

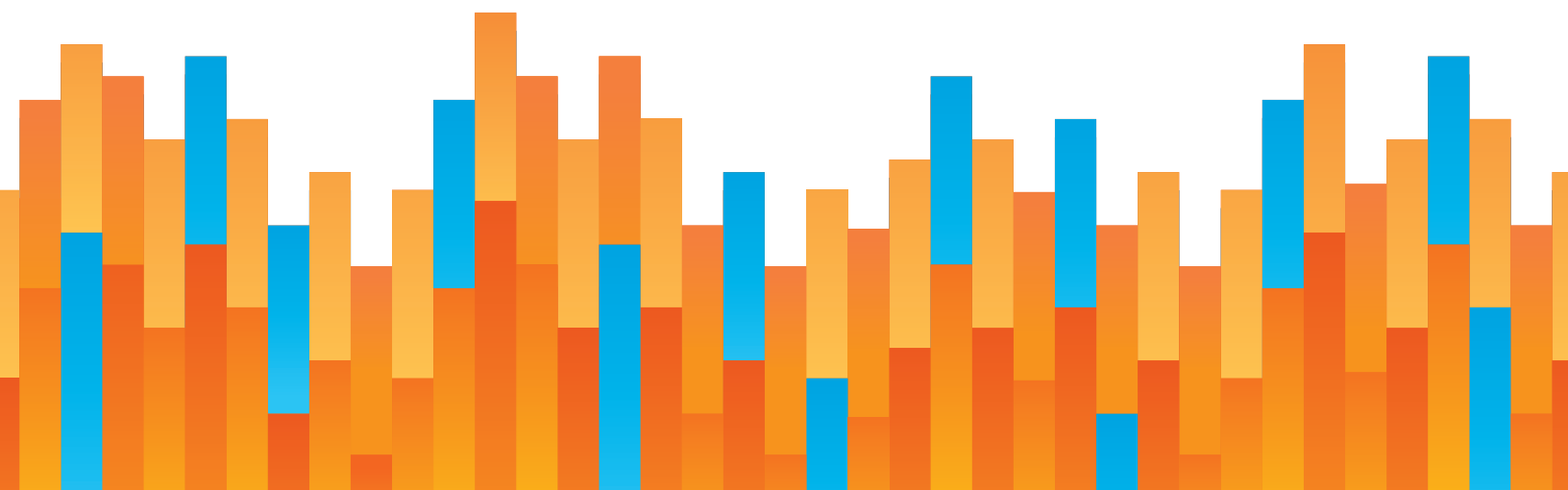


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# ANNUAL PRIVATIZATION REPORT: SURFACE TRANSPORTATION

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Edited by Austill Stuart  
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# PART 1

## GLOBAL OVERVIEW

Long-term public private partnerships (P3s) for highways have been used for the past 60 years. As documented by Jose Gomez-Ibanez 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.<sup>1</sup> 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 of the companies. In the late 1990s and early 2000s 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.

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<sup>1</sup> Gomez-Ibanez, Jose A. and John R. Meyer. *Going Private: the International Experience with Transport Privatization*. Brookings Institution. 1993.

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. 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, combined with 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 UK, and a number of Central and Eastern Europe countries have been procured and financed as availability payment (AP) concessions.<sup>2</sup>

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. These cases are called “hybrid” concessions in this section.

Global P3 concessions decreased somewhat in 2017. *Public Works Financing* has maintained a database of such projects since 1988. In its latest annual review of this sector, it identified the top 10 transportation deals of 2017, which are presented in Table 1:

**TABLE 1: 10 LARGEST GLOBAL SURFACE TRANSPORTATION DEALS OF 2017**

Project	Location	Country	Value (B)	Type	Duration	Concessionaire
High Capacity Trains	Melbourne, Victoria	Australia	\$1.80	DBFM/AP	20 years	Plenary
Bogota-Giradot Toll Road	Cudinamarca	Colombia	\$1.50	DBFOM-toll	30 years	Vinci
A6 Highway	Weinsberg, Wiesloch	Germany	\$1.37	DBFOM-AP	30 years	DIF/Hochtief (ACS)
Rumichaca-Pasto Toll Road	Narino	Colombia	\$1.04	DBFOM-toll	29 years	Sacyr
Vias del Nus Toll Road	Antioquia	Colombia	\$0.96	DBFOM-toll	25 years	Local Contractors
Ara Tuhono Highway	Puhoi, Warkworth	New Zealand	\$0.90	DBFOM-toll	25 years	Acciona

<sup>2</sup> “P3s on German Federal Trunk Roads.” Joint Workshop on Financing Transport Infrastructure. Geneva. September 10, 2013. Lecture.

<b>Project</b>	<b>Location</b>	<b>Country</b>	<b>Value (B)</b>	<b>Type</b>	<b>Duration</b>	<b>Concessionaire</b>
Popayan-Santander Toll Road	Cacua	Colombia	\$0.85	DBFOM-toll	25 years	Hidalgo
A.V. Oriente II Toll Tunnel	Santiago	Chile	\$0.74	DBFOM-toll	45 years	Atlantia
A7 Highway	Hamburg, Schleswig-Holstein	Germany	\$0.67	DBFOM-AP	30 years	Vinci/Meridiam
Pamplona-Cucuta Toll Road	Northeast Colombia	Colombia	\$0.53	DBFOM-toll	25 years	Sacyr/Concreto

Only three of the top 10 worldwide P3s that reached financial close in 2017 use availability payments, fewer than in past years. However, the growing use of AP concessions has enabled P3s to be used in projects that do not generate their own revenues, as well as in hybrid concessions (discussed above) in which toll revenues help the government cover the costs of its AP obligations.

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

- AP: Availability Payment
- BOO: Build-Operate-Own
- DBF: Design-Build-Finance
- DBFOM: Design-Build-Finance-Operate-Maintain
- DBFM: Design-Build-Finance-Maintain
- DBOM: Design-Build-Operate-Maintain
- RFI: Request for Information
- RFP: Request for Proposals
- RFQ: Request for Qualifications

## PART 2

# INTERNATIONAL HIGHWAY INFRASTRUCTURE: 2017

Worldwide developments in surface transportation P3s during the last year include:

### CANADA

Infrastructure Ontario (IO) and Metrolinx entered into a number of P3 projects to build the Regional Express Rail (RER) program. The projects are listed below:

- In June 2017, IO and Metrolinx shortlisted three teams for the **Hurontario** DBFOM LRT with an estimated total capital cost of C\$1.4 billion. Each of these teams was invited to provide additional details in a subsequent RFP. After hoping to name a preferred partner late in spring 2018, the 30-year concession project is expected to close later in 2018.
- In July 2017, IO and Metrolinx issued RFQs for the **Early Stations Improvement** project. The DBF project will include renovating station infrastructure.
- In October 2017, three teams submitted offers for the DBF **Kipling Bus Terminal** project in Ontario, valued at between C\$50 and C\$99 million.

- In November 2017, IO and Metrolink awarded a C\$128.8-million, fixed-price contract to EllisDon Infrastructure CGS RER Inc. The DBF project is to redevelop the **Cooksville GO Station** in Ontario.
- In November 2017, five teams prequalified to build and finance the **Barrie Rail Corridor Expansion**. The DBF project includes constructing a second track between Lansdowne Avenue in Toronto and the Alandale Waterfront GO station in Barrie. IO and Metrolink plan to issue a request for proposals in late 2018.
- In December 2017, Metrolinx and IO selected Toronto Tunnel Partners (TTP) for the **401 Rail Tunnel** DBF project. Due to innovative construction methods, the C\$116.9-million project costs significantly less than expected.
- In February 2018, Metrolinx and IO issued an RFP to three shortlisted teams for the DBF **Davenport Diamond** project. The C\$150 million to C\$199 million project will build a bridge for Metrolinx trains over a freight line in west central Toronto.
- In March of 2018, IO and Metrolinx awarded a C\$254 million fixed-price contract to EllisDon Transit Infrastructure to design, build and finance the **Stouffville Corridor Stations Improvement** project.
- In April 2018, Metrolinx and IO issued an RFP for the DBF **Milton Corridor Rail Station** project. The project includes expanding and redeveloping two stations.
- In April 2018, Metrolinx and IO issued an RFP to three shortlisted teams for the DBF **Lakeshore West Infrastructure** improvements project. The estimated capital cost is C\$200 million–C\$499 million.
- In April 2018, IO and Metrolinx issued an RFP for the **Hamilton B-Line Light Rail Line (LRT)**, inviting the three shortlisted teams to submit 20-year DBFOM concession proposals. The B-Line has an approved budget of C\$892 million (2015 dollars).
- In April 2018, IO and Metrolinx issued a Request for Proposals (RFP) to two pre-qualified teams to design, build and finance the **Toronto Union Station Enhancement**, a part of the agency's RER program. The C\$500 million–C\$1 billion project will use both DB and DBF contracts.

In other Ontario P3 transit news, in July 2017, the city of Ottawa shortlisted three consortia for the expansion of the east-west **Confederation Line**, a C\$1.7-billion DBF contract. The same month, the city announced that three separate teams were shortlisted for construction of the north-south **Trillium Line**, a DBFM contract estimated at C\$535 million.



Both contracts will be awarded in late 2018.

In Ontario highway news, in March 2017, IO awarded a 30-year concession, with an estimated capital cost of C\$616 million, to developers ACS Infrastructure Canada and Brennan Infrastructures Inc. for the extension of **Highway 427**.

In March 2018, IO issued a request for proposals to three prequalified teams to design, build and finance the expansion of Highway 401. The 18-km project stretches from Credit River in Mississauga to Regional Road 25 in Milton and is expected to cost more than C\$1 billion.

In September, the Windsor-Detroit Bridge Authority (WDBA) extended the submission deadline for the three finalists of the C\$2-billion **Gordie Howe International Bridge** crossing the Detroit River. In June 2018, shortlisted teams were invited to rebid with their best and final offer. All three initial bids exceeded the affordability threshold allowed by the Windsor-Detroit Bridge Authority. Financial close is targeted for the end of September 2018.

Elsewhere in Canada, in December 2017, the government of the Northwest Territories issued an RFP for the DBFOM **Tlicho all-season road**. The estimated capital cost of the 29-year concession is C\$150 million.

## EUROPE

### *Belgium*

In January 2017, two Belgian transport P3s were refinanced: the **Stelplaatsen Cluster 1 bus depot** and the **Noord-Zuid Kempen road**. The Stelplaatsen project utilizes a DBFM for three Belgian bus depots used to store, clean and repair buses. This deal refinances a 2010 agreement that provided a 19-year, €40.5 million loan to refinance the existing debt. The Noord project is a DBFM road project between Geel and Katerlee. This deal refinances a 2011 26.5-year, US\$206-million project that addresses existing debt.

In June 2017, Belgium awarded a consortium of Franki, Aelterman, Hye, Kumpen and Aswebo the **Albert Canal Bridges** P3 project. The €70 million (US\$78.8 million) project entails redeveloping 15 bridges.

In December 2017, the **Liege Tram** P3 project, which had been halted, was re-tendered under a new structure. The 30-year, €380-million (US\$403.4 million) project builds a tram-line between Sclessin and Coronmeuse.

### *Czech Republic*

In February 2018, the Czech government announced that it is planning to build the **D4 Expressway** between Prague and Pisek as a P3. The €275 million (US\$326.4 million) project involves the greenfield development of a 32-km road and other operations and maintenance. The government would like to award the concession by the end of 2018.

### *France*

In July 2017, the NGE Group was awarded the **North Bypass of Saint-Flour** project, a greenfield motorway. The €28.1 million (US\$30.1 million) DBFM project will have a 21.5-year concession. A long-term loan of €14 million was provided by pbb Deutsche Pfandbriefbank. An additional €15 million of subsidies came from the Auvergne-Rhône-Alpes region, as part of its commitment to revitalizing rural areas.

In March 2018 French authorities set a June deadline for Best and Final Offers (BAFOs) for a new toll road concession project involving the **RN 79 Centre-Europe Atlantique road**, known as the deadliest motorway in France. The teams that submitted Expressions of Interest (EOIs) are likely to qualify to submit final bids. The €420 million (US\$450.3 million) DBFM project will include widening road sections and increasing the number of lanes between the Grand Champ road in Sazeret and the Digoin Interchange.

### *Germany*

In April 2017, the German federal government awarded Vinci and Meridiam a 30-year DBFOM concession for the €441-million (US\$471 million) **A7 Salzgitter-Göttingen** motorway upgrade project.

In September 2017, A1 Mobil, the owner of the **A1 expansion project** (awarded 2008), initiated a €787 million (US\$935.1 million) lawsuit against the German government. A1 Mobil wanted compensation for the €700-million deficit that it faced in 2016 due to low toll revenues.

In 2017, the **A3 Biebelried-AK Furth/Erlangen Six-Lane Expansion** project was delayed due to a legal challenge from Vinci and Strabag, who did not make the prequalification list. The challenge was resolved with the Vinci/Strabag team added to two other teams: Effiage/Bunte and BAM P3/PGGM/Hochtief. BAFOs are due later this year. The €1-billion (US\$1.09 billion) project will extend 79 km of roadway from three to six lanes. The 30-year concession is expected to reach financial close in early 2019.

In February 2018, the German federal government awarded a BAM PPGM consortium group the **A10/A24** expansion and reconstruction highway project. The project includes a long-term bond and short-term loans. The 30-year, brownfield DBFOM concession is worth €400 million (US\$434.7 million).

### *Italy*

In March 2017, Brescia Mobilita awarded FS Italiane the DBFM contract for two new light-rail lines in Brescia. The two lines have been identified as the first part of a new Rome network.

In July 2017, the Procura di Milano submitted a bankruptcy claim for the **Autostrada Pedemontana Lombarda (APL)** road P3 project. (The project reached financial close in February 2016.) In December 2017, the request was denied because “the company is not in a state of insolvency.” The contract includes the construction of 47 km of freeway, 13 km of tunnels and 1.7 km of bridges.

In November 2017, the SIS consortium closed a deal for a €2.566 billion (US\$3.1 billion) DBFOM greenfield highway project. The **Pedemontana-Veneta** toll highway, connecting Spresiano with Montecchio, Maggiore, will include two tunnels and secondary road connections. After construction, the consortium will receive 39 years of availability payments.

### *Poland*

In July 2017, the European Commission ruled that AWSA, the operator of the **A2 Motorway Konin-Nowy Tomysl** section was overcompensated between 2005 and 2011 by €210 million. AWSA needs to pay this total plus interest to Deutsche Bank and KommunalKredit. The US\$2 billion A2 road links Warsaw with the German Autobahn network.

*Netherlands*

In January 2017, four groups bid for the €1 billion (US\$1.06 billion) **Afsluitdijk** dam project, a 25-year DBFM concession project that includes rehabilitating the 32-km Afsluitdijk causeway connecting North Holland to Friesland.

In December 2017, the Rijkswaterstaat (the Dutch government Infrastructure Agency) awarded a 20-year concession of the **A24 Blankenburg Tunnel** project to Macquarie, Ballast Nedam and DEME. The €1 billion DBFOM project will connect the A24, A15 and the A20 to the western part of the city. Financial close is expected in mid-2018.

In March 2018, the Rijkswaterstaat awarded the €650 million **A16 Rotterdam motorway P3** project to a BAM P3 PGGM consortium. Commercial close occurred the following month. The 20-year concession will entail connecting the A13 to the A16.

In March 2018, six consortia have been prequalified for the €450 million **A9 Amstelveen Motorway** DBFM greenfield project. The six consortia will be shortlisted to three over the next year.

*Norway*

In March 2018, the Norwegian Roads Authority selected Skanska as the preferred bidder for the **RV3/RV25** P3 project. In May 2018, the two parties reached financial close on the 20-year NOK 2.6 billion (US\$320 million) DBFOM project.

*Spain*

In May 2017, UBS International Infrastructure Fund II acquired the 72.4-km **Atovia del Camino** toll road from Deutsche Alternative Asset Management.

In May 2018, Spain discussed modifying its €5 billion (US\$5.7 billion) road P3 plan, the **Spanish P3 Plan Extraordinario de Inversión en Carreteras (PIC)**. Motorway projects would use 30-year availability payments. However, the proposal penalizes the private partner if traffic volumes on a road drop below a planned threshold.

In September 2017, Spain announced plans to auction off **bankrupt toll roads** with 25-year concessions. Auctions will begin in late 2018 and will be managed by Sociedad Estatal de Infraestructuras del Transporte Terrestres (Seittsa).

### *United Kingdom*

In January 2017, a request for expressions of interest (EOI) for the **West Coast Partnership franchise**, (an intercity rail line) was released. An invitation to tender was issued in late March 2018.

In March 2017, the Department for Transport released a shortlist for its **East Midlands franchise**, a train operating company servicing the East Midlands and parts of Yorkshire.

In July 2017, a consortium led by South Korea's National Pension Service agreed to a £3.0 billion deal to purchase the 30-year concession to manage **High Speed 1 (HS1)**. The agreement covers the operation and maintenance of the 109-km line connecting London and the Channel Tunnel as well as four stations. The original owners, Borealis Infrastructure and the Ontario Teachers' Pension Plan, decided to sell after a strategic review.

In September 2017, the Welsh Transport Ministry released a prior information notice (PIN) for the £380 million (US\$496.7 million) DBFOM **A465** motorway upgrade project.

In September 2017, Balfour Beatty was awarded a £36-million (US\$47.6 million) extension to operate and maintain the **M1-A1 Link** road. The new contract will terminate in 2026.

In November 2017, the UK government announced its **Strategic Vision for Rail**, which praised current and previous private sector involvement in British rail projects, and called for increased private rail involvement going forward.

Tenders are being accepted until March 2018 for operating the **South Eastern franchise**, a railway franchise servicing the area between London and Kent.

In February 2018, UK Transport Secretary Chris Grayling announced that the current **East Coast franchise** partnership (operated by Stagecoach and Virgin Trains) will be terminated within a year. The train service may be operated by the government or rebid to a new operator. The operators overbid for the line and have lost £200 million on it.

In May 2018, the UK Department of Transport approved the €1.1 billion **Silvertown Tunnel** and is examining bids to build and operate it. In March of 2018, Meridiam, Skanska and Strabag pulled out of the bidding for the project due to delays. The 25-year concession will entail constructing a twin-bore tunnel between Silvertown and North Greenwich.

## LATIN AMERICA

### *Argentina*

In August 2017, Spanish highway operator Abertis and the Argentine government agreed to a 10-year extension of a 1994 concession of **Autopistas del Sol (Ausol)**, Buenos Aires' main toll highway. Under the new deal, Abertis will make US\$430 million worth of improvements to the highway. The Argentine government made a similar deal with Abertis for another roadway providing western access to the city of Buenos Aires. Via its partnership in the Group Concesionario del Oeste, Abertis agreed in June 2017 to invest another \$250 million dollars in exchange for extending the concession until 2030.

In April 2018, the **Rutas del Sur** road package was tendered to Transportadora de Gas del Sur S.A. The outstanding principal amount for the loans is US\$191.6 million. Other roads to be developed under this package include "safe roads," which will be repaved to have wider shoulders.

### *Aruba*

In March 2017, the **Watty Vos Boulevard** project reached a financial close. The Aruban government awarded the US\$100-million DBFOM project to Mota-Engil in 2015.

### *Brazil*

In March 2017, the São Paulo State Investment Fund awarded Patria Investimientos the 3.9-billion BRL (US\$1.3-billion) 30-year DBFOM concession of **Rodovias do Centro-Oeste Paulista**, a 574-km highway.

In April 2017, Arteris, the Brazilian affiliate of Abertis Infraestructuras, and Brookfield won the 30-year DBFOM concession for a 720-km long highway, **Rodovias dos Calçados**. Arteris

will introduce myriad upgrades to the highway, including dynamic free-flow tolling, traffic control monitoring, and weather and information services.

In June 2017, the **PR-323 Corridor** P3 project was terminated due to the concessionaire being unable to secure financing, a BRL 7.7 billion (US\$2.3 billion) DBFOM project secured in 2014.

In January 2018, the São Paulo State Investment Fund awarded Ecordovis the concession for the **Rodoanel Norte**, the 43.8-km northern section of Rodoanel Mario Covas, the tolled ring road around São Paulo. Ecodorvis' bid of US\$257 million was 90% higher than the minimum allowable price.

In March 2018, Mato Grosso, Brazil's third largest state, awarded a six-company consortium led by Consasa a \$16-million, 30-year DBFOM concession for select highways in the state.

In April 2018, the state government of Bahia delayed the deadline for proposals for an LRT P3 project in the city of **Salvador**. The BRL 1.5-billion (US\$469 million) project will have a 20-year concession. The original tender in 2017 was suspended by a judge. The new tender was awarded in May 2018 to a consortium consisting of China-based BYD and U.S.-based Metrogreen to build and operate the light rail line.

### *Chile*

The country's Public Works Ministry approved an offer by Abertis to widen sections of **Rutas del Pacífico**, also enabling Abertis to extend the concession by three years to 2027.

In August 2017, Italy's Atlantia Spa, bidding through its local affiliate, won the concession for **AVO 11**, the 5.2-km southern stretch of the Américo Vespucio Oriente (AVO) tunnel, a US\$800-million, 45-year BOT project.

In August 2017, Acciona agreed to sell the **Ruta 160**, toll road to Globalvia in a €335-million (US\$392.5 million) deal. Acciona was awarded the O&M 40-year concession for Ruta 160 in 2008.

In October 2017, Chile rebooted a previously failed tender for a US\$680 million toll road project, **Route 66, Camino de la Fruta**. The previous concession was terminated in 2014 due to cost overruns related to environmental remediation by the concessionaire. The revised

project will be procured as a 40-year DBFOM brownfield project linking Ruta 5 and the port of San Antonio. Chile also rebooted the US\$90 million **Ruta G21** project, a 30-km mountain highway that will be built in phases.

In November 2017, Intervial Chile, S.A., a Colombian firm, submitted the winning bid for a 40-year, US\$310-million DBFOM concession of **Rutas del Loa**, a 136-km toll road. Operations are to begin in 2020.

In November 2017, the Directorate General of Concessions (DG) announced it will procure two new transport projects. **Extension Autopista Costanera Norte to Ruta 78**, a connector highway, will be procured as a US\$258-million greenfield project. Bidding for the 45-year concession will begin in 2018. Proposals for the other project, a 30-year US\$85-million **gondola project**, were due in December 2017. The project has been delayed as the government evaluates its transportation priorities.

### *Colombia*

In January 2017, the **Autopista al Mar 2** project reached financial close. The COP 1.53-trillion (US\$520 million) project was awarded to the Autopistas Uraba consortium in 2015.

In January 2017, the **Northern Access Bogotá Highway** reached commercial close. Promesa de Sociedad Futura was awarded the COP 457.8-billion (US\$153.6 million) project in late 2016.

In January 2017, KMA Construcciones was chosen as the preferred bidder for the **Autopista Ruta Caribe Two** project. The COP 1.63-trillion (US\$560 million) project is a mixture of brownfield and greenfield developments.

In March 2017, Invias was awarded the original contract to maintain navigation conditions on the Magdalena River to Odebrecht. That agreement was terminated following allegations, backed with evidence, that concessionaire Odebrecht won its contract by paying bribes to the former transportation vice minister. Grupo Aval and ANi agreed to the termination and liquidation of the original contract. ANi recognized investments made in the project. Episol received partial reimbursement for equity investments.

In March 2017, the US\$750-million **Vias Del Nus** highway project, a 25-year DBFOM concession lease, reached financial close.



In April 2017, Sacyr won the COP 1.5-trillion (US\$520 million), 25-year DBFOM concession for the **Pamplona-Cucuta** highway project.

In May 2018, the **Ruta Sol 2** motorway entered its feasibility and structuring phase. The Colombian highway authority, Invias, has temporary control. The motorway will be rebid to the private sector. Tender documents are expected in fall 2018.

In June 2017, Colombia's national infrastructure agency canceled the concession contract for its **Puerta de Hierro-Palmar de Varela y Carreto-Cruz del Viso Highway P3** project due to breach of contract. The project had been awarded to Sacyr.

In August 2017, the Antioquia government awarded a P3 contract to revive the local freight rail network to Ferrocarril de Antioquia 2017. The Antioquia area of Colombia had some of the most extensive rail service in Latin America in the early 20<sup>th</sup> century. One of the government's priorities is to bring freight rail back to the region.

In September 2017, international lenders expressed interest in financing the **Conexión Pacífico 2** highway project. The 25-year, US\$1.3-billion DBFOM project will serve the municipalities of La Pintada and Venecia.

In October 2017, the Bogotá City Council chose SYSTRA and Ingetec to design **Bogotá's first metro line**. The US\$4.35-billion project will have 18 stations and integrate with TransMilenio, Colombia's bus rapid transit system.

In December 2017, the **Antioquia-Bolivar road P3** reached a financial close, the first P3 to do so through the issuance of bonds. Owned by Ruta al Mar Concession consortium, the road will link Antioquia, Cordoba, Sucre and Bolivar, as well as serve the seaport Buenaventura.

### *Mexico*

In June 2017, Infrastructure Mexico awarded a consortium led by ICA Infrastructure the 10-year, MXN 4.385-billion (US\$243 million) **Texcoco-Zacatepec** road rehabilitation project concession.

In July 2017, Infrastructure Mexico awarded Sacyr Concesiones the 10-year, MXN 3.93-billion (US\$218 million) **Pirámides-Tulancingo-Pachuca** road project concession. The project will entail rehabilitating and maintaining 91.5 km of the highway.

### *Uruguay*

In August 2017, Uruguay's **first circuit road** reached financial close. Originally awarded in 2015, the DBFOM project entails reconstruction and maintenance of Routes 21 and 24, located in the southwestern part of Uruguay.

## **ASIA**

### *China*

In September 2017, Sunvision Capital, a consortium of eight companies, signed a financing contract for the **Hangzhou-Shaoxing-Taizhou** high-speed rail (HSR) project, a 30-year DBFOM concession project valued at CYN 44 billion (US\$6.73 billion).

### *Malaysia and Singapore*

In May 2018 Malaysia cancelled the **Kuala Lumpur-Singapore** HSR's rail line. The new Malaysian government believed the project relied on too much government revenue. Proposals for the US\$9.4 billion DBFOM project were due by mid-2018.

### *Russia*

In March 2017, construction of **the third section of the Moscow Central Ring Road** reached commercial close. The RUB 80-billion (US\$1.37 billion) project will produce a 105.3-km toll road connecting the M11 Moscow-St. Petersburg highway with the M7 Volga motorway.

In June 2017, the **fourth and last section of the Moscow Central Ring Road** connecting the M7 Volga motorway with the M4 Don highway reached financial close. The 96.5-km, RUB 85.4-billion (US\$1.51 billion) DBFOM project will have a 30-year concession. The complete 541-km roadway is valued at RUB 300 billion (US\$7.2 billion).

*Turkey*

In January 2017, the Turkish government awarded the BOT contract to Daelim, Limak, SK, and Yapi Merkezi to construct the **Çanakkale Bridge** project. The TRY 10.35-billion (US\$2.73 billion) project will have a concession contract of 16 years and two months.

In April 2017, the Turkish government selected the consortium ERG Insaat and Seza Insaat as the preferred bidder for the BOT **Ankara-Nigde motorway** project. After a year of talks over financing, the parties agreed to a TRY 6.7-billion (US\$1.42 billion) deal in June 2018.

In April 2017, the Turkish government awarded IC Ictas, Astaldi, and Kalyon the BOT contract for the **Menemen-Aliaga-Candarli Motorway** project. The TRY 1.437-billion (US\$385.9 million) project will have a 10-year concession.

**AFRICA***Kenya*

In August 2017, The Kenya National Highways Authority selected Bechtel as the preferred bidder for the **Nairobi-Mombasa Highway**. This will be the country's first high-speed expressway. Construction is expected to begin in 2018 with the first section of the highway opening in 2019.

**OCEANIA***Australia*

In July 2017, the Victorian government selected Cross Yarra Partnership as the preferred bidder for the A\$6-billion (US\$4.47 billion) **Melbourne Metro P3**, which reached financial close in December 2017. The project entails constructing tunnels and underground stations, with groundbreaking projected in 2018. The government will allocate A\$2.75 billion toward the project. The tunnel aspects of the project will be procured as a P3.

In September 2017, Queensland's infrastructure minister confirmed that part of Brisbane's **Cross River Rail** (a new heavy rail line) project will be procured as a P3. An RFP for the A\$5.4 billion (US\$4.2 billion) underground rail line was issued in April 2018 with a due date of late 2018. The project will connect Brisbane's city center to the suburbs.

In November 2017, the Victorian government unveiled plans for a large highway project, the **North-East Link**. A preferred bidder for the A\$16.5-billion (US\$12.5 billion), 26-km project that will complete the missing link in a loop around Melbourne will be chosen in 2019.

In December 2017, Plenary and Cintra were awarded the **western package of Melbourne's Outer Suburban Arterial Roads (OSAR)** program. The A\$1.8-billion (US\$1.37 billion) project is divided into eight road upgrades, each with a 20-year availability payment P3. Construction is scheduled to begin in 2018.

Three consortia (Regional Futures led by Downer, a Bombardier-led consortium, and Momentum Trains, led by CAF development bank of Latin America) were shortlisted for the DBFM **Regional Rail project** in New South Wales that will procure several new train fleets. Despite having worked on rail projects in every Australian state except New South Wales, in May 2018 Bombardier withdrew from the process. In early June 2018, the consortia sent detailed information on the technology they would use in the project. RFPS were due by the end of June 2018. A bidder will be announced in 2019.

## PART 3

# U.S. HIGHWAY CONCESSIONS 2017

For the fiscal year (FY) 2017—defined as between October 2016 and September 2017—no U.S. P3s reached financial close, though several deals did so in calendar year 2017 (early FY 2018), and are detailed later in this chapter.

Table 2 provides an overview of the FY 2017 U.S. highway concession market, listed in order of the investment value of each project. For existing toll roads now leased to private concessionaires, the length of each lease is provided. 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 32 highway projects in Table 2, 21 are financed based on toll revenues. Of the others, only five were financed on a pure AP basis, with the six larger AP concessions all involving new toll revenues that will supplement the state's revenue sources.

**TABLE 2: LARGEST U.S. LONG-TERM HIGHWAY CONCESSIONS, 2017**

<b>Project</b>	<b>Location</b>	<b>Value (\$ B)</b>	<b>Type</b>	<b>Begun</b>	<b>Concessionaire</b>
I-4 Ultimate Managed Lanes	Orlando, FL	\$2.836	DBFOM, AP/toll	09/14	Skanska/Granite/Lane
I-635 LBJ Managed Lanes	Dallas, TX	\$2.800	DBFOM, toll	06/10	Cintra/Meridiam
Midtown Tunnel	Norfolk, VA	\$2.100	DBFOM, toll	04/12	Skanska/ Macquarie
North Tarrant Expressway Phases 1 + 2W	Fort Worth, TX	\$2.047	DBFOM, toll	12/09	Cintra/Meridiam
I-495 HOT Lanes	Fairfax County, VA	\$1.998	DBFOM, toll	07/08	Transurban/ Fluor
I-595 Managed Lanes	Fort Lauderdale, FL	\$1.814	DBFOM, AP/toll	02/09	ACS Infrastructure
Goethals Bridge	New York City, NY	\$1.500	DBFM, AP/toll	11/13	Macquarie/ Kiewit
SH 183 Managed Lanes	Dallas, TX	\$1.415	DBF+ OM, AP/toll	11/14	Kiewit
North Tarrant Expressway Phase 3A	Fort Worth, TX	\$1.400	DBFOM, toll	09/13	Cintra/Meridiam
SH 130 Segments 5-6	Texas	\$1.358	DBFOM, toll	03/08	Cintra/Zachry
ORB East End Crossing	Louisville, KY	\$1.180	DBFOM, AP/toll	03/13	Walsh/Vinci/ Bilfinger Berger
Rapid Bridge Replacement	Pennsylvania	\$1.119	DBFM, AP	3/15	Plenary Walsh
SH 288 Toll Lanes	Texas	\$1.069	DBFOM, toll	5/16	ACS, Infrared, Shikin Banai
Grand Parkway, F-1, 2	Houston, TX	\$1.007	DBOM, AP/toll	3/13	Zachry/Odebrecht
I-95 Express Lanes	Virginia	\$0.940	DBFOM, toll	8/12	Transurban/Fluor
Port of Miami Tunnel	Miami, FL	\$0.914	DBFOM, AP	10/09	Meridiam
SR 125, South Bay Expressway	San Diego, CA	\$0.773	DBFOM, toll	5/03	Macquarie
I-77 Managed Lanes	Charlotte, NC	\$0.648	DBFOM, toll	06/15	Cintra
Portsmouth Bypass	Portsmouth, Ohio	\$0.557	DBFOM, AP	04/15	ACS, Infrared, Star
I-69 Upgrade	Indiana	\$0.370	DBFOM, AP	07/14	Isolux/PSP Investments
Presidio Parkway	San Francisco, CA	\$0.365	DBFOM, AP	10/12	ACS/Meridiam
Dulles Greenway Tollroad	Loudoun County, VA	\$0.350	DBFOM, toll	09/93	Macquarie
Southern Connector, SC	Greenville, SC	\$0.191	DBOM, toll	02/98	Interwest
South Norfolk Jordan Bridge	Chesapeake, VA	\$0.140	BOO, toll	1/11	Fig/American Infrastructure
91 Express Lanes	Orange County, CA	\$0.130	DBFOM, toll	07/93	Level 3/ Cofiroute/Granite
US 36 HOT Lanes, Phase 2	Colorado	\$0.120	DBFOM, toll	02/14	Plenary/Ames/Granite
Camino Columbia Bypass	Laredo, TX	\$0.085	DBFOM, toll	06/99	Camino Columbia Inc.

Source: U.S./Canada Transportation P3 Projects Scorecard." *Public Works Financing*. October 2017.

The majority of those concessions are based on toll-revenue financing, as indicated. The others are financed based on a state's agreement to provide annual availability payments (APs) over the life of the concession term. Some of those are "pure" availability payment deals, in which the state DOT uses part of its existing revenue sources (mostly federal and state fuel taxes) to meet its AP obligations. But the larger AP projects also involve toll revenue, which helps the state afford its AP obligations, as noted in the table. The total dollar value of the 32 concessions is \$42.6 billion, of which 60% is generated based on toll-revenue financing, with the other 40% financed based on the states' AP commitments.

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 funds are particularly attractive to pension investments and are more politically acceptable to legislators and the public than global investment firms seeking higher rates of return.

## PART 4

# FEDERAL POLICY ON P3 CONCESSIONS

### 4.1

## OVERVIEW OF FINANCING TOOLS

Support for surface transportation P3s comes largely from different entities within the Federal Highway Administration (FHWA).<sup>3</sup> The Center for Innovative Finance Support (CIFS) (previously the Office of Innovative Program Delivery), which strongly supports 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. Its P3 Toolkit now includes:

- Fact sheets on key aspects of P3 projects;
- Publications, including guidebooks and other documents;
- P3-VALUE 2.0 spreadsheet-based calculation tools for conducting feasibility assessments of potential P3 projects including risk assessment, value for money, benefit/cost analysis and financial analysis;

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<sup>3</sup> The Center for Innovative Financial Support serves as a P3 clearinghouse. It includes valuable information on P3 components, financing and alternative delivery mechanisms. The web address for the site is <https://www.fhwa.dot.gov/ipd/p3/>



- P3-SCREEN, a checklist of key factors and analyses involved in making decisions about possible P3 procurements;
- P3-VALUE Webinars for training in using the above tools;
- Training sessions for interested public officials; and,
- Frequently Asked Questions.

CIFS also offers detailed information on two federal financing programs that have been used by many P3 highway, transit and freight projects: Transportation Infrastructure Finance and Innovation Act (TIFIA) loans and Private Activity Bonds (PABs). Neither of these programs 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 these loans and bonds.

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. 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%. (DOT officials note that a project would have to be "truly exceptional" to receive a loan exceeding 33%). 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 have first call on 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. 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 3 lists all current PABs and TIFIA loans for P3 highway and bridge projects through the end of the government's Fiscal Year 2017.

**TABLE 3: HIGHWAY AND BRIDGE PROJECTS FINANCED BY TIFIA AND PABS**

Project	TIFIA (\$M)	PABs (\$M)	Total Project (\$M)	Year Financed
South Bay Expressway	\$140	\$0	\$658	2003
I-495 HOT Lanes	\$589	\$589	\$2,068	2008
SH 130, 5 & 6	\$430	\$0	\$1,328	2008
I-595 Express	\$603	\$0	\$1,834	2009
Port of Miami Tunnel	\$341	\$0	\$1,073	2009
NTE Phase 1 and 2A	\$650	\$400	\$2,047	2009
LBJ Express	\$850	\$615	\$2,615	2011
Midtown Tunnel	\$422	\$675	\$2,089	2012
Presidio Parkway II	\$150	\$0	\$365	2012
I-95 Express	\$300	\$253	\$923	2012
East End Bridge	\$162	\$677	\$1,319	2013
NTE Phase 3	\$531	\$274	\$1,637	2013
Goethals Bridge	\$474	\$461	\$1,436	2013
US 36, Colorado Phase 2	\$60	\$20	\$175	2014
I-69, Indiana	\$0	\$244	\$560	2014
I-4 Ultimate	\$949	\$0	\$2,877	2014
PA Rapid Bridge	\$0	\$721	\$1,118	2015
I-77 Express Lanes	\$189	\$100	\$636	2015
Portsmouth Bypass	\$209	\$227	\$634	2015
SH 288 Toll Lanes	\$357	\$273	\$1,064	2016
Pocahontas Parkway	\$150	\$0	\$597	2016
<b>Total</b>	<b>\$7,556</b>	<b>\$5,529</b>	<b>\$27,053</b>	

Source: FHWA Center for Innovative Financial Support, accessed March 22, 2018.

As Table 3 shows, \$7.56 billion in TIFIA loans led to more than \$27.05 billion in project activity over the past 15 years. PABs had a similar effect: \$5.53 billion in PABs helped make that \$27 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 \$7.5 billion of TIFIA loans, grants would need to total more than \$19 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 more than direct 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. 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.

## 4.2 A RECENT HISTORY OF TRANSPORTATION POLICY

The three most important aspects of the legislation for P3s are TIFIA, PABs and federal tolling provisions. Weighing new policy options benefits by examining the recent history of each funding source.

### THE FAST ACT AND TIFIA

In 2012, Congress passed the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21). The bill had increased the annual amount of TIFIA funding to \$1 billion, a large increase from previous years. Departments of transportation and transit agencies had pressed for additional TIFIA funding. Initially, that funding was well utilized. During FY 2014 the TIFIA office awarded a record 12 projects funding (many of them not P3s), totaling \$8.4 billion. But by the end of FY 2015 (Sept. 30, 2015), only seven of those 12 projects were awarded funding totaling \$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. 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 reduced funding from TIFIA to other programs. (This FAST Act guides 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.

For TIFIA for the five years covered by the FAST Act, Congress authorized just \$1.4 billion—an average of \$287 million per year. But that should be sufficient to cover most of the P3 projects, concludes Bryan Grote, the TIFIA expert at Mercator Advisors.<sup>4</sup> He has estimated that the TIFIA program should have total funding of nearly \$3 billion and could support as much as \$40 billion of loans, assuming a continued subsidy rate of 7.5% over the five-year life of the FAST Act.

### THE FAST ACT AND PABS

Many P3 advocates had 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.<sup>5</sup> During the 2017 tax reform process, in order to meet congressional budget rules, the original House legislation proposed eliminating equal treatment of PABs. Fortunately, the final legislation maintained the current tax treatment of PABs.

The PAB cap remains a real problem. Figures from the Center for Innovative Financial Support (CIFS) website show that PABs totaling \$6.6 billion have been issued across all types of transportation projects, and another \$4.3 billion in PABs has been allocated to specific projects either in planning or under construction. Additionally, there is approximately \$2 billion in additional PAB funding currently being evaluated. As a result, \$12.9 billion of the \$15 billion in PAB financing has been committed. The PAB cap may be reached by 2020.

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<sup>4</sup> Gomez-Ibanez and Meyer. *Going Private*.

<sup>5</sup> "Back in Business: A Blueprint for Renewing America's Infrastructure." *businessroundtable.org*, May 2017, Web.  
<https://www.businessroundtable.org/sites/default/files/reports/BRT%20Infrastructure%20paper%205142017.pdf>, May 2018.

As of mid-2018, key House and Senate committees are considering an increase in the PAB lifetime cap. The plan is for the House Ways and Means and Senate Finance Committees to pass companion bills. Some proposals raise the cap to \$20 billion or \$25 billion while others eliminate it altogether. The cap was instituted because PAB skeptics argued that PABs might not be successful. Given the importance of PABs in financing megaprojects, there are no longer technical doubts about their success.

### **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. 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 Association (ATA).

Several groups argued for revising the pilot program to make it more customer-friendly, by explicitly restricting the use of the toll revenues to the capital and operating costs of rebuilt/replacement Interstates, and by requiring rebates of state fuel taxes for miles driven on the replacement (tolled) Interstates. 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 American Automobile Association's (AAA) national board approved of tolling that followed these specific recommendations at their board meeting in August 2015. Clearly, making changes to the pilot program would help build support.

Senate 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 slot. 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 earlier this year. New participants in the pilot program would have an initial two years by which time they would have to have their project authorized and moving forward. Currently, Connecticut, Indiana, Oregon and Wisconsin are each interested in obtaining a program slot.<sup>6</sup>

## 4.3 THE PRESIDENT'S INFRASTRUCTURE PLAN

After President Trump's election, there was considerable excitement around his promised \$1 trillion infrastructure plan.<sup>7</sup> However, given political opposition to the plan's reduction of federal funding share to certain types of projects, the plan will undergo major changes that will dilute its needed policy reforms. Congress, too, has its own priorities and will draft its own plan. And with a multi-year surface transportation bill not expiring until 2020, authorizing new financing and funding is not Congress' top priority.

The president's proposal consists of \$800 billion in new financing authority and \$200 billion in new funding. Half of the \$200 billion would support a new incentive grants program. Most of that \$100 billion would support the U.S. Department of Transportation, but some would fund the Army Corps of Engineers and the Environmental Protection Agency. State and local governments that helped themselves by increasing revenue would receive some credit for that funding.

Of the remaining \$100 billion, \$50 billion would support grants in rural areas, with \$40 billion given out as block grants based on a population/rural road miles split. The other \$10 billion would fund performance grants. States that use their block grants and other federal funding well would be more likely to receive performance grants.

The remaining \$50 billion supports four other programs or categories of funding. New "transformative projects" would receive \$20 billion. The Trump administration envisions projects that are viable but might not attract private investment. Such projects would still be expected to generate revenue and have a positive impact on the project's geographic

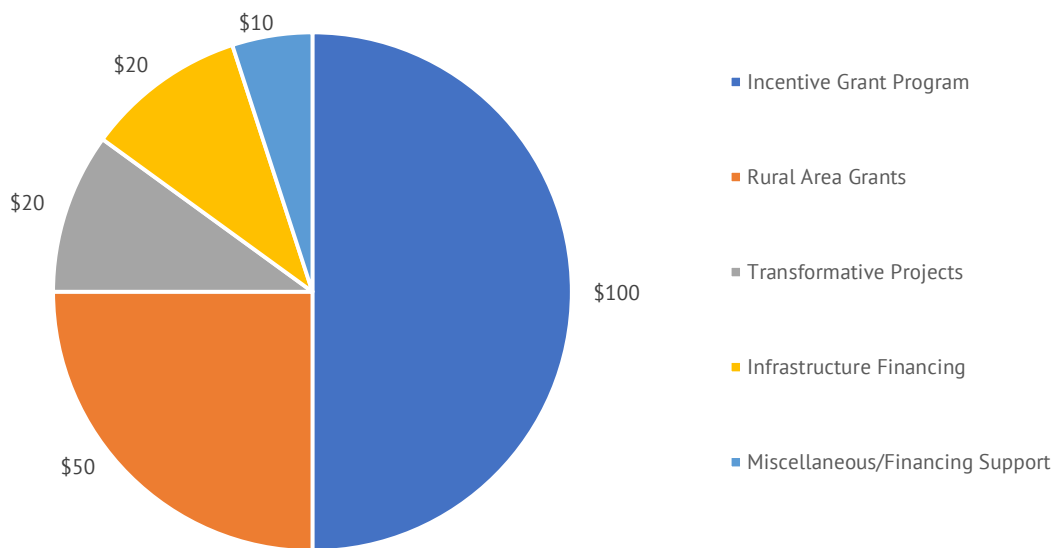
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<sup>6</sup> "P3s on German Federal Trunk Roads." Lecture.

<sup>7</sup> "Legislative Outline for Rebuilding Infrastructure in America." *whitehouse.gov*. January 2018. Web. <https://www.whitehouse.gov/wp-content/uploads/2018/02/INFRASTRUCTURE-211.pdf>, May 2018.

area. Federal credit programs, including Transportation Infrastructure Finance and Innovation Act (TIFIA) and the Railroad Rehabilitation and Improvement Financing (RRIF) programs, would receive \$14 billion to pay the credit subsidy to make new loans and loan guarantees. The following chart shows the administration’s proposed breakdown of funding.

**FIGURE 1: PRESIDENT TRUMP’S INFRASTRUCTURE PLAN: FUNDING BREAKDOWN (\$BILLIONS)**



The president’s support of tolling and P3 tools is particularly helpful. As discussed in the previous section, the TIFIA subsidy was \$1 billion during MAP-21, but was reduced significantly for the FAST Act. The administration proposes restoring the TIFIA subsidy to \$1 billion. Similarly, because \$11.2 billion in PABs have been authorized since August 2016, which means the lifetime cap of \$15 billion will be reached by 2020, the Administration also proposes eliminating the cap on PABs. The plan also supports innovative approaches to congestion mitigation, specifically variably priced toll lanes in urban areas designed to offer a congestion-free option. The plan reduces the restriction prohibiting tolling on the Interstate highway system, allowing states to determine how to rebuild the system.

## PART 5

# STATE LAW AND POLICY ON P3 CONCESSIONS

The FHWA Center for Innovative Finance Support lists 35 states, the District of Columbia and Puerto Rico as jurisdictions that have P3 authority for transportation infrastructure. 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 DBFOMs. Full P3s have been implemented in only nine states, in Puerto Rico and in projects under the auspices of the Port Authority of NY/NJ.

Legislators in the other states have failed to enter into P3s for one of several reasons: Some legislation contains serious flaws that make 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.

In 2017, a number of states debated bills establishing or expanding P3 authority:

### ARKANSAS

In March 2017, Arkansas State Senator David Sanders (R-AR) sponsored **SB 651**, a bill enabling P3 projects. In April, the bill was signed into law. Passed 84-3 in the House and



25-6 in the Senate, the law had bipartisan support due to the need to upgrade Arkansas' infrastructure.

## CALIFORNIA

The California Legislative Authority (Section 143 of Streets and Highways Code) for P3 projects expired on January 1, 2017. As a result, the California Department of Transportation (commonly abbreviated CalTrans) cannot enter into P3s. In February of that year, three different legislators attempted to solve this problem.

California State Representative Richard Bloom (D-CA) sponsored bill **AB 1454**. The bill would eliminate the sunset date on California's DOT authority "to enter into comprehensive development lease agreements with public and private entities." California State Senator Scott Wilk (R-CA) sponsored **SB 422** to extend P3 authority for California's DOT indefinitely. California State Senator Benjamin Allen (D-CA) sponsored **SB 768**, which would extend the authorization of the California DOT "to enter into comprehensive development lease agreements with public and private entities... for certain transportation projects that may charge certain users of those projects tolls and user fees."<sup>8</sup> All three bills failed in early 2018.

## HAWAII

In January 2017, Hawaii State Representative Nadine Nakamura (D-HI) sponsored **HB 2581**, which, among other things, would have created the Office of P3s and authorized the use of DBFOM and DBOM for delivery of infrastructure facilities. The bill died when the session adjourned. Two other Hawaii bills were very similar in establishing an Office of P3 within a department: Hawaii State Senator Donovan Dela Cruz's (D-HI) **SB 1306** and Hawaii State Senator Glenn Wakai's (D-HI) **SB 2705**. SB 1306 failed the first crossover deadline in April, and SB 2705 died when the legislature adjourned.

That same month, Hawaii State Representative Ryan Yamane (D-HI) sponsored **HB 627**, a bill authorizing the Department of Business, Economic Development, and Tourism to

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<sup>8</sup> "SB 768: Transportation Projects: Comprehensive Development Lease Agreements." *leginfo.legislature.ca.gov/*. 27, March 2017. Web. [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180SB768](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB768), May 2018.

establish a permanent P3 Coordinator position. In July, Hawaii Governor David Ige (D-HI) vetoed the bill.

## ILLINOIS

In January 2017, Illinois State Senator Heather Steans (D-IL) sponsored **SB 6**, which appropriated \$18 million for P3s to the Illinois DOT. In July, the bill was passed into law, overriding a gubernatorial veto.

In February 2017, Illinois State Representative Marcus Evans (D-IL) sponsored **HB 2753**, exempting design-build and P3 contracts involving the state's DOT and its Toll Highway Authority from "the penalty associated with spending state money on a public works project without having first obtained title to the land." In March, the bill was re-referred to the House Committee on Rules, where it never received a hearing. Such legislation would be beneficial as it could speed the delivery of infrastructure and increase the popularity of P3s.

## KANSAS

In April 2017, Kansas Governor Sam Brownback approved **SB 55**, which provided surety bonds for financial protection for contractors working on P3 projects. The legislation spelled out consequences and legal actions for failure to pay a contractor or subcontractor. It was passed to encourage P3 projects in Kansas.

## KENTUCKY

In February 2017, Kentucky State Senator Max Wise (R-KY) sponsored bill **SB 203**, a bill suspending the requirements for General Assembly approval for P3s contracted prior to July 1, 2020. The bill passed the legislature in March and was signed into law by Kentucky Governor Matt Bevin (R-KY) in April.

## LOUISIANA

In early June 2017, the general assembly passed Louisiana's **HB 379**, authorizing the Regional Transit Authority to solicit and enter into P3 contracts. The bill was signed into law by Louisiana Governor John Bel Edwards (D-LA) on June 14th.

## MASSACHUSETTS

In March 2017, Massachusetts State Representative Harold Naughton, Jr. (D-MA) **sponsored HB 2746**, which authorizes the Massachusetts DOT to enter into P3s for transportation projects. In April 2018, the bill was referred to the House Ways and Means Committee, after having received a favorable report from the Joint Committee on Transportation.

## MICHIGAN

In February 2017, Michigan State Senator Mike Kowall M (R-MI) sponsored **SB 97**, which authorized public authorities to use P3s for transportation or facility (public building, health care or laboratory facility) projects. In November, the bill passed the House Committee on Transportation and Infrastructure. However, after no companion legislation was introduced in the House, the bill died.

In March 2017, Michigan State Representative Laura Cox (R-MI) sponsored **HB 4323**, which created a P3 investment fund providing for capital assets, energy resources, investment opportunities, transportation infrastructure improvements, and P3s that provide economic benefits. Governor Rick Snyder signed the bill into law in September 2017.

That same month, Michigan State Senator Hildenbrand (R-MI) sponsored **SB 218**, which would create a P3 investment fund within the Department of Technology, Management, and Budget. The bill was referred to the State Senate Committee on Appropriations, where it died.

## NEVADA

In June 2017, Nevada's **SB 448**, authorizing counties with a population exceeding 700,000 to enter into P3 transportation projects, was signed into law by Nevada Governor Brian Sandoval (R-NV). Clark County, home to Las Vegas, is the only county that qualifies.

## OKLAHOMA

In February 2017, Oklahoma State Representative John Montgomery (R-OK) sponsored **HB 1534**, which authorizes responsible governmental entities to take any action to execute any P3 contract for the provision of a public service. In May, the bill was signed into law by Oklahoma Governor Mary Fallin (R-OK).

That same month, Oklahoma State Senator James Leewright (R-OK) sponsored **SB 430**, which creates the new Partnership Committee, which will be used for reviewing P3 proposals and the bidding process. In May, the bill was signed into law by Governor Fallin.

## OREGON

In February 2017, Oregon State Representatives Mark Johnson (R-OR) and Chuck Thomsen (R-OR) sponsored **HB 2750**, which permitted the Port of Hood River to establish tolls on bridges it operates and maintains. In August, the bill was signed into law.

## VIRGINIA

In February 2017, Virginia State Senator Jeremy McPike (D-VA) threatened to reintroduce his bill dictating detailed information on toll rates and trip times on the I-95/495 and I-66 express toll lanes if VDOT did not make detailed information available to the public.

## WASHINGTON

In January 2017, Washington State Senator Hans Zeiger (R-WA) sponsored **SB 5330**, which includes a provision to modify the review process for non-toll P3 projects but leave P3 projects involving toll-related facilities unchanged. The bill was reintroduced in June, and presently sits in the state legislature's Transportation Committee.

## PART 6

# MAJOR HIGHWAY P3 CONCESSIONS BY STATE

A September 2014 report from Moody's Investor Services found that "(T)he U.S. has the potential to become the largest P3 market in the world, given the sheer size of its infrastructure."<sup>9</sup> Despite this potential, actual deal flow has remained anemic over the last few years. The overly cautious financial culture at some state DOTs has caused many states to avoid P3s. Long delays in getting TIFIA loans approved and DOT's implementation of the TIFIA program as a discretionary instead of check-the-box process contributed to concerns about the P3 pipeline. But leading-edge states continued moving forward, as the following section on P3 activity by state makes clear.

### ALABAMA

In November 2017, the Alabama DOT (ALDOT) received four statements of qualification for the **Mobile River and Bayway Project**, the agency's first P3. The \$1.5-billion DBFOM project will include constructing a bridge across the Mobile River and replacing the existing I-10 Bayway. In February 2018, ALDOT shortlisted three consortia: I-10 Mobility Partners (Ferrovial, Meridiam, and Parsons), Gulf Coast Connectors (ACS, HOCHTIEF, John Laing, Macquarie, Dragados, Flatiron, Lane, and T.Y. Lin) and Mobile River Bridge Group (InfraRed,

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<sup>9</sup> Email to Robert Poole from Bryan Grote, Mercator Advisors, Feb. 3, 2016.

Shikun & Binui, Southland, Astaldi, Johnson Brothers, Stantec and FIGG). After releasing an RFP for the shortlisted groups, ALDOT hopes to award contracts in late 2018.

## ARIZONA

In September 2017, the Arizona DOT (ADOT) released an RFQ for a **freeway lighting P3** in the Phoenix metropolitan area, a project for which ADOT shortlisted three teams in December. The 15-year, \$200-million DBFOM contract will include installing LED lights over 300 miles of highway. Bids are due in mid-2018.

## COLORADO

In August 2017, a team led by Kiewit and Meridiam won the 32-year DBFOM concession for the **Central 70 express toll lanes** in the Denver metropolitan area. Kiewit Meridiam Partners (KMP) submitted a proposal to complete the \$1.8-billion project six months ahead of schedule. The project reached commercial close in November and financial close in December.

## FLORIDA

In February 2017, four companies prequalified for the **I-395/SR 836/I-95** DBF project. The partnership would involve three Miami-area projects: improvements on I-395, improvements on SR 836, and concrete replacement on I-95. In May 2017, Florida DOT (FDOT) was poised to award the \$800-million project to the Archer Western-de Moya Joint Venture, but the award was delayed due to former Miami Commissioner Marc Sarnoff suing the FDOT, challenging the fairness of the bidding process. In May 2018, the lawsuit was withdrawn. FDOT and Archer Western need to sign an amended contract before construction can begin.

## INDIANA

In January 2017, Isolux Corsan agreed to a \$75-million recapitalization of the \$325-million **I-69 highway** DBFOM project, initially awarded to the company in 2014. The availability payment project is extending I-69 from Bloomington to Martinsville. However, in June 2017, with limited construction activities and Isolux's inability to pay subcontractors, the state terminated the contract with Isolux and assumed control of the highway project.

## LOUISIANA

In January 2017, an RFI was released for the **I-10 Capital Corridor Improvements Project**. Among its purposes, the DBF project will widen I-10 through the Capital Region, which includes the East and West Baton Rouge Parishes. It will also improve the State Road 415 Interchange.

## MARYLAND

In September 2017, Governor Larry Hogan (R-MD) announced a \$9-billion plan to reduce traffic congestion and called for P3 proposals for **express lanes on Interstate 270 and the Capital Beltway (I-495)**. The Maryland DOT called the plan “the largest highway P3 in North America to bring congestion relief to Maryland.”

## MASSACHUSETTS

In February 2017, the Massachusetts DOT issued an RFI for the **Metropolitan Highway System Lighting Project**. The potential DBFOM project would aim to improve and modernize lighting in the Metropolitan Highway System (MHS).

## MICHIGAN

In September 2017, the Michigan Department of Transportation (MDOT) issued an RFQ for the **I-75 Modernization Project** in Oakland County. The \$575-million DBFM project, which includes widening and reconstructing 18 miles of freeway, will be the state’s first highway P3. In December, the state received proposals from five groups releasing an RFP to four shortlisted teams in May 2018: Meridiam Walsh, AECOM/John Liang, Star/Vinci, and ACS/Dragados. MDOT hopes to name the winning bidder in September 2018.

In September, the Windsor-Detroit Bridge Authority (WDBA) extended the submission deadline for the three finalists of the \$2-billion **Gordie Howe International Bridge** crossing the Detroit River. In June 2018, shortlisted teams were invited to rebid with their best and final offer. All three initial bids exceeded the affordability threshold allowed by the Windsor-Detroit Bridge Authority. Financial close is targeted for the end of September 2018.

## NORTH CAROLINA

In March 2017, the North Carolina DOT (NCDOT) selected Mercator Advisors LLC to independently review the **I-77 toll lanes project** awarded to Cintra in 2014. In August 2017, Mercator released a report with four recommendations to the state, including termination of the contract. In May 2018, the NCDOT advisory board voted to recommend keeping one toll lane and making the second lane free. NCDOT could end the contract by paying a termination fee, but the termination can only be accomplished in full, not in part as suggested by the advisory board.

## PENNSYLVANIA

In October 2017, the Pennsylvania DOT announced it was accepting unsolicited proposals for **potential P3s in the transport sector**. Proposals could be offered for roads, bridges, ports, and other transportation sector projects.

## RHODE ISLAND

In May 2017, Rhode Island awarded a \$25-million DBOM contract to Kapsch TrafficCom. The concessionaire will install toll-collection technology on **I-95, I-195, and I-295**.

In December 2017, the Rhode Island DOT awarded the \$248-million contract to renovate the **Routes 6 and 10 interchange** in Providence to concessionaires 6/10 Constructors. The project will be completed by 2023.

## TEXAS

In May 2017, the concessionaire for **SH 130 Segment 5 and 6 toll concession**, the SH 130 Concession Company, filed for bankruptcy. In June, the company gained new ownership and new financing, emerging as a “much stronger company” according to the new CEO. The concessionaire operates and maintains segments 5 and 6 of SH 130 from Mustang Ridge to Sequin.



## VIRGINIA

In July 2017, the \$500-million **I-95/I-395 Express Lanes Project** reached financial close. The project will convert two reversible high occupancy vehicle (HOV) lanes into three reversible high occupancy toll (HOT) lanes on I-395 between SR 236 and the Washington, D.C. line.

In November 2017, the **I-66 toll** concession reached financial close. The \$3.55-billion project will include creating two new tolled express lanes from University Blvd in Gainesville to I-495.

In December 2017, the Virginia DOT issued an RFQ for the \$3.8-billion **I-64 Hampton Roads Bridge Tunnel**. The P3 project will widen I-64 by two lanes. A draft RFP was issued in May 2018. Three teams were shortlisted for the project: Hampton Roads Capacity Constructors, Hampton Roads Connector Partners, and Skanska Kiewit Joint Venture. All teams will be encouraged to submit detailed proposals in Fall 2018. The winning team is expected to be chosen in 2019.

# ABOUT THE AUTHOR

**Baruch Feigenbaum** is assistant director of transportation policy at Reason Foundation, a non-profit think tank advancing free minds and free markets. Feigenbaum has a diverse background researching and implementing transportation issues, including revenue and finance, public-private partnerships, highways, transit, high-speed rail, ports, intelligent transportation systems, land use and local policymaking.

Feigenbaum is involved with various transportation organizations. He is a member of the Transportation Research Board Bus Transit Systems and Intelligent Transportation Systems Committees. He is vice president of Programming for the Transportation and Research Forum Washington Chapter, a reviewer for the *Journal of the American Planning Association (JAPA)* and a contributor to *Planetizen*. He has appeared on NBC Nightly News and CNBC. His work has been featured in the *Washington Post* and *The Wall Street Journal*.

Prior to joining Reason, Feigenbaum handled transportation issues on Capitol Hill for Representative Lynn Westmoreland. He earned his master's degree in transportation from the Georgia Institute of Technology.

