalent amount of investment. Clearly, TIFIA loans and PABs are more than useful financing tools: They also allow lower taxpayer expenditures compared with direct grant funding, and stretch those taxpayer dollars further.

Stressing the importance of increasing infrastructure investment, former Secretary of Transportation Anthony Foxx created the Build America Transportation Investment Center (BATIC), which aims to speed up the time it takes for transportation P3s to reach financial close.³⁶ The American Association of State Highway & Transportation Officials launched the BATIC Investment Center as a new center of excellence to assist state DOTs in capacity-building in the area of project finance and P3s. The Center hosts multiple events throughout the country educating policymakers on transportation financing.

To understand the challenges faced by the current Administration and Congress, it helps to examine surface transportation policy over the last few years.

5.2

A RECENT HISTORY OF FEDERAL TRANSPORTATION POLICY

The three most important mechanisms stemming from federal P3 legislation are TIFIA, PABs and federal tolling provisions. Weighing new policy options benefits by examining the recent history of each funding source.

5.2.1 THE FAST ACT AND TIFIA

In 2012, Congress passed the Moving Ahead for Progress in the 21st Century (MAP-21) Act.³⁷ Made at the request of DOTs and transit agencies that had pressed for additional TIFIA funding, the bill increased the annual amount of TIFIA funding to \$1 billion per year, an

³⁶ Foxx, Anthony. “Removing the Roadblocks to Smarter Investment in American Transportation.” McKinsey & Company. 2015. Web. <https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/removing-the-roadblocks-to-smarter-investment-in-american-transportation> 1 July 2019.

³⁷ “Moving Ahead for Progress in the 21st Century Act.” National Academies of Science, Engineering and Medicine. *NationalAcademies.org*. 2015. Web. http://www.nationalacademies.org/OCGA/112Session2/public-laws/OCGA_147109 1 July 2019.

820% increase over the \$122M in annual funding the program received from 2003–2012.³⁸ In MAP-21's first year that funding was well utilized. During FY 2014 the TIFIA office awarded \$8.5 billion in loans to a record 12 projects (many of them not P3s). But in FY 2015 only seven projects received loans (valued at \$2.4 billion).



Since both the Office of Management and Budget (OMB) and the Congressional Budget Office (CBO) score TIFIA loans as direct funding, they count against the total revenue Congress authorized in the bill, even though they are loans, not grants.



Since both the Office of Management and Budget (OMB) and the Congressional Budget Office (CBO) score TIFIA loans as direct funding, they count against the total revenue Congress authorized in the bill, even though they are loans, not grants. As a result, when the 114th Congress reauthorized the surface transportation program in late 2015, enacting the Fixing America's Surface Transportation (FAST) Act, Congress redirected significant funding from TIFIA to other programs. (The FAST Act guides federal surface transportation policy through the middle of 2020.)

OMB's and CBO's interpretation incentivizes Congress to spend more money on grants, not loans, even though this practice is contrary to U.S. federal transportation policy. OMB and CBO could fix this problem by changing how they score TIFIA.

Congress authorized just \$1.4 billion for TIFIA through the five years covered by the FAST Act, an average of \$287 million per year. But that should be sufficient to cover all of the P3 projects, concludes Bryan Grote, the TIFIA expert at Mercator Advisors.³⁹ He estimated that the TIFIA program's \$2 billion in funding could support as much as \$30 billion of loans, assuming a continued subsidy rate of 7.5% for the remainder of the FAST Act.

³⁸ Davis, Jeff. "Was the Fast Act's 70 Percent Cut in TIFIA Funding Justified?" *enotrans.org*. 16 December 2015. Web. <https://www.enotrans.org/article/22938/> 24 July 2019.

³⁹ Grote, Bryan. Mercator Advisors. Email interview. 26 June 2019.

5.2.2 THE FAST ACT AND PABS

Many P3 advocates urged Congress to increase the current \$15 billion cap on PABs for highway and transit projects in FAST Act negotiations, but the idea gained little traction.⁴⁰ During the 2017 tax reform process, in order to meet congressional budget rules, the original House legislation proposed eliminating equal tax treatment of PABs, which provides them with the same tax-exempt treatment as municipal bonds. Fortunately, the final legislation maintained the current tax treatment of PABs.



The \$15 billion PABs cap remains a real problem.



The \$15 billion PABs cap remains a real problem. According to the Federal Highway Administration's Center for Innovative Financial Support (CIFS), DOT has awarded \$11.1 billion in PABs to 26 highway, transit and rail projects. An additional \$1.4 billion has been allocated but not issued. And the Bureau has received applications for an additional \$2.7 billion, for a grand total of \$15.2 billion.⁴¹ Unless the \$15 billion cap is increased, DOT will not be able to authorize the issuance of additional PABs by a qualified entity (typically a state agency, on behalf of the project developer). Further, additional projects are likely to apply for PABs over the next year and a half, although economic challenges resulting from Covid-19 could slow construction. Without action, several projects might have to be canceled in 2020.

⁴⁰ "Back in Business: A Blueprint for Renewing America's Infrastructure." *Businessroundtable.org*. May 2017. Web. <https://s3.amazonaws.com/brt.org/staging-qeOOpdhbbqqq3/BRT-Infrastructurepaper5142017.pdf> 29 July 2019.

⁴¹ DeCorla-Souza, Patrick. Center for Innovative Finance Support, Federal Highway Administration. Email interview. 26 June 2019.



As of early 2020, key House and Senate committees are considering an increase in the PAB lifetime cap from \$15 billion to \$20.8 billion.



As of early 2020, key House and Senate committees are considering an increase in the PAB lifetime cap from \$15 billion to \$20.8 billion.⁴² The plan is for the House Ways and Means and Senate Finance Committees to pass companion bills. The cap was originally instituted because PAB skeptics argued that demand for PABs might be low. Given the demonstrated importance of PABs in financing megaprojects, there are no longer technical doubts about their success.

The 2018 White House infrastructure plan expanded PAB eligibility to include brownfield reconstruction projects and other facilities eligible for TIFIA funding, although no formal legislation was introduced in Congress.⁴³ Given a projected backlog of \$740 billion to \$836 billion in the highway sector alone, additional brownfield financing authority is vital.⁴⁴

Any bill to increase the PAB cap is unlikely to pass on its own. A PAB increase would have to be attached to other legislation, Covid-19 supplemental spending, a tax reform bill or a transportation reauthorization bill. Passage of a surface transportation bill looks unlikely before 2021. While PAB supporters should promote a long-term surface transportation

⁴² In February 2019, Senators John Cornyn and Mark Warner introduced legislation to increase the PABs cap from \$15 billion to \$20.8 billion. In the House representatives Blumenauer, Kelly, Sewell and Davis introduced a similar House bill in May 2019.

⁴³ Brasher, Lance and Joshua Nickerson. "White House Infrastructure Plan—Perspectives for the PPP Market." *Skadden.com*. 16 February 2018. Web. <https://www.skadden.com/insights/publications/2018/02/white-house-infrastructure-plan> 9 July 2019.

⁴⁴ "New USDOT Conditions Report Highlights \$926 Billion Highway, Transit Investment Backlog." *News.Transportation.org*. 9 November 2016. Web. <https://news.transportation.org/Pages/012017conditions.aspx> 9 July 2019; Hawes, Clarissa. "U.S. Has a \$740 Billion Backlog of Roads and Bridge Repairs." *Trucks.com*. 9 November 2016. Web. <https://www.trucks.com/2016/11/09/infrastructure-spending-740-billion-backlog/> 9 July 2019.

reauthorization bill, the most realistic approach to increasing PABs in 2020 is passage of a tax reform bill or pairing the PAB increase with Covid-19 supplemental funding.

5.2.3 THE FAST ACT AND TOLLING POLICY

The FAST Act also made several changes in federal tolling policy that will affect toll-financed concession projects. One of the largest potential areas for such projects would be the replacement of aging Interstate highways as they reach the end of their 50-year design life. An existing federal pilot program allows three states to gain exemption from the general federal prohibition on using tolls for rebuilding Interstate corridors currently not tolled.⁴⁵ Specifically, it allows each state to use toll finance to reconstruct one Interstate, with the toll revenue dedicated to the capital and operating costs of the rebuilt facility. The potential to charge higher tolls, thereby turning the rebuilt Interstates into cash cows, has prevented support for such projects by highway user groups such as the American Automobile Association (AAA) and trucking organizations such as the American Trucking Associations (ATA).

Several groups argued for revising the pilot program to make it more customer-friendly. They proposed explicitly restricting the use of the toll revenues to the capital and operating costs of rebuilt/replaced Interstates, and by requiring rebates of state fuel taxes for miles driven on the replacement (tolled) Interstates to avoid what amounts to motorists' "double taxation" of highway funding. Along with those provisions, they also argued that the program should be expanded to more states, and that each participating state be able to devise a long-term plan to replace all its first-generation Interstates with new ones, using toll finance. The AAA national board approved of tolling that followed these specific recommendations at its board meeting in August 2015, and several state chapters of AAA have softened their opposition to tolling.⁴⁶ Several state ATA chapters have begun to look seriously at tolling, calculating that it might be worth paying tolls for rebuilt and widened Interstates in some situations. However, the ATA parent national organization remains opposed to any expansion of tolling. Clearly, making changes to the pilot program would help build support.

⁴⁵ "FHWA Reopens Pilot Program to Allow Three States to Toll Interstate Segments." *AASHTO Journal*. November 2017. Web. <https://news.transportation.org/Pages/110317tolling.aspx> 1 July 2019.

⁴⁶ Bower, Kathleen, AAA Senior Vice President of Public Affairs. In-person interview. December 2015.



Legislators heard these arguments but were only willing to make small tweaks to the existing three-state pilot program. The key change was adding a “use it or lose it” provision that required states to take documented steps toward implementing tolling or give up their slots.



Legislators heard these arguments but were only willing to make small tweaks to the existing three-state pilot program. The key change was adding a “use it or lose it” provision that required states to take documented steps toward implementing tolling or give up their slots. Since none of the original three states holding the slots (Missouri, North Carolina and Virginia) had obtained legislative consent to proceed with rebuilding its designated Interstate by early 2017, those states were required to give up their slots in 2018. New participants in the pilot program would have an initial two years to have their project authorized and moving forward. A number of states, including Connecticut, Indiana, Michigan and Wyoming, have expressed interest in acquiring a slot, but reaching political consensus in any state has been challenging.⁴⁷

5.3

OTHER FEDERAL TOLLING POLICY

States can consider three additional tolling options. While these options don't *require* P3s, many tolling projects are P3s.

The first, and most popular option thus far, is for states to add variably priced managed lanes, which price lanes dynamically to manage congestion and maintain high throughput.⁴⁸ Some are conversions from poorly operating high-occupancy vehicle (HOV) lanes, while others are new construction. Many large metro areas, including Atlanta, Dallas, Denver, Houston, Los Angeles, San Francisco, South Florida and Washington, D.C., plan to build networks of variably priced managed lanes. While these lanes work best in urban

⁴⁷ Jarvis, Heather, Staff Attorney, Wyoming State Legislature. In-person interview. 13 June 2019.

⁴⁸ States adding managed lanes include Arizona, California, Florida, Georgia, Maryland, Minnesota, North Carolina, Tennessee, Texas, Utah and Virginia.

areas, a recent Reason study highlighted several Interstate corridors that pass through more-rural areas in which variably priced lanes may be feasible.⁴⁹



Many large metro areas, including Atlanta, Dallas, Denver, Houston, Los Angeles, San Francisco, South Florida and Washington, D.C., plan to build networks of variably priced managed lanes.



The second option is the FHWA Value Pricing Program, which allows a state to charge variable tolls on all lanes of an Interstate to reduce congestion.⁵⁰ In 2018, Oregon agreed to apply for the program to put variable tolls on all lanes of I-5 in the Portland region. Since congestion is worst in urban areas, the Value Pricing Program is a better fit in urban regions, while the Interstate System Reconstruction and Rehabilitation Pilot Program (ISRRPP) is a better choice to rebuild an entire corridor.

The third option is for states to rebuild their non-tolled bridges and tunnels with tolled bridges using a provision in the 1998 Transportation Equity Act for the 21st Century (TEA-21).⁵¹ Rhode Island, which has the largest percentage of structurally deficient bridges in the country, developed a proposal to toll trucks (but not light-duty vehicles) on the state's Interstates and other major arterials. FHWA approved the toll truck program in 2016, leading to a lawsuit from ATA challenging the constitutionality of tolling trucks but not cars. Connecticut and Indiana are developing proposals to rebuild parts of their Interstate highways using tolled bridges, as is Oregon for one of its corridors.

⁴⁹ Feigenbaum, Baruch. "Managed Lanes Connecting Metro Areas: The Pragmatic Solution." Reason Foundation. April 2019. Web. <https://reason.org/wp-content/uploads/managed-lanes-between-metro-areas-the-pragmatic-solution.pdf> 26 June 2019.

⁵⁰ "Value Pricing Pilot Program." Office of Operations, Federal Highway Administration. *Ops.FHWA.DOT.gov*. 2019. Web. https://ops.fhwa.dot.gov/congestionpricing/value_pricing/index.htm 27 June 2019.

⁵¹ Kirk, Robert. "Tolling U.S. Highways." Congressional Research Service. 2016. Web. <https://fas.org/sgp/crs/misc/R43575.pdf> 27 June 2019.

PART 6

P3 LEGISLATION AND HIGHWAY ACTIVITY BY STATE

6.1 OVERVIEW OF STATE P3 LEGISLATION

The FHWA Center for Innovative Finance Support lists 36 states, the District of Columbia and Puerto Rico as jurisdictions that have P3 authority for transportation infrastructure.⁵² Last updated in August 2018, the FHWA does not include New Jersey, where P3 enabling legislation was signed later that month.⁵³ However, the enabling acts vary in authority provided from state to state. Further, many of these states with authority have entered into DBFs or DBMs but not DBFMs or DBFOMs. Full P3s have been implemented in only 11 states, in Puerto Rico and in projects under the auspices of the Port Authority of NY/NJ.

⁵² “State PPP Legislation.” Center for Innovative Highway Support, U.S. Department of Transportation. *FHWA.DOT.gov*. 2018. Webs. <https://www.fhwa.dot.gov/ipd/PPP/legislation/> 25 June 2019.

⁵³ Gilligan, Eugene. “New Jersey PPP Bill Could Spur Variety of Opportunities; Obstacles Remain.” *Inframation News*. 15 August 2018. *InframationNews.com*. Web. <https://www.inframationnews.com/news/2940326/new-jersey-PPP-bill-could-spur-variety-of-opportunities-obstacles-remain.html> 25 June 2019.

Legislators in the other states have failed to enter into P3s for one or more of several reasons: Some legislation contains language that makes entering into P3s a poor choice for the public partner, the private partner or both; other states have had political challenges in which the governor or a state's legislative body was opposed to P3s. Other states have not found a project that is a good fit for a P3. Table 9 lists the type of P3 authority in states with authorizing legislation.

TABLE 9: STATES BY P3 AUTHORITY

Broad Authorization	Restricted Authorization	States Entering into Full P3s
Arizona	Alabama	California
Colorado	Alaska	Colorado
District of Columbia	Arkansas	Florida
Delaware	California	Indiana
Florida	Connecticut	Maryland
Georgia	Minnesota	Michigan
Illinois	Nevada	North Carolina
Indiana	North Carolina	Ohio
Kentucky	Oklahoma	Pennsylvania
Louisiana	Puerto Rico	Texas
Maine	Tennessee	Virginia
Maryland	Texas	
Massachusetts	Utah	Port Authority of NY/NJ
Michigan	Vermont	Puerto Rico
Mississippi	Wisconsin	
Missouri		
New Hampshire		
New Jersey		
Ohio		
Oregon		
Pennsylvania		
South Carolina		
Virginia		
Washington		
West Virginia		

Source: Center for Innovative Finance Support: State P3 Legislation. *FHWA.DOT.gov*.

6.2

2019 STATE LEGISLATIVE P3 ACTIVITY

Over the past year, a number of states debated bills establishing or expanding P3 authority. Table 10 summarizes these bills. The following section provides more details on P3 activity.

TABLE 10: P3 LEGISLATIVE ACTIVITY PER STATE

State	Bill	Pass/Fail/Pending	Summary
Illinois	SB 1814	Pass	Authorizes P3 transit hub in Chicago
Louisiana	SCR-122 HB 561	Senate: Passed House: Pending	Considers undertaking P3 for new I-10 Bridge over the Calcasieu River
Massachusetts	H.4002	Pending	Authorizes \$18 billion in transportation bonds, while allowing MBTA to pursue DFBOM P3s
Mississippi	HB 1060	Died in Committee	Specifies the intention behind P3 authorization legislation, the level of government involvement and clearer definitions through a new section of the Mississippi Code
New Jersey	NA	NA	NJ Dept. of Treasury released its proposed P3 regulations and procedures, which could expand P3 utilization in the state.
New Mexico	HB 543	Senate: Defeated House: Passed	Enabled P3s for transportation and broadband projects

Source: see individual state explanations following.

ILLINOIS

In June 2019, the Illinois Legislature passed bill SB 1814, which authorized a P3 for a \$3.8 billion transit hub in Chicago.⁵⁴ Part of larger budget implementation legislation, the bill was signed by the governor later that month. The P3, through the concessionaire Landmark Development Co., would create a mixed-used development that would combine rail and

⁵⁴ Gilligan, Eugene. "Illinois Legislators Pass Bill Authorizing Transit Hub P3." *Inframation News*. 4 June 2019. *InframationNews.com*. Web. https://www.inframationnews.com/news/3596961/illinois-legislators-pass-bill-authorizing-transit-hub-p3.shtml?utm_source=newsletter&utm_medium=email&utm_campaign=infraamericas-daily-briefing-05-06-2019&_cb=login_5cf7c4df81423 25 February 2020.

bus services. The term of the P3 for the transit hub is limited to 75 years and the legislation permits the state of Illinois to aid Landmark Development Co. in obtaining federal credit assistance through the Railroad Rehabilitation and Improvement Financing and the Transportation Infrastructure Finance and Innovation programs.

LOUISIANA

In June 2019, the Louisiana State Legislature passed SCR-122, a joint resolution between the Louisiana House of Representatives and the Louisiana State Senate in 97–0 and 30–0 votes, respectively. The bill directs Louisiana Department of Transportation Development (DOTD) to “seriously consider undertaking a public-private partnership for the new Interstate 10 Calcasieu River Bridge project as an alternative to the use of conventional methods.”⁵⁵ The bill is concurrent with HB 561, which would create the Calcasieu Parish Tolling Authority, allowing construction of a tolled bridge adjacent to the existing I-10 Calcasieu River Bridge through a P3. Those backing HB-561 decided to pause further action in hopes of receiving federal funding for the bridge.

Also, in October 2019, the Louisiana State Legislature authorized the P3 for the replacement of the Belle Chasse Bridge and Tunnel, located roughly 11 miles SSE of New Orleans’ French Quarter. The Louisiana DOTD reached financial close with Plenary Infrastructure Belle Chasse in December 2019 on the project, a 30-year DBFOM P3.

MASSACHUSETTS

In July 2019, Governor Charlie Baker introduced plans for an \$18-billion transportation bonding bill that would authorize the Massachusetts Bay Transit Authority (MBTA) to procure DBFOM P3s.⁵⁶ A provision in the bill would also allow the MBTA to use DB P3s on all construction and repair projects, which were previously only authorized for projects with budgets over \$5 million. The Massachusetts Joint Committee on Transportation held a

⁵⁵ Gilligan, Eugene. “Louisiana Legislative Resolution Encourages PPP for Bridge Project.” *Inframation News*. 17 June 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/news/3620546/louisiana-legislative-resolution-encourages-PPP-for-bridge-project.html> 25 June 2019.

⁵⁶ Gilligan, Eugene. “Massachusetts Governor Seeks DBFOM Authorization for MBTA Projects.” *Inframation News*. 26 June 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/news/3645491/massachusetts-governor-seeks-dbfom-authorization-for-mbta-projects.html> 25 February 2020.

hearing for the bill on October 8, 2019. Another component of the bill, a regional gas tax headed by the Transportation and Climate Initiative, became a contentious issue and, as of early 2020, no legislative action has been taken.

MISSISSIPPI

In January 2019, HB 1060 (“The Mississippi Public-Private Partnership Act”) was referred to the Ways and Means Committee, where it died in February.⁵⁷ The bill was meant to provide clear definitions about the P3 procurement process and promote additional government oversight of the process. Among other provisions, the bill would require executives of the relevant public entity to find a public interest before entering into a P3 agreement.

NEW JERSEY

In June 2019, the New Jersey Department of the Treasury released its proposed guidelines and rules for the state’s P3 program, which was expanded during the previous year.⁵⁸ Beyond outlining the general logistics of P3s in New Jersey, these rules will require the Office of Public Finance to maintain a list of all P3 projects and publish semi-annual reports. Additionally, all local governments, school districts, state government entities, and community colleges and universities utilizing P3s must regularly report to the Office of Public Finance.

NEW MEXICO

In March 2019, the New Mexico State Senate defeated legislation that would enable P3s for transportation and broadband projects in a 25–16 vote.⁵⁹ The Public Private Partnership Act (HB 534) had passed 64–0 in the House. The bill required the public partner in a P3 transaction to use a cost/benefit analysis to understand the project’s life-cycle costs to help

⁵⁷ “MS HB1060 | 2019 | Regular Session.” LegiScan. LegiScan, 5 February 2019. Web. <https://legiscan.com/MS/bill/HB1060/2019> 9 March, 2020.

⁵⁸ Gilligan, Eugene. “New Jersey releases proposed P3 regulations.” *Inframation News*. 18 June, 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/news/3622236/new-jersey-releases-proposed-p3-regulations.shtml> 26 February 2020.

⁵⁹ Gilligan, Eugene. “New Mexico Senate Rejects PPP Bill” *Inframation News*. 19 Mar 2019. *InframationNews.com* <https://www.inframationnews.com/news/3456756/new-mexico-senate-rejects-PPP-bill.shtml> 27 June 2019.

determine whether using governmental procurement procedures would delay or increase the project's cost. The bill also required at least one public meeting on the proposed P3 project, while an amendment to HB 534 would have prohibited toll roads in the P3 framework.

6.3

STATE CONCESSION ACTIVITY

Three states had major proposed highway concession activity in 2019, detailed below in Table 11:

TABLE 11: MAJOR HIGHWAY P3 CONCESSION ACTIVITY BY STATE

Project	State	Status	Value \$ (B)	Type	Duration	Concessionaire
Mobile River Bridge and Bayway Project P3	Alabama	Canceled	\$2.1	DBFOM	55 Years	NA
Belle Chasse Bridge and Tunnel Replacement P3	Louisiana	Financial Close	\$0.162	DBFOM	30 Years	Plenary Infrastructure Belle Chasse
SH 130 Segments 5 and 6 Refinancing	Texas	Financial Close	\$0.262	Refinancing	22 Years	SH 130 Concession Company

ALABAMA

In August 2019, the Mobile River and Bayway Project, Alabama DOT's first proposed P3, was canceled.⁶⁰ The project was previously estimated to be worth \$2.1 billion. Alabama DOT had previously released a shortlist of private partners and hoped to award the contract by May 2018. As of early 2020, a scaled back bridge replacement project is under consideration.

⁶⁰ "I-10 Mobile River Bridge and Bayway Widening P3." *Inframation News*. 2020. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/1576626/i-10-mobile-river-bridge-and-bayway-widening-p3.shtml> 15 January 2020.

LOUISIANA

In March 2019, the Louisiana Department of Transportation and Development (LaDOTD) identified Plenary Infrastructure Belle Chasse as the winning bid for the \$162-million DBFOM Belle Chasse Bridge and Tunnel Replacement P3.⁶¹ The parties reached financial close for the DBFOM contract in December 2019.

In May 2019, the LaDOTD approved a \$250-million, 19.8-mile I-12 to Bush Street Highway P3 in Tammany Parish.⁶² The LaDOTD also applied for a \$111-million INFRA grant for availability payments to the private partner.

PENNSYLVANIA

In January 2019, the Pennsylvania Department of Transportation issued an RFI to collect feedback and information for rehabilitating tunnels and tunnel systems along the Pennsylvania Turnpike.⁶³ Expressions of interest from 14 different companies were submitted in February 2019, before the project was ultimately canceled in late April of the same year.

TEXAS

In May 2019, the SH 130 Concession Company, which holds the toll concession contract for SH 130 Segment 5 and 6, engaged Barclays and Citi financial advisors to explore private placement to address the project's long-term financing needs. Back in 2012, traffic on the highway was 25% of what was initially projected, leaving the then-toll road insolvent. The

⁶¹ Gilligan, Eugene. "Louisiana Approves New Highway Project; Reviewing Belle Chasse PPP." *Inframation News*. 30 May 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/news/3591186/louisiana-approves-new-highway-project-reviewing-belle-chasse-PPP.shtml> 27 June 2019.

⁶² "I-12 to Bush Street Highway P3." *Inframation News*. 2020. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/3592621/i-12-to-bush-street-highway-p3.shtml> 15 January 2020.

⁶³ Miller, Abigail. "Pennsylvania Turnpike Commission Issues RFI For Tunnel Rehabilitation Project." *Inframation News*. 14 January 2019. *InframationNews.com*. Web. <https://www.inframationnews.com/news/3301686/pennsylvania-turnpike-commission-issues-rfi-for-tunnel-rehabilitation-project.shtml> 27 June 2019.

concessionaire filed for bankruptcy in May of 2017,⁶⁴ with new ownership by Strategic Value Partners and financing coming in the following month. In December 2019, the second round of refinancing reached financial close, allowing for road repairs and, hopefully, financial stability for the project.⁶⁵

⁶⁴ Berke, Jon. "SH 130 Owners Mandate Advisors to Refinance 2020 Debt." *Inframation News*. 10 May 2019. *InframationNews.com*. Web.<https://www.inframationnews.com/news/3567351/sh-130-owners-mandate-advisors-to-refinance-2020-debt.thtml> 27 June 2019.

⁶⁵ 'SH-130 P3 Refinancing (2019)." *Inframation News*. 2020. *InframationNews.com*. Web. <https://www.inframationnews.com/deals/2789426/sh-130-p3-refinancing-2019.thtml> 15 January 2020.

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