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Arizona Wades Into P3 Mainstream With South Mountain Freeway $916m DBM Deal

by Fredric W. Kessler, Partner, Nossaman LLP

P3 purists—especially the financiers in our industry—like to think that it's not a P3 if there isn't private equity and debt. They would have analysts believe that private equity and debt are the essential ingredients for achieving the life cycle price efficiency and risk transfers that are the hallmarks of P3 project delivery.

TxDOT departed from this orthodoxy with several design-build-maintain contracts, most of which structured a series of five-year optional maintenance periods into the contracts. The Arizona Department of Transportation has taken the TxDOT approach to a new level, setting precedent with its DBM contract for the South Mountain Freeway Project inked February 26 with Connect 202 Partners, a design-build and maintain partnership led by Fluor Enterprises, and including Granite Construction and Ames Construction, with Parsons Brinckerhoff as lead designer, and DBi Services LLC, as maintenance partner with Flour.

The project is the last major highway piece of the Phoenix metropolitan regional transportation plan. It will be 22 miles long, with eight lanes, including two HOV lanes, a major traffic interchange, a river crossing and connections with 14 urban arterial streets. Construction is expected to begin in July 2016 with completion and opening to traffic slated for late 2019.

ADOT obtained a price to design and build the project—$916 million, which ADOT officials state represents a savings of $122 million. That is a conservative number. Connect 202 Partners' design also will avoid about $47 DBi Smillion in right-of-way costs. In addition, the risk shifting under the DBM approach is expected to save ADOT administrative and change order costs, for a total cost savings that could be in the range of $300 million. The contract includes a 30-year maintenance period priced at $132 million for both routine and capital maintenance (in 2015 dollars).

These are the immediate, widely reported facts. But what is the inside story? How did this transaction materialize? Why DBM? What does it mean for ADOT? For the U.S. P3 landscape?

The DBM Decision

In early 2013 a group led by Kiewit Infrastructure and Sundt handed the ADOT P3 office an unsolicited proposal. In it, they proposed to accelerate delivery of the South Mountain project through a design-build contract for the entire 22-mile length, to assist ADOT with placing TIFIA financing for the project, and, if ADOT was interested, to provide limited maintenance services.

ADOT had never done business like this before. Its plan for South Mountain was to build it in nine separate segments using traditional low-bid, pay-as-you-go construction contracting. The project would not be completed until mid- to late- 2022, stretched out over the time frame projected for generating enough local sales tax revenue to fund the project. The Kiewit-Sundt proposal precipitated a hard look at whether there was a better way.

ADOT drew together its technical, financial and legal P3 consultants to evaluate the unsolicited proposal and conduct a value for money analysis. That analysis compared six different project delivery methods, including accelerated design-build, design-build-finance, design-build-maintain, and design-build-finance-maintain. As ADOT's former CFO said, you could throw a blanket over the quantitative results for the last three, they were that closely bunched. Qualitative considerations, often given short shrift in VfM analysis, became the deciding factors.

ADOT landed on DBM for a few key qualitative reasons. Foremost among them is ADOT's strained maintenance budget. The bulk of it comes from annual state appropriations. Maintenance appropriations levels in real dollars have gradually declined in the state. ADOT could not come to terms with the prospect of a major commitment to annual availability payments that it perhaps would find one day it could not afford unless it beggared its maintenance budget for more critical and older freeways. The price to end an availability payment P3 early, including debt repayment, breakage costs and return on equity, would be formidable. By contrast, the cost to end a DBM P3 early would be much more manageable: demobilization costs and compensation for a few years of lost profit on maintenance services.

Also important to ADOT was the ability to accelerate project delivery through a modest short-term bond issuance against future local sales tax revenues for transportation. ADOT could issue the bonds on a tax-exempt basis even with a 30-year maintenance contract because the project is not revenue-generating.

Finally, ADOT was very interested in risk transfer over the life of the project, and concluded that DBM could achieve this objective just about as efficiently as DBFM.

ADOT's Culture Shift

Once ADOT decided to pursue a competitive DBM procurement, the department experienced a profound cultural metamorphosis. Leadership was crucial to this change. Director Halikowski remained consistent throughout the procurement in supporting this new way of doing business. He initiated a significant change in department organization and lines of authority to make room for a devoted South Mountain implementation team. The challenge of instituting this kind of cultural shift, across virtually every division and discipline in the department, cannot be underestimated, some meeting the challenge with more success than others.

Nowhere was the change in culture more dramatic than in the area of design and construction specifications. While ADOT has had a design-build statute and program for many years, it always operated under traditionally prescriptive specifications and with significant ADOT controls over design, means, methods and quality management. ADOT's P3 technical consultant, HDR, led a months-long effort to challenge ADOT engineers to adopt performance-based specifications for the South Mountain project. ADOT initiated the effort with an early 2015 meeting of all group managers and technical leads, at which former US Secretary of Transportation Mary Peters spoke eloquently about the national perspective encouraging performance-based P3 contracting. As ADOT proceeded with critical examination of its standard specifications, time and again it became evident that the 30-year maintenance obligation enabled prescriptive specifications to give way, as the proposer would bear the risk of its own design and construction decisions. It allowed true life cycle considerations to inform proposer design and construction choices.

As just one example, ADOT has always prescribed concrete pavement with a rubber overlay throughout the Phoenix freeway system. For South Mountain, ADOT left the choice of base pavement to the proposers. Two of the three chose concrete; the winning proposer chose asphalt.

There is nothing like hands on involvement in a P3 project procurement to educate agency staff at all levels about how P3s really work. Throughout the procurement, the project implementation team reached out to the greater ADOT organization to involve them in the process. For example, the implementation team recruited over 40 members of ADOT staff, and over 50 members of the general engineering consultant team, as experts to assist with evaluation of different parts of the technical proposals. I am not aware of any effort at this scale in other US best value procurements. It was a resounding success. The technical proposals received unprecedented expert scrutiny; P3 education efforts reached deep into the organization; and confidentiality was maintained.

Procurement and Contract Innovations

The adage that when you've seen one P3, you've seen one P3 is certainly true for the South Mountain solicitation documents and DBM contract. While many elements are familiar to industry participants, a few innovations should merit study by other transportation agencies.

The single biggest risk item for the project is right-of-way. ADOT's schematic design, which served as the preferred alternative for the environmental impact statement and record of decision, identified the need to acquire up to $700 million of residential, commercial, industrial and agricultural parcels. To manage cost and risk, ADOT made two essential decisions.

First, it turned over to Connect 202 Partners the responsibility to carry out right of way acquisition services for most of the non-residential parcels, while retaining the responsibility to pay the acquisition price. This approach significantly reduces ADOT's risk of causing delay in Connect 202 Partners' construction schedule.

Second, ADOT created financial incentives for the proposers to optimize project design and avoid the need for parcel acquisitions. During the proposal period, proposers received the opportunity to confidentially identify parcels they would avoid. For each such parcel, the proposer received a credit against its pricing for the estimated avoided cost of parcel acquisition, relocation and demolition.

In addition, under the DBM contract, Connect 202 has further opportunity to avoid parcels and share in the savings in acquisition costs. While somewhat complicated, the credit provisions worked quite well.

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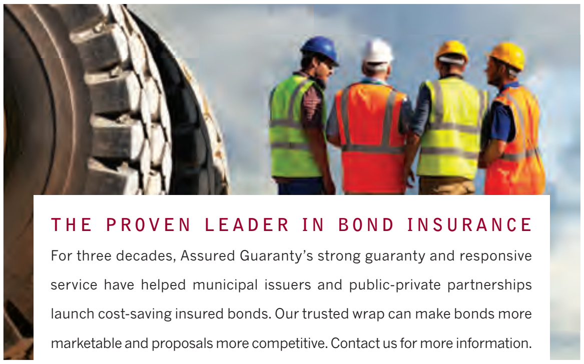
As a result, ADOT expects to realize significant savings in its ROW acquisition budget for the project.

The project also faces environmental risk.

IN THIS ISSUE

TEAMWORK GUARANTEED



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Litigation challenging the NEPA documentation and record of decision was filed during the procurement. ADOT anticipated this eventuality, and structured the construction schedule to avoid construction in the area of environmental controversy prior to a final decision in the litigation. ADOT gave the proposers a benchmark window for when it would issue notice to proceed with construction in that area, and asked proposers to price daily adjustments in the contract price if notice to proceed were advanced or delayed outside the benchmark window. The price adjustments proposed were factored into the price scoring and built into the signed DBM contract.

On the maintenance side, ADOT offered a full 30-year maintenance term, discarding five-year optional maintenance periods in favor of a long, certain period for both parties. ADOT carefully calibrated maintenance performance standards and response times to approximate its own maintenance behaviors for the Phoenix freeway system. There was no desire – and no budget – to call for higher standards. The routine maintenance pricing ADOT received closely aligned with its projections and with average per mile maintenance costs for the Phoenix regional system.

ADOT also carefully identified discrete items of capital maintenance, including pavement overlay. ADOT plans to fund the capital maintenance with future federal-aid funds. FHWA has indicated that each round of capital maintenance will be viewed as a separate federal-aid project, meaning that ADOT will have to plan ahead and enter into a separate FHWA project agreement each time.

Federal, State and Local Cooperation

The choice of the DBM project delivery method ushered in an extraordinary degree of federal, state and local cooperation. The three main capital funding sources are federal-aid funds, state highway funds, and local sales tax revenues for transportation. The Maricopa Association of Governments, the MPO for the region, proved to be a bastion of support for the DBM method, and participated, along with the City of Phoenix, in the evaluation of statements of qualifications and proposals. FHWA worked closely with the project implementation team and met every schedule need of the procurement.

Intergovernmental cooperation was a key ingredient to success. We have seen many P3 projects fail for lack of such a common purpose. It also helped that Arizona's P3 statute does not require contract approval from a separate governmental body, saving the procurement from extraneous political risk.

Beyond South Mountain

Often the biggest hurdle to P3 delivery is the conventional wisdom that P3s are not worthwhile because no private party can match or beat the government's cost of financing. An adjunct piece of conventional wisdom is that P3s lock the agency into years of payments that could produce future imbalance in transportation budgets. Sometimes, explanations and evidence of life cycle cost efficiency, opportunity costs and the like are not enough to change minds.

Long term DBM project delivery represents a viable alternative for transportation agencies that adhere to conventional wisdom. South Mountain is a clear demonstration that significant cost and schedule efficiencies over the design life of a project can be achieved without private equity and debt. Tax-exempt rates can be available in the right circumstances, and future exit costs in order to deal with unexpected budget meltdowns are quite manageable.

And there is no shortage of interest in DBM contracting in the private P3 industry. From five statements of qualifications, ADOT short listed three excellent teams, and received three strong proposals.

South Mountain has put Arizona squarely on the US P3 map. The momentum behind the P3 delivery method within ADOT and among elected officials is palpable. Already there are calls for P3 legislation for social infrastructure, and ADOT is examining the use of P3s for other major projects in planning stages. From its P3 office to its South Mountain core team, ADOT now has a solid roster of P3 practitioners and devotees. The P3 industry should keep its eyes on Arizona. ■

■ ■ ■

■ Chicago I-55 Revenue Risk P3 Floated

This summer, Illinois DOT expects to select a preferred option for solving congestion on a 25-mile stretch of the Stevenson Expressway (I-55) serving Chicago. Among the solutions being considered is tolled median lanes delivered and operated using a P3 model. A resolution was passed by the legislature on Feb. 4 allowing consideration of a P3 approach.

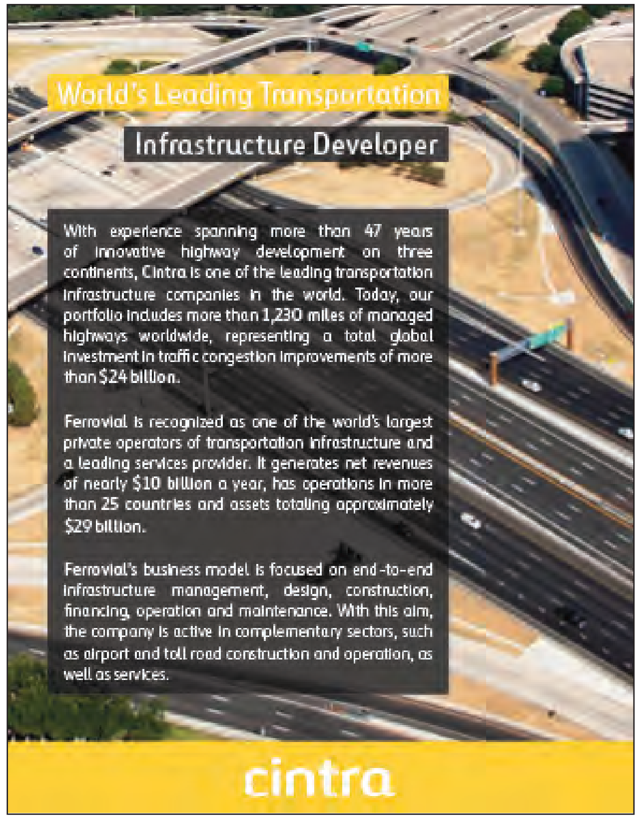
No public funds have been identified for the project. Instead, Gov. Bruce Rauner, a Harvard MBA, suggested in a press release that the project would be self-supporting at corridor traffic levels of 170,000 adt. The Illinois DOT project website notes that the scope of work in environmental studies being done by Stantec involves the addition of one lane in each direction within the existing median of I-55 to meet expected 2040 travel demand.

Construction could start as early as next year and be completed in 2019, according to the governor's press release, in which the governor estimated private delivery could save taxpayers $425 million in capital costs.

■ Thimble Shoals Tunnel Prize Entices

The accelerated procurement of a second tunnel under the Thimble Shoal navigation channel of the Chesapeake Bay Bridge-Tunnel (CBBT) in Virginia is coming to a frantic conclusion as four shortlisted design-build teams submit technical proposals on March 1 and then final prices on April 29.

Bidders originally were directed to consider lifecycle operation and maintenance costs a priority, but were redirected in August to focus on lowest first cost



after the owner's budget had tightened.

The final RFP issued on Feb. 1 included a DB estimate by Jacobs of $724 million for an immersed tube bid option. Bidders may also propose a bored tunnel, but not both (see box). Dragados qualified to bid only the bored tunnel option, and Skanska's team qualified only for immersed tube delivery. Teams led by Bouygues/Traylor/Manson and Archer Western/VINCI qualified for both and could bid either way.

Thimble Shoals is one of the most sought-after contracts in the U.S. civil construction market. Over 70 international companies are on the pursuit teams. To encourage sharp pencils, unsuccessful bidders each will be paid a $1.25 million stipend.

The public owner, the Chesapeake Bay Bridge-Tunnel District (CBBTD), is a non-DOT, single-facility toll authority with extensive tunnel operating experience. Eight national technical and financial consultants advise it. Funding for the capacity expansion is coming from toll revenue debt in the form of a large TIFIA loan and tax-exempt bond financing.

The CBBT was opened in 1964 as a two-lane highway, mostly on raised trestles in the shallower stretches of the Bay. Over its 20 miles, CBBT features four bridges and a pair of mile-long immersed-tube tunnels anchored between four man-made islands at the Bay's

Maryland's GOP Governor Larry Hogan Approves Purple Line Transit P3

On March 2, Maryland's Republican Gov. Larry Hogan instructed Maryland DOT to move forward with the Purple Line light rail project pending further negotiations with Purple Line Transit Partners over cost reductions.

The Fluor-led design-build team, Purple Line Transit Constructors, comprises Fluor Enterprises Inc., The Lane Construction Corp., Traylor Bros., Inc., and includes subcontractor Atkins North America, Inc. as the lead designer. The Purple Line Transit Constructors team will begin design and construction later this year with passenger service scheduled for early 2022. Following the construction, Purple Line Transit Operators, a Fluor-led team comprising Fluor Enterprises, Alternate Concepts, and Spanish railcar vendor CAF USA, Inc., will provide 30 years of operations and maintenance services.

The equity team is managed by Fluor (15%) and includes Meridiam Infrastructure (70%), and Star America (15%).

The 16.2-mile line is designed to operate using two-car trains powered by overhead electrical lines, mostly along local streets. Ridership was estimated by Maryland Transit Administration (MTA) a year ago to be 44,400 linked trips per day and operating costs to be $54.5 million in 2020. Fluor's operating costs were not broken out in the governor's announcement.

Fluor's press release put the design-build cost of the current project at $2 billion. That is substantially less than MTA's $2.45 billion estimate (including $121 million in finance charges) in its New Starts report to the Federal Transit Administration (FTA) in November, 2014.

"With great construction know-how, superior transit expertise and continued low interest rates, Purple Line Transit Partners is positioned to deliver a tremendous value to Maryland taxpayers," said MDOT Secretary Pete K. Rahn.

MDOT has reduced overall costs during the 36-year life of the agreement by more than $550 million. Average annual availability payments will be $149 million, versus an earlier estimate of $167 million over 30 years. With an expected $1.36 billion in fare revenue along with local and federal contributions to the project, the final costs for the state over the 36 years will be about $3.3 billion.

Following Board of Public Works approval in April, the contract will proceed to financial close in early June. This financial step will allow the state to work with the U.S. Department of Transportation's Federal Transit Administration to finalize a Full Funding Grant Agreement in July with the MDOT and MTA that will oversee the Purple Line construction project.

Project scope is largely embedded in the 65% design done by MTA for its environmental impact study. So savings came largely from:

- rebalancing risk allocation—for example, utility relocation delays, signaling and other risks had already been shifted to MTA.
- pragmatism—the private operator will get some leeway to correct mistakes during the start-up period, rather than having to achieve 100% perfect performance on day one.
- embracing innovation, particularly in railcar design and operations.

MTA will give Purple Line Transit Partners full notice to proceed on the project at financial close with construction to begin in late 2016. The Purple Line is expected to open for service in spring 2022. ■

A POLITICAL TRIUMPH FOR A HARDLINE TAX CUTTER

Awarding a Purple Line contract achieves many good things for Gov. Larry Hogan two years into his first term:

• It gives him further credibility with his GOP base as a cost cutter.

(No details are available, but it seems likely that trade unions and MTA's transit operating union gave some ground to repair relations with the governor they worked so hard to defeat in 2014).

• It proves to the business community that Hogan can deliver a major infrastructure improvement as a P3, with schedule guarantees and life-cycle savings built into the bid price.

• It demonstrates to voters that Hogan is a pragmatic conservative, not an ideological purist.

(A big chunk of the state's tax revenue is collected in the Purple Line corridor, where real estate interests have lined up financing for projects around some of the 21 light-rail stations. Also, failing to procure the Purple Line would have sent $900 million in federal transit grants back to Washington for redeployment, possibly to Chicago.)

The win is well timed. Hogan is battling his overwhelmingly Democratic legislature now to accept broad spending caps as part of a restructuring of the state's debt-laden operating budget of about $17.1 billion. Hogan's approval rating among voters is already close to 60%. The Purple Line success may drive that number even higher as more Democrats move to the right.

Then there is the bigger picture. Once it is financed later this year, the Purple Line will mark the first large, controversial transit project successfully delivered by a Republican governor in recent memory. Republican governors have been cancelling rail projects and turning back federal grants for the past eight years.

Democrats in Congress talk the talk on transit, and FTA has more money than it can spend. But Democratic governors and mayors haven't delivered many shovel-ready projects during the Obama Administration

Credit then to Hogan, Pete Rahn and the private P3 teams for walking the walk on Purple Line.

"Hogan has taken a point of political exposure and turned it into a point of distinction," says Leif Dormsjo, who conceived the Purple Line procurement as deputy DOT Secretary under O'Malley.

The political message on Purple Line, he says, is that "it took a shrewd, practical Republican to pull off what Democrats have been trying to do for 20 years." ■

It took a shrewd, practical Republican to pull off what Democrats have been trying to do for 20 years.

two deep-channel locations, to facilitate the passage of large ships. *(continued on p. 8)*

The new 5,710-ft, two-lane vehicular tunnel being procured now will double capacity at a choke point near the southern end of the CBBT, near Norfolk, Va. The work combines complex tunnel, island, and trestle construction in a difficult marine environment.

Midtown Tunnel price check

One reason CBBTD offered bidders the option of a bored tunnel is to try to offset the competitive advantage held by Skanska's Midtown Tunnel DBFOM team. Skanska/Kiewit/Weeks Marine expect to complete their 4,000-ft crossing of the Elizabeth River in 2017.

Their two-lane immersed tube tunnel was built in eleven 350-ft-long sections prefabricated at a Skanska yard in Baltimore. The sections were floated from there to the tunnel site in Portsmouth, Va., not far from the Thimble Shoals yard.

CBBTD consultants hope that the competitive bids on the Thimble Shoal tunnel will provide a rough price check on Skanska's Midtown tunnel, which was priced in a negotiated DB contract signed by Virginia DOT in 2012.

Midtown was Skanska's first P3 project. Its conceptual proposal was accepted by Virginia DOT in 2009. Terms and prices were extensively negotiated over the next two-plus years. The design-build price was set at $1.47 billion in 2012 but that included repairs to an existing tunnel and work on an access road. Virginia's Office of PPPs was unable to break out the tunnel component for this story.

Among other things, there are significant differences between the two tunnels in terms of the soils, permitting requirements, the urban (Midtown) and rural work sites (Thimble Shoal) which would make any price comparisons suspect. "From our perspective, there would be little to no value in comparing the two tunnels," says Jacqueline H. Cromwell, head of business development for the PPP office.

BIDDERS

Shortlisted teams and their tunneling options—immersed tube tunnel (ITT) or bored tunnel (bored):

- Archer Western-VINCI Construction, with AECOM (ITT and bored)
- Bouygues/Traylor/Manson, with Arup (ITT and bored)
- Dragados Team: Dragados USA/Schiavone, with HMM (bored)
- SKW Tunnel Builders: Skanska/Kiewit/Weeks Marine, with WSP PB and Parsons (ITT)

(A fifth team, Salini/Healy/GLF, submitted a SOQ but was not shortlisted.)

ADVISING CBBTD ARE:

Moffat & Nichol (strategic advisor)

Jacobs (team design manager)

COWI (ITT design)

HNTB (construction manager)

PFM (financial advisor)

BOM Merrill Lynch (lead banker)

Steer Davies Gleave (traffic and revenue)

Nossaman (project counsel)

Nixon Peabody (bond counsel)

■ LaGuardia Airport P3 Costs Test Port Authority's Capital Budget

The various departmental managers at the Port Authority of NY/NJ have been ordered to reprioritize their capital budgets for 2016 to find savings needed to offset cost growth, mainly on the LaGuardia Airport P3 project.

Scope creep and changes made in the past six months to satisfy Gov. Andrew Cuomo's redesign of the central terminal building have added hundreds of millions to the $3.56-billion all-in estimate made in 2014. Final numbers won't be known until the DBFOM terms are put to a vote by the Port Authority board, now scheduled for March 24.

An industry source cited by the *Wall Street Journal* estimated the final pricetag could be as high as $5 billion. A source working with the LaGuardia Gateway Partners says it will be considerably less than that. The P3 financing piece, he says, "is still pretty manageable," not counting the $110-million contribution expected from passenger facility charges and milestone checks written by the Port.

"Surprisingly," Gov. Cuomo's last-minute addition, the terminal's "Great Hall," is not a significant cost driver, he says.

California P3 Market Update:

■ High Speed Rail Pivots To Silicon Valley, Unsolicited Proposals Sought

In a major pivot this month, the California High-Speed Rail Authority abandoned plans to build the high-cost, high-ridership Los Angeles segment of its bullet-train first and instead announced it would build a 250-mile leg north to San Jose in a dash to provide commercial service by 2025.

Toward that end, the authority will roll out guidelines soon for accepting unsolicited proposals to complete its 100-mile initial operating segment (IOS) in the Central Valley and then some or all of the northern route to Silicon Valley.

"We are definitely open to unsolicited proposals," says Jeff Morales, the Authority's CEO. Ten railcar vendors and a roomful of infrastructure funds are hovering. Whether civil works will be bundled with track, railcars and other components in a P3 is being considered now, says Morales.

The authority's draft 2016 business plan predicts first-year revenues in 2025 for this segment will be $550 million (2015 dollars). Updated estimates by WSP | Parsons Brinckerhoff put the capital cost at $21 billion. That includes $5 billion to procure and prepare the right of way; $8 billion to build the track and structures; and $2.7 billion for vehicles, electronics and signals.

Project financing will rely mainly on the volatility of cap and trade revenues. Gov. Jerry Brown's fy 2016-17 budget directs $500 million to high-speed rail. That's "a prudent amount," says Morales because proceeds are running well above that this year. Half of the $500 million will be spent by the authority on a paygo basis and half will be dedicated to developer financing. Discussions are underway on how to make those monies ratable.

To get safety certification for the entire system, Morales says, the authority needs to add track, electronics and stations to the 100 miles of IOS railbed being built under three DB contracts between Merced and Bakersfield. The long, straight sections of track in this section will allow testing at the 200-mph-plus speeds required by the FRA. Ferrovial, Dragados and Tutor Perini are building the railbed for the IOS and at least the Spanish firms have the capability to complete the IOS under a P3 contract.

An early infusion of $3 billion in federal stimulus funds by the Federal Railroad Administration has paid for that work, but the federal money runs out on Sept. 30, 2017. Funds unspent by then must be returned to the Treasury.

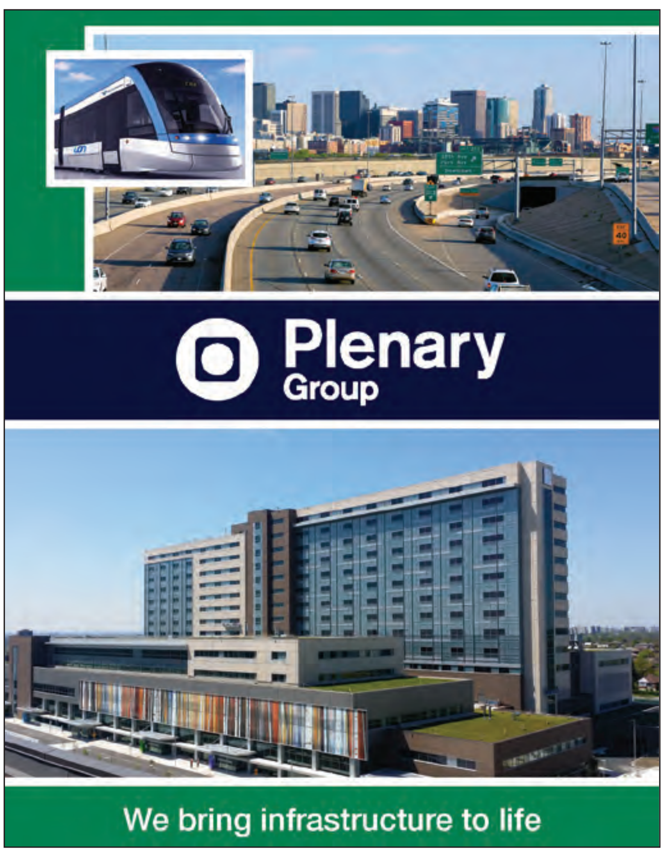
By delaying Los Angeles in favor of the lower-cost northern route the Authority all but killed a plan by Xpress West for a private rail line from Las Vegas to Victorville, Calif., 100 miles from Los Angeles. China Railway International USA Co. joined Las Vegas promoter Tony Marnell last fall to build the bullet train. “They just got a lot farther from going anywhere,” says a source.

■ UC Merced P3 On Track

With Gov. Jerry Brown’s support , California’s Dept. of Finance on Feb. 17 signed off on a $1.1-billion expansion of the University of California’s Merced campus as a long-term DBFOM agreement, which would make it the largest social infrastructure P3 in the U.S.

Unsolicited proposals “are the Donald Trumps of the infrastructure industry” —a disruptively simple solution to a highly complex problem.

Three teams were shortlisted from six qualifiers. Finalists Plenary, Balfour Beatty and Lend Lease are invited to submit proposals in April. A conditional award would be made in June, with financial close 90 days later. The schedule is driven by the need to complete 3,300 new dorm rooms by September 2018, laboratories a year later, and full buildout by 2020.



Providing high quality facilities to meet a fast-growing student population at Merced is a political priority. It draws a large number of its students, many of them minorities, from California’s Central Valley. Most UC applicants who don’t get their first choice of campuses are sent to UC Merced.

The Brown administration’s approval came a week after legislative analysts questioned the need and timing of the project, which was approved by the state Board of Regents as a P3 last November. Financing for the P3 component will rely mainly on taxable debt, which triggered the analysts’ oft-repeated critique of DBFOM projects in general as more expensive than publicly financed design-build projects.

UC Merced Vice Chancellor Daniel Feitelberg, a former J.P. Morgan muni banker, is managing the procurement. To answer the capital cost question, he has established a P3 bid threshold equal to the Regents’ estimate of the cost to construct and maintain the proposed facilities under a design-build contract with public financing.

Advising Feitelberg are AECOM; Ernst & Young; Nossaman; and Jones Lang LaSalle.

■ LA Metro Wait, LAX Go

The P3 industry got an earful in California this month. LA Metro called a P3 meeting to tell dejected developers that it wouldn’t tee up any projects itself but rather would entertain unsolicited proposals under a rudimentary policy it originally developed in 2014. A week earlier, the City of Los Angeles hosted 1,200 people from 600 companies who could see an RFQ as soon as March 29 for $4 billion worth of DBFOM projects at Los Angeles International Airport (LAX).

LA Metro is laying low on P3s until the end of the year, at least. The regional transit agency is seeking a ¼ cent sales tax increase in a November referendum that needs a 2/3 vote to pass. Proceeds could be used to support DBFOM delivery of the $6-billion Sepulveda Pass Transit Corridor, a priority of Mayor Eric Garcetti. But Metro has to avoid the controversy that P3s typically bring. So until the sales tax referendum votes are counted, P3s should be played “small ball” at Metro.

(Which begs the question of why seek unsolicited proposals? Metro's invitation could be "a train wreck in the making," says a source, who believes that unsolicited proposals "are the Donald Trumps of the infrastructure industry"— a disruptively simple solution to a highly complex problem.)

By comparison, Los Angeles could pay for the $5-billion Landside Access Modernization Program (LAMP) at LAX with cash. Instead, it is procuring major pieces of the project using DBFOM delivery because it gives the city the ability to manage cost, schedule and service quality on what will be one of its largest infrastructure investments.

Garcetti has tasked Los Angeles World Airports (LAWA), the city agency that owns LAX, to complete the work by 2023. Components are:

- an elevated 2.25-mile automated people mover (APM) with six stations $3 billion (DBFOM, financed with availability payments to the developer)
- a 5-sq-mile consolidated rental-a-car facility (ConRAC) $1 billion (DBFOM, financed with availability payments to the developer)
- parking garages ($250 million)
- bridges to airport terminals ($250 million), and roadway improvements (Caltrans)

Advising LAWA are:

- executive advisor—R. Clay Paslay
- finance—Frasca Associates
- program management—D.J Aviation, Inc.
- people mover—Lea + Elliott
- design—HOK; WSP Parsons Brinckerhoff
- legal—Nossaman is advising the Los Angeles city attorney's office

■ Last Chance For Calif. P3 Highway Bill

Rather than pursue its own highway P3 bill, LA Metro has aligned itself with a larger effort underway now to extend the existing statewide enabling legislation beyond its expiration in 2017. "We would support the extension of the statewide P3 statute," says Michael Turner, Metro's Deputy Executive Officer for Government Relations.

Efforts to pass such a bill were unsuccessful last session. The governor's transportation budget bill calls for the existing P3 law to be reenacted without amendment. Legislative discussions on the larger bill are expected to begin next month and continue for most of the session, says lobbyist Mark Watts, interim executive director of Transportation California, an alliance of unions and contractors supporting P3s.

The long road ahead will provide ample opportuni-

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ty to amend the bill, says Bruce Blanning, Executive Director of the Professional Engineers in California Government (PECG). His group represents Caltrans engineers who argue that they should have control over design checking, inspection and other typically public functions. In practice, Caltrans oversight imposes significant cost and schedule risks private investors can't bear.

In practice, the flaws in the existing P3 law, Section 143 of the state code, make procurements expensive and uncertain. Blanning's simple amendment giving Caltrans engineers control over construction inspection would kill the goose. "If PECG gets what they want it will make Section 143 very unattractive, if not unusable," says a P3 procurement expert.

■ Virginia I-66 Public Finance Option

The public finance option for the I-66 managed lanes project in Virginia got real recently with the introduction of a bill by Del. Chris Jones that would provide a full state guarantee for up to $1.5 billion in tax-exempt toll revenue bonds in a way that would not affect the state's debt ceiling.

To issue the bonds, Gov. Terry McAuliffe would first be required to approve the traffic and revenue forecast, which would probably come in 2018, his final year in office.

A decision by Virginia DOT on whether any of the three teams competing for a DBFOM concession meets the state's aggressive term sheet conditions will be made this September. They are: Transurban/Skanska; Cintra/Meridiam; and InfraRed/Isolux/Fluor.

If not, a new procurement would have to be initiated for design-build delivery once a new finding of public interest is made by the Commissioner of Highways. That could be done fairly quickly using most of the same documentation prepared to certify the P3 bid option, says Morteza Farajian, I-66 program manager.

■ Texas DOT Shuts Its DB-P3 Unit

The resignation this month of Texas DOT's central planner Russell Zapalac and disbanding of his specialized design-build/P3 office in Austin could be a boon for the consultants advising on alterative delivery projects. The pendulum has swung in Texas against tolls, P3s and big design-build projects. But the decentralization going on now will almost certainly leave TxDOT's newly empowered district offices in need of help when the pendulum swings back, as it always has.

For now, at the urging of the Associated General Contractors, TxDOT is moving back to smaller, more traditional projects managed by districts and funded more evenly from cash flow and debt issued by TxDOT. Marc Williams, TxDOT's interim Deputy Executive Director, calls this a "philosophical realignment," one of many models that have been tried in recent years.

The optimistic view: Toll roads are necessary in any future scenario. Outsize revenue estimates from the oil and gas severance tax passed last year won't be met. Critical megaprojects like I-35 in Austin or LBJ East in Dallas can't be done as conventional projects. All that, and the desire of some Regional Mobility Authorities (RMA) to accelerate projects, will keep the flame burning, say P3/DB advocates.

(Two TxDOT P3 projects that have gotten hung up, the untolled Harbor Bridge DBF in Corpus Christi, and the I-288 toll concession in Houston, both won by Dragados last year, will move in the near future, says Williams.)

Zapalac's Special Projects Division in Austin has been renamed "Strategic Contract Management." Central planning and procurement of large projects have been eliminated. Right-of-way, inspection and other resources developed over the past four years have been distributed among TxDOT's Districts, which will assume all planning and project execution functions. Project Director Katie Nees resigned and joined HNTB.

Zapalac was an outsider, hired away from HDR Inc. in 2011 with a limited base of support within TxDOT.

"In the P3 business, we spend years and millions of dollars to roll the rock up the hill, and then it rolls back down on top of us."

Recently, lawsuits and claims have tainted his group's bundling of the repair of 300 rural oil and gas development roads into a single design-build contract. That's what did him in, says a friend of the Governor.

Political support has evaporated. Sen. Robert Nichols will no longer advocate for P3s. Gov. Gregg Abbott and the legislature have banned new funding for toll roads and ordered TxDOT to count the costs of the state buying existing RMA projects and all of TxDOT's concessions, including Cintra's in Dallas.

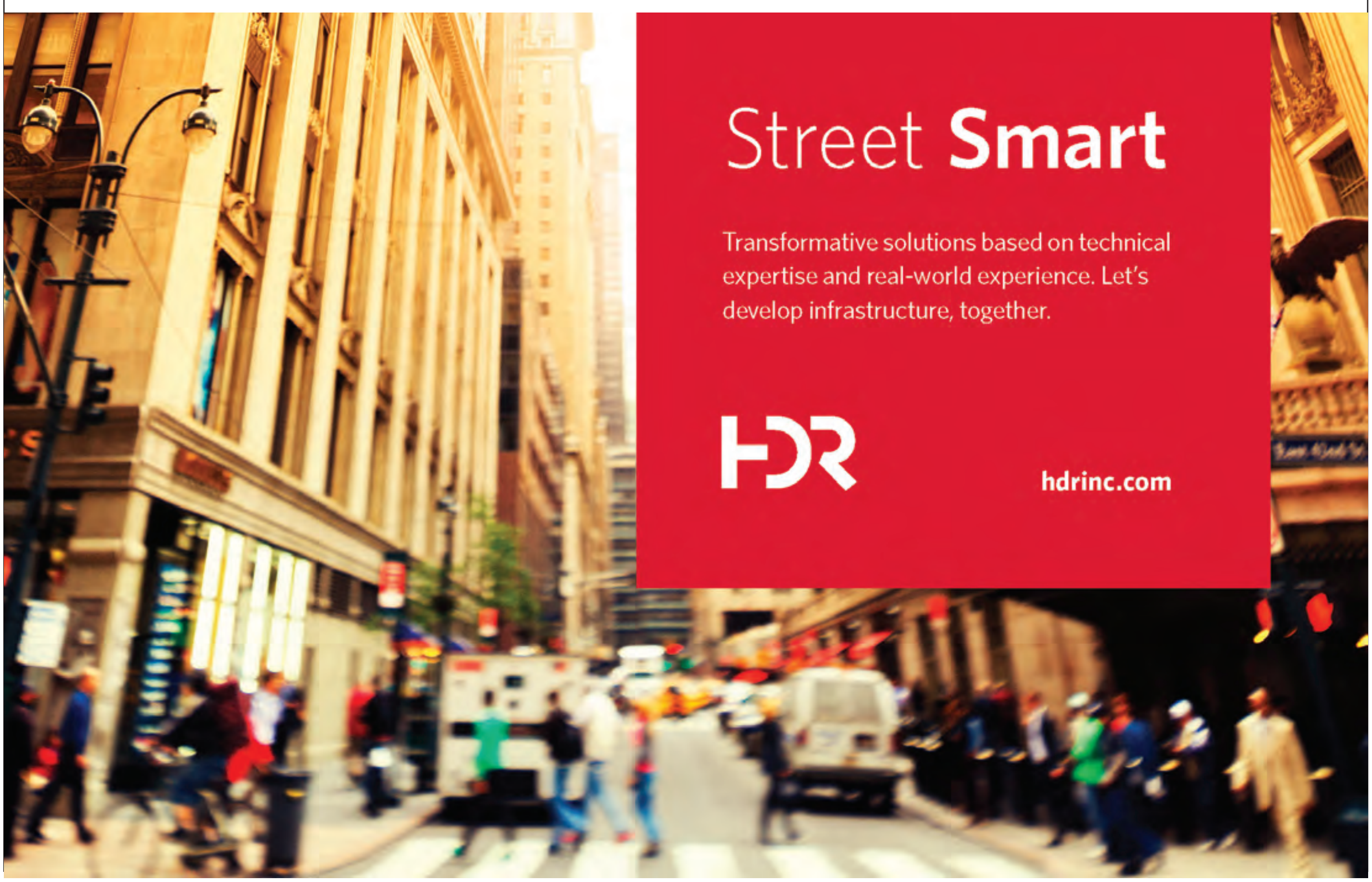
Abbott will meet with highway interests in mid-March to discuss decentralizing TxDOT. He gets strong support from Tyron D. Lewis, a former legislator from Odessa in west Texas, who chairs the five-member Texas Transportation Commission.

The pessimistic view: "In the P3 business we spend years and millions of dollars to roll the rock up the hill and then it rolls back down on top of us."

■ Chicago Takes Another Bite From The Skyway Deal

Financial close was reached on Feb. 25 for the sale of the Skyway Concession Company LLC, to three Canadian pension funds, who paid $2.879 billion to Cintra and Macquarie for the privately operated toll-road.

The final price reflects $43 million in adjustments, mainly to buy the approval of the City of Chicago, which had been paid $1.8 billion by Cintra and Macquarie for the concession rights in 2005. They went bankrupt and agreed to sell their concession to the Canadian funds a few months ago.



Before approving the private transaction, the city unexpectedly required the participants to pay $28 million in taxes and fees that had not been considered in the original sale price. The city also got promises from the funds to accelerate capital spending and lead paint removal.

The Canadian funds—Canada Pension Plan Investment Board, Ontario Municipal Employees Retirement System, and Ontario Teachers' Pension Plan—valued the Skyway at approximately 40x the toll-road's 2014 EBITDA of just over $71 million.

Cintra will realize a return of about $265 million for its 55% share in the Skyway concession. Net proceeds to Macquarie Atlas Roads for its 22.5% interest are expected to be about US$95 million.

Macquarie Atlas Roads (MQA) recently reported a full-year net profit of Aus $85 million (US$62 million) and a 4.4% gain in EBITDA to Aus $524 million ($384 million) in the 12 months to December 2016. Traffic and revenues were up on its French and U.S. toll roads. Dulles Greenway traffic is up 5.4% and revenues increased by 7.9% year-on-year.

Macquarie Atlas Roads was spun out of the Macquarie Infrastructure Group in 2010 but is still managed by Macquarie Group. Atlas Roads investors paid the financial group Aus $58 million (US$43 million) performance fee in the 12 months to June 2014, according to the *Sydney Morning Herald*.

■ Transurban Toll Revenues Up 19%

On Feb. 11, Transurban reported:

Globally:

- a 19.3% increase in first-half toll revenue to Aus $960 million following a six-month rise in ADT of 8.4%.
- free cash increased 22% to $461 million, largely on the strength of the company's toll roads in Sydney and Brisbane.
- $11 billion of committed and planned projects to improve customers' trips in Melbourne, Sydney, Brisbane and Northern Virginia.

On its U.S. operations:

- ADT increased 139.6% due to the 95 Express Lanes in Virginia opening for operation on Dec. 14, 2014.
- Toll revenue grew 216.8%, influenced by the 95 Express Lanes opening
- EBITDA was up 292.6%.
- A development framework has been reached with the Virginia Department of Transportation (VDOT) to progress the US$225 million 395 Express Lanes project.

■ Indiana Toll Road Rebuild Wins Governor's Praise

The Indiana Toll Road Concession Company (ITRCC), owned by IFM Investors, announced on Feb. 2 that it would repave and rehabilitate a 70-mile segment near the middle of the 157-mile highway. The $200-million contract awarded to Indiana contractor Reith-Riley Construction Co. involves all interchanges, mainline pavements, shoulder replacement, widening and bridge repairs. Work is set to start in March and be completed in two years by a 300 workers.

ITRCC previously had announced that it would spend $30 million to demolish and replace eight rest plazas. Governor Mike Pence announced the Reith-Riley contract saying: "As our economy continues to grow with more Hoosiers working than ever before, I am confident that our roads will continue to serve as the arteries of economic development and help Indiana businesses get goods and products to market.

I'm thankful to the Indiana Toll Road Concession Company for its continued work to modernize and upgrade the Indiana Toll Road, and I look forward to its completion as the largest project on the Indiana Toll Road since its initial construction."

■ Day of Reckoning For San Antonio Water

Facing possible liquidation soon, Spain's Abengoa is discussing terms of a 20/80 partnership with a number of equity funds in an attempt to hold together its Vista Ridge water supply project in San Antonio, the first major water P3 in Texas.

The fate of the $844-million DBFOM project rests with creditors in Madrid and on continued support from the city for the deal it struck in 2014. As with everything related to Abengoa, any deal in San Antonio has to happen quickly.

Among the potential investors, Brookfield Global Infrastructure Advisor Ltd. is a likely partner. It is buying Poseidon Resources, developer of the recently completed Carlsbad desalination plant for San Diego County Water Authority. Kiewit/Shea held the EPC contract for that $900-million project, which will be operated by Israel's IDE Technologies under a long-term contract.

Further, Brookfield was selected last November by Saint John, NB, as equity developer for the city's $200-million DBFOM water project. Brookfield is 50% partner with Spanish EPC firm Acciona, which lost out to Kiewit/Shea for the Carlsbad work.

The Carlsbad and St. John DBFOM projects were structured with equity, EPC, and operations as arms-length transactions. In San Antonio's contract, all three legs of the stool are affiliated under Abengoa the parent, and one or more legs may soon be broken.

The San Antonio project company, Abengoa Vista Ridge, is funded with equity from the parent company, which is teetering in Madrid. That affects Abeinsa, its construction subsidiary, which now can't provide a surety bond for its pipeline project or pay its consultants.

In addition to Brookfield, John Laing Group Plc and the Blackstone Group have submitted formal proposals to Abengoa Vista Ridge. Meridiam and Queensland Investment Corp. have expressed interest.

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The equity ticket in the Vista Ridge deal is $82 million, or about 10%. That may have to increase substantially to support the debt, to be issued by Bank of America. Poseidon's Carlsbad transaction required 18% equity, or $164 million, to gain an investment-grade rating.

All of this is moot if San Antonio fails to support its P3 project. Signs are good:

- Political leaders are leading;
- The community wants the assurance of a long-term water supply;
- Interest rates will be capped soon at a favorable rate;
- It's raining, but not too hard. ■

February 2016 News Briefs

The Hampton Roads Virginia Transportation Planning Organization: has concluded that under its preferred no-toll funding scenario only one of nine priority projects in the Norfolk Va. region can be completed by 2028 and the rest maybe 40 years later. The MPO board rejected a plan by its consultant Public Financial Management to impose a $1 to $3 congestion-priced toll on all bridges and most interstates in the region. The board also rejected tax increases.

Virginia bill HB1069, which would give the state legislature "a larger role in approving new tolls and would reform the toll violation process," faces a test in the state Senate Transportation Committee on March 2. The newspaper adds, "The bill prohibits tolling any existing highway, bridge or tunnel without approval of the General Assembly. It does allow tolling in limited circumstances . . .. However, those tolls would have to have a free, reasonable alternative."

Fargo-Moorhead P3: The U.S. Army Corps of Engineers has selected the FM Area Diversion Project, a P3 demonstration, as one of six projects nationwide that will begin construction in Fiscal Year 2016. The Corps' Work Plan includes $5 million appropriated by Congress for the current fiscal year to get the project started. The Corps cannot use the dollars for construction until a decision, expected in July, is made by the Assistant Secretary of the Army determining that all state environmental reviews and regulatory requirements are likely to be resolved.

New Hampshire: New Hampshire Governor Maggie Hassan recently made public her new, 10-year, $3.7-billion transportation plan for the State. Significantly, the Governor's plan incorporates the use of the Transportation Infrastructure Finance and Innovation Act (TIFIA) federal loan program to assist in funding several projects, including a $173.3 million loan to help fund a planned expansion project on I-93. In total, funding from the Federal Highway Administration, in the amount of $1.84 billion, is projected to cover nearly half (49.2%) of the proposal.

Spending Down: A report by the Center on Budget and Policy Priorities says that spending on roads, bridges, schools and wastewater treatment has reached a 30-year low. Between 2002 and 2013, spending on infrastructure fell in nearly every state when adjusted for inflation. That is partially because of a significant decline in federal spending on infrastructure, which has gone from 1% to 0.5% of GDP.

Indiana Road Funding: Legislation recently passed in the Indiana House of Representatives contains a number of initiatives aimed at increasing road funding within the State, including exploring instituting tolls on a number of interstate highways. Specifically, the bill directs the Indiana Department of Transportation to seek permission

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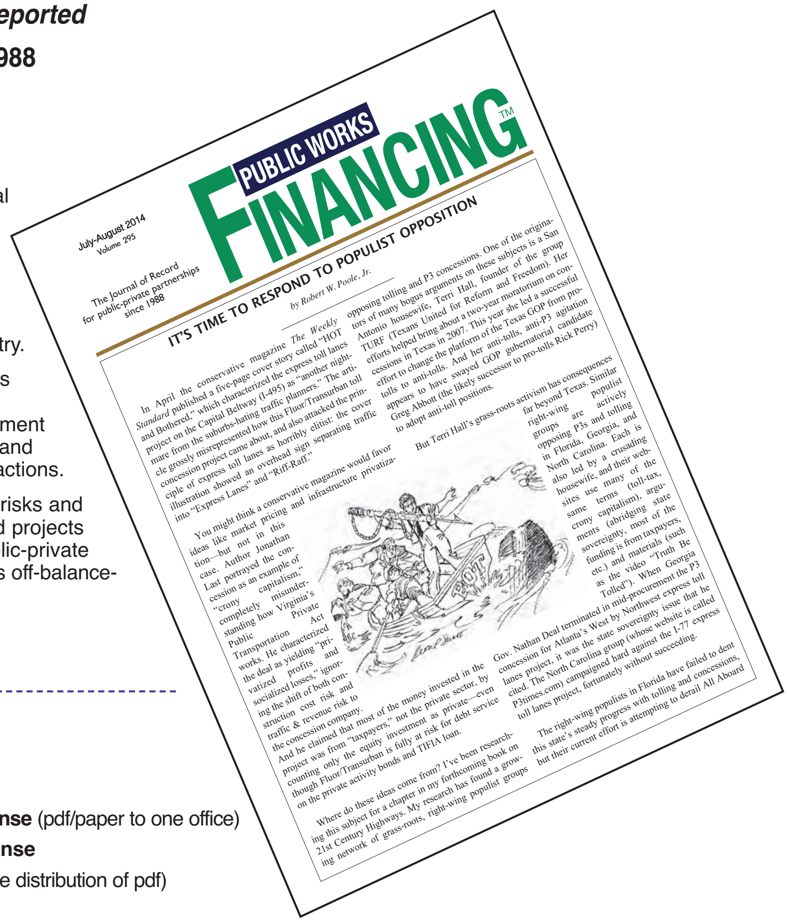

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IT'S TIME TO RESPOND TO POPULIST OPPOSITION

by Robert W. Poole, Jr.

In April the conservative magazine *The Weekly Standard* published a five-page cover story called "HOT and Bothered," which characterized the express toll lanes project on the Capital Beltway (I-495) as "another nightmare from the suburbs-hating traffic planners." The article grossly misrepresented how this Fluor/Transurban toll concession project came about, and also attacked the principle of express toll lanes as horribly elitist: the cover illustration showed an overhead sign separating traffic into "Express Lanes" and "Riff-Raff."

You might think a conservative magazine would favor ideas like market pricing and infrastructure privatization—but not in this case. Author Jonathan Last portrayed the concession as an example of "crony capitalism," completely misunderstanding how Virginia's Public Private Transportation Act works. He characterized the deal as yielding "privatized profits and socialized losses," ignoring the shift of both construction cost risk and traffic & revenue risk to the concession company. And he claimed that most of the money invested in the project was from "taxpayers," not the private sector, by counting only the equity investment as private—even though Fluor/Transurban is fully at risk for debt service on the private activity bonds and TIFIA loan.

Where do these ideas come from? I've been researching this subject for a chapter in my forthcoming book on 21st Century Highways. My research has found a growing network of grass-roots, right-wing populist groups opposing tolling and P3 concessions. One of the originators of many bogus arguments on these subjects is a San Antonio housewife, Terri Hall, founder of the group TURF (Texans United for Reform and Freedom). Her efforts helped bring about a two-year moratorium on concessions in Texas in 2007. This year she led a successful effort to change the platform of the Texas GOP from pro-tolls to anti-tolls. And her anti-tolls, anti-P3 agitation appears to have swayed GOP gubernatorial candidate Greg Abbott (the likely successor to pro-tolls Rick Perry) to adopt anti-toll positions.

But Terri Hall's grass-roots activism has consequences far beyond Texas. Similar right-wing populist groups are actively opposing P3s and tolling in Florida, Georgia, and North Carolina. Each is also led by a crusading housewife, and their websites use many of the same terms (toll-tax, crony capitalism), arguments (abridging state sovereignty, most of the funding is from taxpayers, etc.) and materials (such as the video "Truth Be Tolled"). When Georgia Gov. Nathan Deal terminated in mid-procurement the P3 concession for Atlanta's West by Northwest express toll lanes project, it was the state sovereignty issue that he cited. The North Carolina group (whose website is called P3times.com) campaigned hard against the I-77 express toll lanes project, fortunately without succeeding.

The right-wing populists in Florida have failed to dent this state's steady progress with tolling and concessions, but their current effort is attempting to derail All Aboard

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from the Federal Highway Administration to put tolls on I-65, I-70, and I-80/94 after conducting a feasibility study on the toll proposal. Additionally, the bill would raise the State's gasoline tax by 4 cents from the current 18 cents per gallon and the diesel tax by 7 cents from the current 16 cents per gallon, as well as index them to inflation. The bill also would cut the top State income tax rate to 3.06% in 2025 from 3.23% in 2017, and direct more of the State's 7% sales tax on gasoline to transportation projects. The bill still needs the approval of the State Senate, which recently unanimously passed Governor Mike Pence's five-year, $1.4-billion "21st Century Crossroads" funding plan that relies on $240 million of new highway bonds but no new taxes.

Atlanta Road Boom: The Atlanta Regional Commission board on Feb. 24 approved a long-range blueprint that details how $85.1 billion worth of investments in metro Atlanta will be spent over the next 24 years. The plan includes $7 billion for expanding the express toll lane network on I-75, I-575, Ga. 400, I-285, I-20 and I-85).

Bridgegate: Court proceedings in the George Washington Bridge lane closure scandal in 2013 began in early February with pretrial motions by the two defendants. Federal Judge Susan Wigenton issued an order allowing former aides to Gov. Chris Christie [defendants Bridget Kelly and Bill Baroni] to subpoena documents withheld by Christie's lawyers Gibson Dunn & Crutcher, which has billed the state $8 million so far.

Toll politics: Maryland Governor Larry Hogan's "stunningly high approval ratings" among Maryland voters is partly due to toll reductions, say political analysts. "Under his own authority, without the need for General Assembly approval, Hogan reduced a number of fees, most notably road and bridge tolls. Those actions were highly visible and popular returns to voters even as they undercut the stability of Maryland's transportation funding."

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Rhode Island: Rhode Island lawmakers approved and signed into law Gov. Gina Raimondo's toll-backed plan to raise funding for major bridge and infrastructure repair work within the State. Significantly, while the measure, titled RhodeWorks, underwent significant changes prior to being signed into law, it still includes the creation of a new toll on commercial trucks as a funding mechanism for projects within the state. Notably, as passed, the measure only includes the issuance of $300 million in GARVEEs, and no toll-backed revenue bonds, as compared to $600 million and $700 million, respectively, in the original proposal. Additionally, the measure includes 3 fewer tolling stations, and a $10 lower maximum cross-state toll than originally proposed.

Southeastern Pennsylvania Transportation Authority: SEPTA released its preferred plan to extend regional rail service to King of Prussia via an elevated spur that would run four to five miles, with 5 stops, mainly along the Pennsylvania Turnpike. The estimated cost of the project is $1.1 billion, and initial projections assume 8,500 passengers daily in the initial operating year of 2023. Additionally, SEPTA has announced that it intends to seek a New Starts grant in 2018 from the Federal Transportation Administration (FTA) to fund up to half of the project's cost. Initial public hearings will be held over the next 2-weeks.

Massachusetts Bay Transportation Authority (MBTA): The MBTA is reporting that it has reduced its operating deficit by approximately $100 million, through a combination of reduced spending on overtime pay and increased revenue from advertising and other sources. Officials say the deficit for fiscal year 2017 is $138 million, down 43% from the $242-million gap that was projected last year. The MBTA is still considering fare increase proposals to address the system's larger, $7 billion state-of-good-repair backlog. The proposals currently under consideration are a 6.7% fare increase, which is projected to create an additional $33 million in annual revenues, and a 9.8% increase to raise $49 million in revenues annually.

Durham-Orange Light Rail FEIS/ROD: The Federal Transit Administration (FTA) recently signed the combined Final Environmental Impact Statement/Record of Decision (FEIS/ROD) for the proposed Durham-Orange Light Rail Transit (D-O LRT) Project. Marking the end of the environmental review phase under the National Environmental Policy Act (NEPA), the project can now begin engineering work to advance project design. The estimated cost for the project, which is expected to include 17 stations and a rail operations maintenance facility, is between $1.5 and $1.6 billion.

FASTLANE Grant Availability: The U.S. Department of Transportation (USDOT) is soliciting applications for the Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE) grant program. The grant program, which was authorized under the Fixing America's Surface Transportation (FAST) Act to fund critical freight and highway projects across the country, is authorized to provide $800 million in funding for fiscal year 2016 – 25% of which is reserved for rural projects, with an additional 10% reserved for smaller projects. Generally, the program is aimed at providing dedicated funding for projects that address major issues facing the nation's highways and bridges, and represents the first time in the USDOT's history that a program establishes broad, multiyear eligibilities for freight infrastructure, including intermodal projects. The formal Notice of Funding Opportunity (NOFO) is available on the USDOT's website at the following link: https://www.transportation.gov/fastlanegrants/fastlane-nofo.

TIGER Grant Program: The USDOT is accepting applications for the 8th round of the Transportation Investment Generating Economic Recovery (TIGER) competitive grant program. $500 million in funding is available in this latest round of the program, which has provided nearly $4.6 billion to 381 projects in all 50 states, the District of Columbia and Puerto Rico since 2009. In total, over the first 7 rounds of the program, the USDOT has received more than 6,700 applications requesting more than $134 billion for transportation projects across the country. Applications are due by April 29, 2016, and the formal NOFO is available on the USDOT's website at the following link: https://www.transportation.gov/tiger/tiger-nofo.

Newfoundland P3 Cancelled: The new Liberal government in Newfoundland and Labrador has cancelled the province's first planned P3. The Conservative government, defeated in the Nov. 30 election, had launched an RFP in July 2015 for 360 new long-term care beds in four communities. The RFP was extended just before the election was called, leaving proponents for the DBFOM projects hanging. The Liberals announced Jan. 29 that the process was cancelled because it had considered only one procurement option. The Conservative plan would have seen proponents deliver soft services as well as the buildings. The government would never own the buildings, but would pay fees based on patient and building costs for 25 years. The government was advised by Partnerships BC, British Columbia's P3 agency.

RFP For Ontario's Finch West LRT: Infrastructure Ontario and transit agency Metrolinx have issued an RFP to three teams for the 11-km, Cdn $1.2-billion Finch West LRT in northwest Toronto. The DBFM project includes 16 surface stops, a maintenance facility, an underground station at an intersecting subway, and a below-grade terminus. Construction is slated to start in 2017, and opening is targeted for 2021.

- Humber Valley Transit Partners is led by developers SNC-Lavalin and Graham, with financial advisors National Bank and Scotia Capital.

- Mosaic Transit Group includes developers ACS, Aecon and CRH, with financial advisor RBC Capital Markets.

- FACT Partners is headed by developers EllisDon and Bechtel, with financial advisor EllisDon Capital. ■

Getting Serious About Mileage-Based User Fees

by Robert W. Poole, Jr., Reason Foundation

The idea of replacing per-gallon fuel taxes with per-mile charges (mileage-based user fees) has probably seemed to most readers of this newsletter like an interesting but unlikely transition, beloved mostly by academics and planners. But that seems to be changing fairly rapidly. Consider the following:

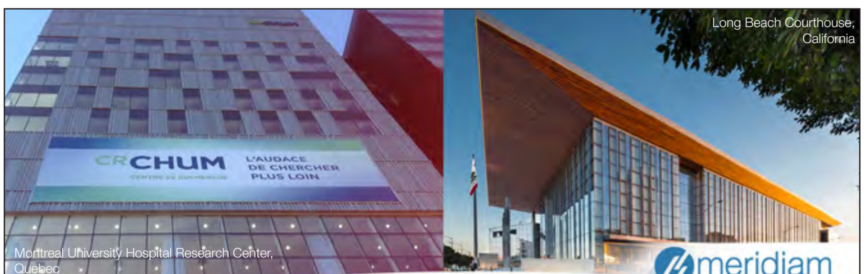
- In passing the FAST Act last fall, Congress authorized $95 million in grants for state-led pilot projects to test various ways of implementing mileage-based user fees (MBUFs).
- The Congressional Budget Office's new report, "Approaches to Making Federal Highway Spending More Productive," highlights charging drivers by the mile as a way to increase the productivity of highway investment.
- At a February AASHTO conference in Washington, DC, Rep. Sam Graves, chairman of the House highways & transit subcommittee, said they are looking seriously at per-mile charging.
- And the National Conference of State Legislatures recently passed a unanimous resolution that MBUFs are the best replacement for fuel taxes.

In its January federal budget review, CBO projected that by FY 2026, revenue from the federal gasoline tax will be 18% less than in FY 2016—and the decline will be far worse thereafter, as the new federal CAFE standards require a new-car average of 54.5 mpg starting in 2025. So the need to replace per-gallon taxes is very real—and pretty near-term.

Figuring out the best way to do MBUFs should engage all of us who care about the future of highway infrastructure. It's important that we not build in the same kinds of flaws that have led to fuel taxes becoming an unreliable and unsustainable funding mechanism. Here are several suggestions.

First of all, we must insist that MBUFs are indexed to a basic measure of inflation. I recommend using the Consumer Price Index (CPI), as the most widely understood and accepted measure.

Second, we should reject one-size-fits-all as a part of the design. That means giving highway customers a choice of payment mechanisms (as opposed to mandating something like GPS tracking in every vehicle). Oregon's current pilot program offers four alternatives, and California is planning five, including a simple annual odometer reading. But it also means allowing for different per-mile rates for different types of roadways. Many of us favor a simple basic charge (e.g., 1.5 cents/mile) to pay for local roads and lower-tier state highways. For premium, limited-access highways, a higher rate is necessary and can be collected via transponder and/or license-plate billing—state-of-the-art tolling technology that is already widely accepted. People who only drive on local roads would no longer be cross-subsidizing the more-costly expressways and Interstates.



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Third, we need to de-politicize highway funding as part of the transition. The traditional users-pay/users-benefit principle has been grossly distorted by Congress and state legislatures treating "highway user tax revenues" as the cash cow for anything and everything related to any kind of transportation. When you pay your electric bill or your water bill or your phone bill, you pay the provider directly for the amount of service you've used. And the provider uses that revenue to pay for the capital and operating costs of the infrastructure needed to provide you those services. We can do the same for highways if we design the MBUF framework so that highway customers pay the providers directly. That happens today only with toll roads, but could be done in the future by allocating basic MBUF revenues among the state DOT and local roadway providers based on their relative shares of vehicle miles of travel in the state. The legislatures could still set overall policy for their DOTs, but would not be involved in micromanaging highway spending.

This model answers a question that has caused much consternation within the toll road and P3 communities: what is the future of toll roads and toll-financed P3 projects in a world that transitions to MBUFs instead of fuel taxes? The answer is that for premium, limited-access highways, the per-mile toll IS the mileage-based user fee. This has several implications for existing tolled facilities. If they are not already charging on a per-mile basis, they should plan on shifting to that way of calculating and assessing their toll charges. And this certainly does not preclude the very powerful variable per-mile toll rates needed on express toll lanes as the basic traffic management tool.

But it also means that rebates of any other state mileage charges must be part of the picture. The whole idea of MBUFs is that they will replace, not supplement, per-gallon fuel taxes. Politically, if MBUFs are advocated as an additional cost of driving, they will never be authorized by elected officials. If a state implements a basic per-mile charge, based on odometer readings or some other low-tech means, it would apply to all the miles people drive. So for the miles they drive on tolled, limited-access highways, they would be paying double. Hence, in basic fairness, the state must provide rebates of the basic 1.5¢/mile to drivers for the miles they are paying for via per-mile tolls. And that is a trivial task for the electronic tolling software to carry out.

The new CBO report appears to recognize this principle. Among the options it suggests for direct charging of highway users is "tolls on Interstate highways." And it notes that the revenues from those tolls "could be used to make repairs, expand capacity, and substantially renovate the Interstate System." CBO cites the Reason Foundation's 2013 paper on reconstructing and modernizing the Interstates via toll revenue finance as an example.

In short, now is the time for very serious debate and discussion, not merely on the need to transition from per-gallon taxing to per-mile charging but also on how to go about doing this. It is not just a question of adequate funding. It is also an opportunity to de-politicize America's highways, turning them from a political football into something far more like the other essential utilities that we all depend on.■

Robert W. Poole, Jr. *is the director of transportation studies at the Reason Foundation.*

U.S. P3 Market Attracts World-Class Players

Source: Public Works Financing newsletter (3/16)

Top-ranked firms pursuing the U.S. P3 market

Investor Developers

ACS Infrastructure (Dragados)
Cintra (Ferrovial Agroman)
Goldman, Sachs
Infrared
John Laing
KKR
Macquarie
Meridiam
Morgan Stanley
Plenary Group
Star America
Transurban

Contractor Developers

Acciona
AECOM
Balfour Beatty
Bechtel
Bouygues
Fluor
Granite
Isolux Corsan
Kiewit
Lane
Odebrecht
OHL
Parsons
Shikun & Binui
Skanska
SNC Lavalin
VINCI
Walsh/Archer Western
Zachry

Public Advisors

legal/procurement:

Ashurst
Allen & Overy
Elias Group
Freshfields
Hawkins Delafield & Wood
Mayer Brown
Nixon Peabody
Nossaman

financial/procurement:

Citi
Ernst & Young
First Southwest
Goldman Sachs
Infrastructure Management Group
KPMG
Macquarie Capital Advisors
Morgan Stanley
PRAG
PriceWaterhouseCoopers
Public Financial Management
RBC Capital Markets
Scully Capital
UBS
William Blair

Public Advisors

technical:

AECOM/URS
Arup
Black & Veatch
CDM Smith
C&M Associates
Halcrow/CH2M Hill
HDR
HNTB
Jacobs
Lochner MMM Group
WSP|Parsons Brinckerhoff
Raba Kistner
Reynolds Smith and Hills
SAIC
Stantec

Design-Builders

American Infrastructure
Balfour Beatty
Bechtel
Bouygues
Clark Construction
Dragados
Ferrovial
Flatiron
Fluor
Granite
Herzog
Hochtief
Kiewit
Lane Construction
Skanska
Sundt
Traylor Bros.
Tutor Perini
Walsh/Archer Western
Zachry

Design Partners

AECOM / URS
Atkins / PBS&J
Arup
Aztec
CDM Smith
CH2M Hill
Dewberry
HDR
HNTB
I.M. Pei
Jacobs
Lochner MMM
Berger
Moffatt & Nichol
O.R. Colan
WSP|Parsons Brinckerhoff
Parsons Transportation
Raba Kistner

O&M

DBI
Infrastructure Corp. of America (HDR)
Roy Jorgenson
Transfield Services

Insurance

AON
Liberty Mutual
Travelers
Zurich

Private Advisors

to equity:

Barclays Capital
BMO Capital Markets
Chadbourne & Parke
Gibson, Dunn & Crutcher
Macquarie

to banks/bonds:

Arup
Baker & McKenzie
BTY Group
Cleary Gottlieb
Clifford Chance
Hatch Mott McDonald
Hogan Lovells
Latham & Watkins
Leigh Fischer
Milbank Tweed
Orrick
WSP|Parsons Brinckerhoff
Simpson Thacher
Skadden Arps
Steer Davies Gleave
Winston & Strawn

Banks/Bonds

Assured Guaranty
Barclays
BMO Capital Markets
BoA Merrill Lynch
Goldman Sachs
JP Morgan
KeyBank
RBC
Scotiabank
Wells Fargo

Institutional Investors

Allianz
APG Infrastructure
Calpers
CDPQ
Dallas Police & Fire Pension System
DIF
OMERS
PSP Investments
Sun Life Financial
Teachers Insurance
TIAA-CREFF
ULLICO

U.S. Transportation PPPs/Leases, 1993-2016 (2/16)

Source: *Public Works Financing* P3 Projects Database

Notice to Proceed	Project Name	Public Sponsor	Risk	Invested capital ! (current $ mill.)	Developer ($ capital/design-builder)
In operation ***($18bn invested in 17 projects, of which 15 are funded with revenue risk debt)***					
7/93	91 Express Lanes, CA	Caltrans	DBFOM (toll)	130	Level 3/Cofiroute/Granite (sold to gov't. 1/03)
9/93	* Dulles Greenway, VA	Virginia DOT	DBFOM (toll)	350	TRIP II ($150m/Brown & Root)
5/99	* Foley Beach Express, AL	City of Foley, AL	BOO (toll)	44	Baldwin County Bridge Co.
6/99	* Camino Colombia Bypass, TX	Texas DOT	BOO (toll)	90	Landowners (Granite) (TXDOT purchased 1/04)
10/00	* Las Vegas Monorail, NV	Clark County, NV	DBFOM (farebox)	343	Las Vegas hotels ($331m /Bombardier–Granite)
TF 5/03	* SR 125 So. Bay Express, CA	Caltrans	DBFOM (toll)	773	PB!/Macquarie ($653m /Fluor-Washington Grp)
1/05	* Chicago Skyway, IL	City of Chicago	99-yr lease (toll)	1,830#	Cintra Concessions/Macquarie
6/06	* Indiana Toll Road, IN	Indiana Finance Authority	75-yr lease (toll)	3,850#	Cintra Concessions/Macquarie
TF 6/06	* Pocahontas Parkway Lease, VA	Virginia DOT	99-yr lease (toll)	611#	Transurban ($45m /Fluor–Washington Group)
5/07	* Northwest Parkway Lease, CO	Northwest Parkway Auth.	99-yr lease (toll)	603#	BRISA
TF 3/08	* SH 130 segments 5-6, TX	Texas DOT	DBFOM (toll)	1,358	Cintra/Zachry ($968m/Ferrovial–Zachry)
TF 7/08	* I-495 Express Lanes, VA	Virginia DOT	DBFOM (toll)	1,998	Transurban/Fluor ($1.4bn/Fluor–Lane)
TF 2/09	I-595 Managed Lanes, FL	Florida DOT	DBFOM (avail.)	1,814	ACS Infrast. ($1.2bn /Dragados–EarthTech)
TF 10/09	Port of Miami Tunnel, FL	Florida DOT	DBFOM (avail.)	914	Meridiam ($607m /Bouygues–Jacobs)
TF 12/09	North Tarrant Express, TX	Texas DOT	DBFOM (toll)	2,047	Cintra/Meridiam ($1.46bn /Ferrovial)
1/11	Jordan Bridge, VA	Chesapeake, VA	BOO (toll)	140	Figg/Amer. Infra. MLP/ Lane ($100m/Lane)
9/11	PR-22/PR-5 Lease, Puerto Rico	Gov't Development Bank	40-yr lease (toll)	1,136#	Abertis/Goldman Sachs Infra Partners II
Under construction ***($17.5bn invested in 16 projects, of which 7 are revenue risk and 9 are availability payment P3s)***					
TF 6/10	I-635 LBJ Managed Lanes, TX	Texas DOT	DBFOM (toll)	2,800	Cintra/Meridiam ($2.1bn /Ferrovial Agroman)
TF 8/10	Denver Eagle PPP Rail, CO	Denver RTD	DBFOM (avail.)	2,100	Fluor/Laing/Uberior ($1.27bn Fluor–BB)
TF 4/12	Midtown Tunnel, VA	Virginia DOT	DBFOM (toll)	2,100	Skanska/Macquarie ($1.47bn Skanska-Kiewit-Weeks)
TF 6/12	Presidio Parkway, CA	Caltrans	DBFOM (avail.)	365	Hochtief/Meridiam ($245m Flatiron/Kiewit)
TF 8/12	I-95 Express Lanes, VA	Virginia DOT	DBFOM (toll)	940	Transurban/Fluor ($618m Fluor/Lane)
TF 3/13	East End Bridge, IN	Indiana Finance Authority	DBFOM (avail.)	1,300	Walsh/Vinci/Bilfinger ($763m Walsh/Vinci + Jacobs)
6/13	Cline Ave. Bridge, IN	Indiana DOT	BOO (toll)	200	FIGG/Lane/American Infrastructure
TF 9/13	No. Tarrant Exp. 3A/3B, TX	Texas DOT	DBFOM (toll)	1,400	Cintra/Meridiam ($1.1bn Ferrovial/Webber)
TF 11/13	Goethals Bridge, NY-NJ	Port Authority NYNJ	DBFOM (avail.)	1,500	Macquarie/Kiewit ($934m Kiewit/Weeks/Massman)
TF 2/14	US 36, phase 2, CO	Colorado DOT/HPTE	DBFOM (toll)	113	Plenary (Ames/Granite)
7/14	I-69 Upgrade,IN	Indiana DOT/IFA	DBFOM (avail.)	370	Isolux/PSP Investments ($325m Corsan)
TF 9/14	I-4 Ultimate, FL	Florida DOT	DBFOM (avail.)	2,323	Skanska/Laing (Skanska/Lane/Granite)
TF 1/15	Pennsylvania Rapid Bridges, PA	PennDOT	DBFOM (avail.)	899	Plenary/Walsh (Walsh/Granite+HDR)
TF 4/15	Portsmouth Bypass, Ohio	Ohio DOT	DBFOM (avail.)	550	ACS/InfraRed/Star ($429m Dragados/Beaver)
TF 6/15	I-77 Managed Lanes, NC	North Carolina DOT	DBFOM (toll)	648	Cintra ($442m Ferrovial/W.C. English)
TF 3/16	Purple Line transit, MD	Marland DOT	DBFOM (avail.)	2,000	Fluor/Meridiam/Star (Fluor/Lane/Traylor)

Key

TF– financing includes a TIFIA loan
* substantially underperfoming forecast
# upfront lease payment
! includes public contribution to const.

(toll) toll revenues→ private demand risk
(avail.) availability-based payments→ private performance risk
(farebox)→ridership risk

P3 developers with U.S. projects

ACS-Dragados—Spain
Abertis—Spain
Balfour Beatty—U.K.
Bouygues—France
Cintra-Ferrovial—Spain
Figg—U.S.
Fluor—U.S.
Granite—U.S.
Isolux—Spain
Infrared—U.K.
Kiewit—U.S.
Lane—U.S.
John Laing—U.K.
Macquarie—Australia
Meridiam—France
Plenary—Australia
Shikun & Binui–Israel
Skanska—Sweden
Transurban—Australia
Vinci—France
Walsh—U.S.
Zachry—U.S.

Chart Summary

$3575 billion in public and private funds invested in 33 P3 projects since 1993

- $8bn invested in five brownfield leases of existing toll roads
- $25bn invested in 25 highway and bridge capacity additions, of which 16 (worth $15.1bn) were financed with toll-revenue debt, and nine (worth $10 bn) with debt repaid from availability payments to developers for successful performance.
- $4.4bn invested in three rail projects; one farebox risk, two availability payment

Latin America Infrastructure Finance

■ Colombia Replaces Some Lost Oil Revenue With Pacifico Tres Proceeds

Colombia is trying to breathe new life into its Fourth Generation (4G) P3 highway program by selling bonds and state assets to partially replace the drop in oil revenue that has depleted the funding available for infrastructure. The Colombian government has also moved to allow local pension funds to invest in 4G highways.

Colombia's oil driven export income accounted for about 50% of total foreign cash earnings when the US$25-billion 4G program of 25 roads was rolled out three years ago. The dollar income had also funded the dollar component of availability payments Colombia made to its highway operators. But the oil price shock pared the value of oil exports to some US$8 billion in 2015, a quarter of pre-crisis revenue. That prompted Colombia to put the brakes on the 4G plan, whose cost meantime had surged to US$35 billion with the inclusion of ten more roads.

Standard & Poor's this month cut from stable to negative Colombia's BBB credit rating, two levels above junk. S & P cited deteriorated growth prospects amid the fall of oil prices and said the country needed fiscal reform.

But Colombia has had some recent successes. In January it sold in an international auction its 57.6% stake in Isagen, S.A. for $2 billion to a subsidiary of Canada's Brookfield Asset Management. Isagen is a hydroelectric company with 3,032 Mw installed capacity, branded the most efficient in the nation. And on February 22 a US$648-million (eq) financing closed for the 25-year DBFOM Pacifico Tres highway project, including a US-dollar tranche that is the first overseas bond sold for a Colombian toll road.

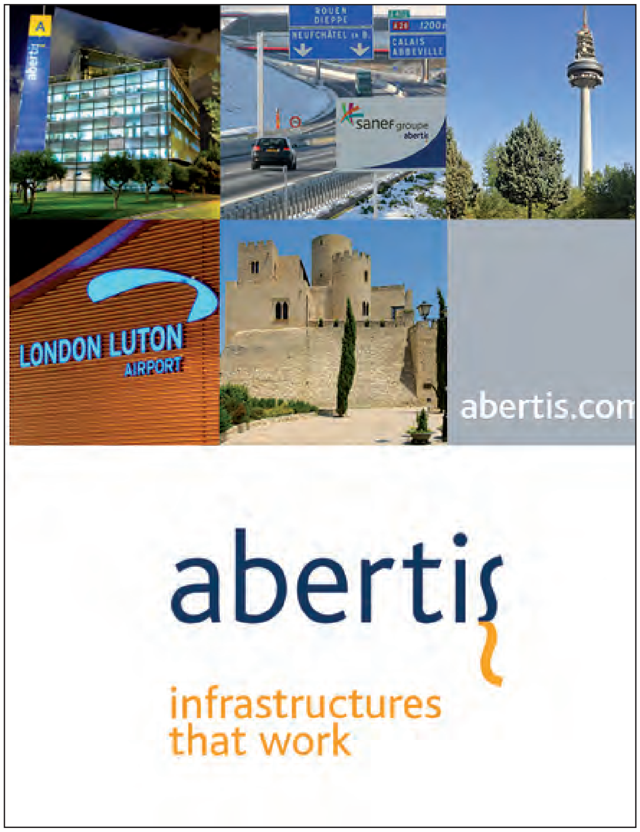
Some of the Isagen proceeds will be used to provide a reported US$30-million multipurpose facility to Pacífico Tres and a second tranche will be used to bridge a local funding gap in a financial package for the US$452-million Autopista Rio Magdalena 2.

The Pacífico Tres bond financing this month was split into a US$260-million dollar-denominated tranche and several local currency components (bonds and loans). Goldman Sachs, under Rule 144 of the U.S. Securities Act, underwrote the US-dollar tranche, due in 2035, yielding 8.25%. Fitch rated the US-dollar bonds BBB-. The package of local currency debt includes Colombian peso $397 billion (US$119 million) of inflation-linked bonds known as UVR, due 2035, yielding 7%.

The Pacífico Tres sponsors, Construcciones El Cóndor, a leading local construction firm, 48%; Mario Huertas Cotes, a local contractor, 26%; and Costa Rica-based building firm Constructora Meco, 26%, contributed some US$10 million in equity capital. The balance of the Pacífico Tres financing was provided by local bank Bancolombiana and Financierta de Desarrollo Nacional (FDN), a semi-official financial institution that includes Japan's Sumitomo Mitsui Banking Corporation, the World Bank's IFC and Latin multilateral bank CAF, each roughly an 8% partner.

N.Y. based Milbank, Tweed, Hadley & McCloy LLP advised the consortium and Arup advised the lenders.

The Concesión Pacífico Tres consortium will pay for the bonds from toll revenue generated by the 25-year DBFOM concession and from government-backed availability fees. It will upgrade and build, over the next five years, 146 km of roads, including a 3.4-km Tesalia tunnel and approximately 1.7 km of bridges and viaducts connecting the commercially important regions of Antioquia, Eje Cafetero, and Valle de Caucua, with the Buenaventura port on the Pacific coast.



Autopista Magdalena 3 is a US$452-million 144-km DBFOM road project 100% sponsored by Spain's OHL Concesiones, and supported by private lenders. OHL submitted for government approval in early February the outline of the financing, which included a letter of intent from local banks pledging funds to the project. The proposal is 22% equity and 78% debt, 40% of which is a dollar tranche and 60% is in local currency. FDN will make a US$60.3-million (eq) local-currency senior loan to Magdalena 2.

Financial advisor for Magdalena 2's local-currency component is Brazil's BGT Pactual Colombia unit and CorpBanca, the Colombian unit of Chile's bank of the same name. CorpBanca is merging with Brazil's leading private bank Itaú. Bankers for the 40% US-dollar component are Japan's Mitsui Sumitomo, separate from FDN, Spain's La Caixa, and a European bank.

■ Uruguay, Paraguay Take P3 Route

Paraguay and Uruguay are trying P3s to replace and upgrade their aging infrastructure. In Paraguay, lawmakers enacted the nation's first bill allowing private capital to invest in and operate infrastructure projects. In neighboring Uruguay, following the award of a P3 road contract, two more roads are to be put out to bid by the public works ministry in May.

Paraguay's first P3 offering is its international airport Silvio Pettirossi serving the capital city of Asunción. Bids for the US$150-million, 30-year DBFOM project are due in mid-April. The project involves building a passenger terminal and rehabilitating the runway to double the number of pass-through passengers from 910,000 in 2015 to 2 million by 2020. Once the new terminal is built, the operating company would move operations from the old site.

With support of the World Bank's IFC, a feasibility report looked at the commercial, technical and financial capabilities of Asuncion's existing airport. The control tower was deemed fit to handle the passenger expansion. The public works ministry, which has begun pre-qualification, has lined up Vinci together with Argentina-based airport operator Benito Reggio. Other firms include Spain's OHL and Korean International Airport.

Paraguay's next project, to be tendered later this year or in 2017, is a US$350-million upgrade of Rutas 2 and 7, a 364-km east-west route across the country. It is currently a partly dirt single-lane road from Ypacaraí, near Asunción, to a junction with Tape Pora, north of Ciudad del Este on the border with Brazil. Spain's Iridium, Sacyr and OHL have prequalified with Argentina's Benito Reggio and Mexico's Tradeco to bid.

Uruguay will follow a successful first P3, a US$160-million road deal done with Sacyr, with tenders for a package of roads and a stand-alone highway. Bid submissions for both are due April 26. The 305-km road package includes highways 12, 54, 55 and 57 to connect the port city of Nuevo Palmira and Cardona, where the roads forks to Juan Lacaza and Trinidad. The deal includes a 40-km bypass to Carmelo. The stand-alone highway is 44.5 km long between Rocha and Velazquez, in eastern Uruguay. ■

. . . European News

■ Ireland Launches First EIB Enhanced Bond Deal

As head of the New Ross N25 Bypass consortium, Spain's Iridium will build for Ireland's National Roads Authority (NRA) the first Irish highway employing the European Investment Bank´s Project Bond Credit Enhancement (PBCE) mechanism.


WHEN IT COMES TO P3s,
AWARENESS HAS BEEN RAISED.
LEGISLATION HAS BEEN WRITTEN AND WIDELY ADOPTED.
THE NEED IS APPARENT AND THE WILL IS THERE.
NOW LET'S MOVE THIS FORWARD, TOGETHER.
Be part of the movement that makes P3s a reality across the nation.
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ASSOCIATION FOR THE IMPROVEMENT OF
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ADVOCATE
For Public Private Partnerships
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Across the Country
ENGAGE
With P3 Thought Leaders
A LITTLE GUIDANCE CAN GO A LONG WAY,
ESPECIALLY WHEN IT COMES TO P3s.
INTRODUCING P3DIRECT
An AIAI Partnership program
With P3Direct, we seek to create a direct connection between experienced P3 industry professionals (our members) and public sector representatives across agencies at every level.
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The Euro 22-million (US$24 million) credit enhancement will support Euro 146 million (US$159 million) of 26-year senior secured project bonds on the DBFOM project. Construction cost is Euro 217 million (US$236 million).

Under the January 26 deal, the PBCE mechanism provides standby liquidity during the life of the project, including during construction. Once the road is operating, standby liquidity will be reduced proportionally with the improved project risk profile.

The senior debt was provided by Allianz Global Investors, GmbH. The bonds, with the EIB credit enhancement facility, have been provisionally rated Baa1 by Moody's and, when the road begins operations, will be backed by availability payments. The bonds will be listed on the Frankfurt exchange.

The consortium will provide Euro 17 million (US$18.5 million) of equity capital. Iridium is contributing 50% and Netherlands based BAM and PGGM infrastructure cooperative each will conttribute 25%. Remaining capital needs will be addressed with bridge loans.

The deal is part of Euro 600 million (US$654 million) marked by the NRA for P3 highways within its current infrastructure program of Euro 5.9 billion (US$6.4 billion), which runs to 2022. The lion´s share of the program, Euro 4.4 billion (US$4.8 billion), will go to highway maintenance.

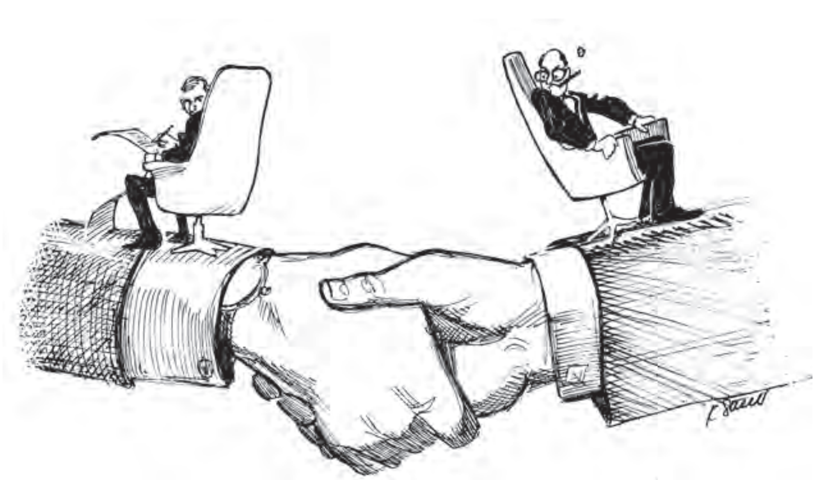
The 25-year DBFOM N25 New Ross Bypass project is a 16-km new motorway link, with 13.2 km of new dual lane road, 1.2 km of new upgraded highway, and various junctions and road bridges, including River Barrow bridge, 887 meters long. The road is in Counties Wexford and Kilkenny in southeast Ireland.

N25 is the second DBFOM highway concession by the same team. The first, the M11 Gorey to Enniscorthy Motorway, closed in October 2015.

■ Carlos Slim Set To Control FCC + Expand P3s

A year ago Mexico´s top investor-businessman Carlos Slim used FCC's Euro 1-billion (US$1.080 billion) capital expansion to acquire a 25.5% equity position in the company, becoming its single largest stakeholder. He is now poised to use a second approved capital increase, which he engineered, of Euro 710 million (US$766 million) to leverage effective control over the Spanish engineering and concessions conglomerate.

This month Slim and Esther Koplowitz, daughter of the founder and the second largest FCC shareholder, agreed to change their shareholders' agreement that prohibited Slim from owning more than 30% of the company. The change clears the way for Slim, who currently owns 27.43%, to acquire more than 30% of the company. This will trigger, under Spanish law, a requirement that he launch a bid for all the shares he does not own. Slim, however, does not aim for complete FCC ownership because it is unlikely Koplowitz will sell her shares.



Once Slim consolidates his holdings, his focus will be on expanding FCC Construcción's P3 business. He is planning a comeback of transportation concessions and an expansion of the water and environmental serxvices business. To begin, FCC Construcción lodged at mid-month a bid for Chile's US$125-million, 25-year concession to modernize and expand Túnel El Melón on the Panamerican highway. There are six other bidders. Previously, FCC Construcción booked, following an extended period of P3 inactivity, a US$415-million deal in Colombia for the 10-km Túnel del Toyo.

FCC is grooming a new unit, Vialia Sociedad Gestora de Concesiones, to develop and operate concessions. FCC Concesiones has shifted to Vialia its stake in a consortium led by Macquarie Capital Group that is building the Mersey Gateway Bridge in the U.K. under a 30-year DBFO contract. The six-lane, cable-stayed toll bridge is due to open in 2017. In Latin America, Vialia will take over FCC's 19% stake in the US$5.4-billion Metro de Lima project.

Part of the new capital increase will be used to pay back a Euro 450-million (US$490 million) tranche of bank debt. The tranche carries an interest rate of up to 16%, and is left over from last year's Euro 900-million (US$980 million) debt payback. FCC has negotiated with its banks a 15% reduction, some Euro 67.5 million (US$73.5 million), in the new repayment that reduces the effective repayment to Euro 382.5 million (US$417 million).

Last year Slim replaced FCC's then chief executive Juan Bejar with Carlos Jarque, head of international and government affairs at América Movil, a large Mexican telecommunications company owned by Slim. Jarque will rise from CEO to FCC board member, and four new directors named by Slim will join the FCC board following the capital increase ending February 26.

■ Spain's Abertis Revenues Strengthen

Spain's Abertis de Infraestructuras revenues and EBITDA each grew 5% in 2015 (like-for-like) over the year before, riding a 6.1% increase in traffic in Spain, which shook off a lengthy recession, and an 8.5% surge in traffic in Chile. Revenue in 2015 was Euro 4.378 billion (US$4.772 billion) and Abertis sees that growing to Euro 4.7 billion (US$5.123 billion) in 2016, the result of continuing traffic growth in its European and Latin American assets, except Brazil.

Roads outside Spain generated 70% of total 2015 revenue, of which France was the largest contributor, with 37% of total revenue. Traffic growth in France was 1.8%. Spain was the next largest, contributing 30% of total revenue.

Ebitda in 2015 to Euro 2.8 billion (US$3.1 billion). Net profit grew 7% to Euro 1.88 billion (US$2.05 billion).

After buying complete control of its third Chilean road, the 50% equity it did not own in Santiago's 61-km crosstown toll road Costanera Central in January 2016, Abertis CEO Francisco Reynes outlined that Abertis holds cash and credit lines of some Euro 4 billion (US$4.4 billion) to support further road acquisitions.

Beyond plans to buy for Euro 1.2 billion (US$1.320 billion) two Italian roads, on which a deal close is anticipated in March, Abertis is reviewing two more roads in Europe, and three in the Americas, though not in the US. Reynes declined to identify the roads that Abertis is targeting.

On whether Abertis will press on bidding for a US highway after three failures, Reynes told *Public Works Financing* that Abertis will not let pass an opportunity to vie for a US highway when a new contest arises.

Reynes noted Abertis cannot bid more boldly because it is constrained by the metrics of the yields it demands from capital invested in the roads it operates. Abertis's skills go on better display negotiating acquisition deals, he said.

In 2015, Abertis employed some Euro 1.074 billion (US$1.181 billion) for highway buys and upgrades that will enhance its revenue stream. Of that, Euro 130 million (US$143 million) was used to increase from 50% to 100% its share of two Chilean road systems, Autopista del Sol and Autopista Los Libertadores.

In Brazil in 2015, under an ongoing road improvement plan agreed on with local authorities, Abertis invested Reais 1.9 billion (US$481 million), which follows Reais 3.1 billion (US$786 million) invested the previous two years, permitting the local road system to increase toll charges up to 18%, though rising from a low level. ■

PUBLIC-PRIVATE SERVICES DIRECTORY

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Veolia Environnement (listed on Paris Euronext: VIE) recorded consolidated revenue of $29.6 billion* in 2014. www.veolia.com *(*) 2014 pro-forma figures, including Dalkia International (100%) and excluding Dalkia France.*

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SUEZ in North America operates across all 50 states and Canada with 3,430 employees dedicated to environmental sustainability and leading the resource revolution. The company owns 15 regulated water utilities, provides contracted public-private partnership services to 84 municipalities, offers water treatment and advanced network solutions to 16,000 industrial and municipal sites, provides drinking water, wastewater and waste collection service to nearly 7.5 million people on a daily basis, processes 55,000 tons of waste for recycling and manages $3.3 billion in total assets.

For more information, visit suez-na.com or contact Mary Campbell at mary.campbell@suez-na.com or 201-767-9300.

O. R. Colan Associates (ORC) provides a full range of real estate services related to the appraisal, acquisition and relocation phase of design build highway projects. With more than 29 offices in 20 states nationwide, the company is broadly recognized as a leader in providing real estate solutions for public works projects. ORC provided the right of way acquisition and relocation assistance for the following successful design-build highway projects: Segments 1-6 of SH 130 and the DFW Connector projects in Texas; the Pocahontas Parkway in Virginia; US 158 in North Carolina; Route 3 North in Massachusetts; I-64 in Missouri; I-93 in New Hampshire; and Sections 2 & 3 of I-69 in Indiana. ORC is currently providing right of way services on the Zachry-Odebrecht Parkway Builders Team for the Grand Parkway in Houston, Texas. These projects combined involved the acquisition of more than 3,000 parcels and the relocation of more than 1,000 residences and businesses. Time is money on a design build project. ORC has the proven ability to deliver the right of way on time for construction on fast paced projects while meeting all state and federal requirements. Contact **Steve Toth,** COO, at stoth@orcolan.com or visit us at www.orcolan.com.

WSP | Parsons Brinckerhoff is a global consulting firm assisting public and private sector clients plan, develop, design, construct, operate, and maintain hundreds of critical infrastructure projects around the world. WSP | Parsons Brinckerhoff's experience extends to every form of transportation, including airports, rail systems, buses, roads, and ports. For complex projects procured through public-private partnerships or using design-build, the company provides project development, design engineering, and operations services to contractors and concessionaires. We apply our world-class technical expertise and our deep understanding of local needs to develop innovative solutions that create value for our clients and for the community the project serves. For more information please contact **Len Rattigan**, Alternative Delivery Director, (703) 742-5740; Rattigan@pbworld.com; **Sallye Perrin**, Strategic Pursuits Manager, (410) 246-0523, PerrinSE@pbworld.com; **Karen Hedlund**, Director of Public-Private Partnerships (212) 465-5059, HedlundKJ@pbworld.com; or **John Porcari**, Strategic Consulting Director, (202) 661-5302, PorcariJ@pbworld.com..

Sacyr Concesiones
"We create future value"

Sacyr Concesiones Throughout its almost 20-year track record, Sacyr Concesiones has more than proven its expertise and technical know-how, as well as its financial capacity with committed global investment amounting to 16 billion dollars. The company specialises in greenfield projects in which it handles the design, financing, construction and management of assets. This global conception of business, combined with its active project management, allows the company to bring added value to its concessions, thereby attracting financial partners. It currently operates over 30 infrastructure concessions in six countries (Spain, Portugal, Chile, Peru, Italy and Ireland) within such sectors as motorways (almost 3,000 kilometres), transport hubs, hospitals (more than 3,000 beds), metro lines, airports and service areas. These assets have an average remaining lifespan of 26 years.

Contact: **Felix Corral** fcorralf@sacyr.com +34 91 545 5000

With over $10 Billion in P3 projects, **Raba Kistner Infrastructure** (RKI) has established its reputation as a leader in quality management programs. We are a national company that provides professional consulting and engineering services in the areas of Construction Quality Management, Program Management (PM+)TM, Independent Engineer and Owner's Verification and Testing, and Construction Quality Control/Quality Acceptance Programs, Right of Way (ROW) Management and Acquisition, and Subsurface Utility Engineering to government and industry clients. Our expertise in quality programs goes beyond satisfying the fundamentals. We ensure that quality programs address the unforeseen challenges that arise in Design and Construction QC/QA programs. Our award winning data management and document control program, ELVIS, provides real time management information to assist in making time-critical decisions.

For more information, **contact Gary Raba**, D Eng, P.E. at graba@rkci.com or by calling 866-722-2547.

Plenary Group is North America's leading specialized developer of long-term Public-Private Partnerships (P3) projects, with more than $11 billion in public infrastructure assets currently under management and offices in Vancouver, Toronto, Ottawa, Los Angeles, Denver and Seattle, as well as site offices that manage the construction and operation of our concessions. Our business model relies on strong partnerships with clients, local contractors, sub-contractors and trades to ensure the efficient and timely completion of projects, with a view towards the long-term.
Contact **Marv Hounjet**, Vice President, Corporate Development USA, marv.hounjet@plenarygroup.com, (425) 223-5741 or **Olivia MacAngus**, Vice President, Corporate Development Canada, olivia.macangus@plenarygroup.com, (416) 902-9695. More information can be found at www.plenarygroup.com.

Mayer Brown has one of the leading public-private partnership practices in the United States. A perennial Chambers Band 1-ranked practice for P3 Projects, what distinguishes us from other law firms is our experience advising clients on transactions that have successfully closed from every side of a project. We have represented public agencies, sponsors and lenders alike on P3 transactions around the country and across all asset types, including roads, bridges, ports, parking, mass transit and social infrastructure.

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MACQUARIE

Macquarie Capital is a leading financial advisor, developer and investor in Public Private Partnerships in the US, Canada and globally. We have supported both private sector and government clients to successfully deliver large and complex projects including transport, social and telecommunications infrastructure. Notable North American successes include Denver Fastracks, Elizabeth River Crossings, Goethals Bridge Replacement and Kentucky Fiber.

Macquarie combines global expertise and local presence with one of the largest and most experienced teams dedicated to PPP's in the US and Canada. We provide partners and clients with a full range of services from project development, project finance advisory, debt and equity capital markets, M&A and restructuring.

We combine financial capacity, technical expertise, deep industry and public sector relationships and a creative approach to deliver innovative solutions to complex transactions.

Contact: **Nick Hann**, Co-Head North American PPPs, at nick.hann@macquarie.com or +1 (604) 605-1779

Andrew Ancone, Co-Head North American PPPs, at andrew.ancone@macquarie.com or +1 (212) 231-1660

KPMG

KPMG's Global Infrastructure professionals in the US and Canada provide specialist Advisory, Tax, Audit, Accounting and Compliance related assistance throughout the life cycle of infrastructure projects and programs. Our teams have extensive local and global experience advising government organizations, infrastructure contractors, operators and investors. We help clients ask the right questions and find strategies tailored to meet the specific objectives set for their businesses. KPMG can help set a solid foundation at the outset and combine the various aspects of infrastructure projects or programs – from strategy, to execution, to end-of-life or hand-back.

Contact **Andy Garbutt,** Practice leader for KPMG's US team, at +1 (512) 501-5329 or e-mail: infrastructure@kpmg.com or www.kpmg.com/infrastructure.com

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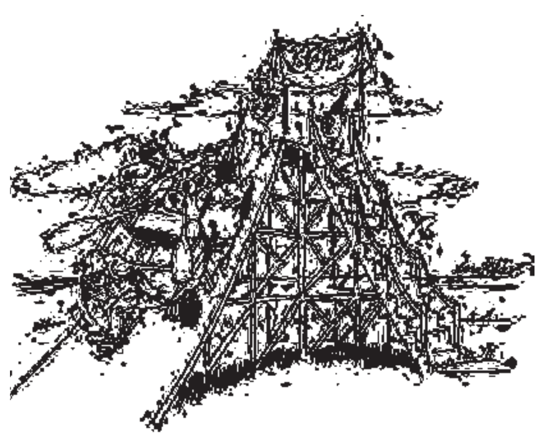
NOSSAMAN LLP

Nossaman LLP represents clients in all aspects of U.S. infrastructure, specializing in P3s and other forms of innovative project delivery, finance, operations and maintenance. We are honored to have advised clients in numerous award-winning projects, including:

- **FDOT's $2.3B I-4 Ultimate Project**: P3 Awards Best Transport Project; IJGlobal North American Transport Deal of the Year; Project Finance International Americas Transportation Deal of the Year; Trade Finance Deal of the Year
- **IFA's $1.18B East End Crossing**: International Road Federation Global Road Achievement Award for Project Finance and Economics; P3 Bulletin International Best Global Road Project and Best Global Infrastructure Project
- **Caltrans's $1.1B Presidio Parkway**: Project Finance International Americas P3 Deal of the Year
- **TxDOT's $1.1B DFW Connector**: ARTBA P3 Project of the Year
- **FDOT's $800M Port of Miami Tunnel Project:** NCPPP Infrastructure Award; ARTBA Globe Award; AASHTO America's Transportation Awards Grand Prize

Contact **Corey Boock** at cboock@nossaman.com / 213.612.7881, **Patrick Harder** at pdharder@nossaman.com / 213.612.7859, **Simon Santiago** at ssantiago@nossaman.com / 202.887.1472 or **Geoffrey Yarema** at gyarema@nossaman.com / 213.612.7842.
On the web at www.nossaman.com and www.InfraInsightBlog.com



Kiewit

Established in 1884, Kiewit is one of the largest construction organizations in North America leveraging a network of more than 50 offices to develop a respected multifaceted business presence across North America. With a staff of management, technical, financial, commercial and legal experts dedicated to successfully delivering P3 projects, our success is based on the trust that we have built with government officials, stakeholders and the financial community. As a recognized leader in design-build and P3 project development, Kiewit combines extraordinary financial credibility and extensive resources with a creative, solution-oriented approach to ensure a predictable outcome of success for our clients.

Kiewit Development
Sam Chai (416) 572-2519 Sam.Chai@Kiewit.com
James Geer (402) 943-1405 James.Geer@Kiewit.com

Kiewit Infrastructure
Joe Wingerter (402) 943-1329
Joe.Wingerter@Kiewit.com

LOCHNER MMM GROUP

In 2007, U.S.-based **H.W. Lochner, Inc.**, and Canada-based **MMM Group** Limited formed an equal partnership, Lochner MMM Group, to integrate internationally-gained design-build and P3 experience with an in-depth understanding of U.S. transportation infrastructure. Together, we combine local knowledge with international best practices to provide owners, contractors, concessionaires, and design partners throughout the U.S. solutions that are innovative, practical and constructible. With coast-to-coast offices throughout the U.S. and Canada, Lochner MMM Group offers:

• A deep pool of staff resources to deliver large scale projects within fast-track schedules.
• Proven capability in advisory, design, and program management roles.
• Experienced teams that understand and thrive in the alternative delivery environment.
• Ability to leverage a strong local presence with international expertise.

Contact: **Phil Russell, President & CEO**, Lochner MMM Group | 512.828.0076 |
phil.russell@lochnermmmgroup.com

KeyBanc
Capital Markets

KeyBanc Capital Markets—A U.S.-based institution with a deeply rooted U.S. regional presence, KeyBanc Capital Markets excels at understanding the needs and sensitivities of local constituencies and public officials to facilitate communication and deliver reliable and innovative infrastructure solutions. With our comprehensive Public Private Partnership platform, and our willingness to deploy bank balance sheet and capital markets products providing short and long term funding, our financial experts have the experience and expertise to respond to all financing needs and address all procurement issues unique to public infrastructure projects.

Contact: Jose Herrera at 917-368-2390 / jose.herrera@key.com, or Jeff Rink at 216-689-0885 / jrink@key.com, or visit key.com/P3.

KeyBanc Capital Markets Inc. is not acting as a municipal advisor or fiduciary and any opinions, views or information herein is not intended to be, and should not be construed as, advice within the meaning of Section 15B of the Securities Exchange Act of 1934. KeyBanc Capital Markets is a trade name under which corporate and investment banking products and services of KeyCorp and its subsidiaries, KeyBanc Capital Markets Inc., Member NYSE/FINRA/SIPC, and KeyBank National Association ("KeyBank N.A."), are marketed. Securities products and services are offered by KeyBanc Capital Markets Inc. and its licensed securities representatives, who may also be employees of KeyBank N.A. Banking products and services are offered by KeyBank N.A. Key.com is a federally registered service mark of KeyCorp. ©2015 KeyCorp.

For information about how to list your firm in PWF's Public-Private Services Directory contact William Reinhardt at (908) 654-6572 or www.pwfinance.net or email: pwfinance@aol.com

PUBLIC-PRIVATE SERVICES DIRECTORY

Meridiam is a leading developer, equity investor and asset manager of primary Public Private Partnership (P3) infrastructure projects with deep expertise in North America and Europe. With US$3.8bn of assets under management across three long-term infrastructure funds, and a focus on transport, social infrastructure and environmental P3 assets, Meridiam strives to establish a long-term contractual relationship between the public and private sectors. Meridiam currently manages 32 projects worldwide, including 9 projects across North America, among which are the Port of Miami Tunnel in Florida, the Long Beach Courthouse in California, and the Waterloo Light Rail Transit in Ontario.

Contact: **Joe Aiello** (j.aiello@meridiam.com)
Thilo Tecklenburg (t.tecklenburg@meridiam.com).

Meridiam North America – 605 Third Avenue, 28th Floor NY, NY 10158 – Tel (212) 798-8686 or Meridiam Canada – 357 Bay Street Suite 501 Toronto, Ontario, Canada, M5H 2T7 – Tel (647) 345-3529
www.meridiam.com

Jacobs is one of the world's largest and most diverse providers of professional technical consulting services. As a full-spectrum lifecycle solutions provider we focus on developing close strategic partnerships with our clients over the life cycle of their projects. Jacobs provides a distinctive range of comprehensive planning, design and management expertise in almost every industry—public and private. We are often called upon by government agencies to provide program advisory services related to public-private partnerships (P3) including financial and economic feasibility, procurement and other related services. As project funding decreases, public-sector clients are partnering with Jacobs to identify and implement P3 programs tailored to meet their project delivery and financing challenges.

For more information, please contact **Pamela Bailey-Campbell** at (214) 920-8158.

Herzog is recognized as a leader and expert contract provider with innovative management skills that enable us to deliver complex transportation projects. Our award-winning experience is extensive and includes the construction of commuter rail, light rail transit, streetcar, freight systems, and highways, along with intermodal and maintenance facilities. Our high level of professionalism and respect for clients is a component of every job; we cultivate cooperative relationships with project owners, stakeholders, subcontractors, and the communities in which we work. The strong partnerships we develop with our clients have allowed us to successfully complete many complex, challenging projects across North America.

For more information, please contact our main office at (816) 233-9001 or:
Joe Kneib, Senior Vice President Market Development—jkneib@herzog.com
Scott Norman, Vice President Estimating—snorman@herzog.com
Brad Lager, President—blager@herzog.com
Ryan Van Meter, Director Risk Management—rvanmeter@herzog.com

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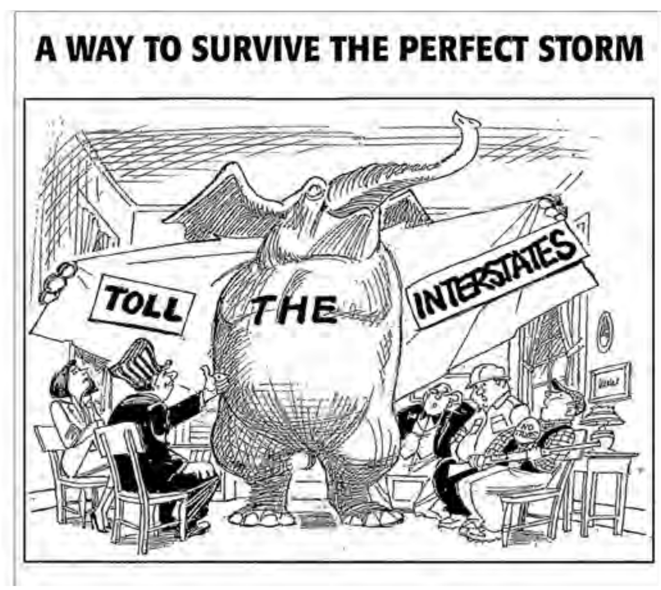

PUBLIC-PRIVATE SERVICES DIRECTORY

With more than 40 years of experience, IRIDIUM Concesiones (formerly Dragados Concesiones) is the ACS Group company that promotes, develops and operates public private partnership projects worldwide. With over 100 projects developed in 21 countries, including 3,953 miles of highways, 1,029 miles of railroads, 16 airports, 18 ports and several social infrastructure PPP projects, IRIDIUM Concesiones is the world leader in this field. We are proud to have global presence with local commitment. ACS Group companies apply their unsurpassed technical skills to the planning, design, construction, operation and maintenance of infrastructures, using the latest technologies in any area and providing the highest level of excellence throughout. A solid financial capability combined with an innovative approach allows IRIDIUM Concesiones to structure the necessary financial resources for any project.
Contact **Salvador Myro** smyroc@iridium-acs.com
at +(34) 91 703 85 48 or visit www.iridiumconcesiones.com
or www.grupoacs.com for further details.

Ferrovial Agroman is a leader in the global construction market. In addition to Spain, the company has significant activity in eight other countries: Poland, USA, Greece, United Kingdom, Chile, Puerto Rico, Ireland and Portugal. Wholly owned by the same parent company as CINTRA, the world's largest transportation developer by invested capital, Ferrovial Agroman has 80 years of construction experience in DBB, DB, and P3 projects in all types of infrastructure assets. These decades of experience result in 2,500 miles highway concessions; 9,475 miles new roads; 16,995 miles rehab of roads; 304 miles tunnels; 2,523 miles canals; 3,884 miles water pipelines; 2,392 miles gas and oil pipelines; 29 hydroelectric power stations; 147 dams; 220 water treatment plants; 21 miles wharfs and ports; 40 airports; 20 stadiums; and 2,920 miles of railways, including 449 miles of High Speed Rail.

Contact **Daniel Filer**, VP of Business Development for North America at +1-512-637-8587.

Ernst & Young, LLP is a leader in assurance, tax, transaction and advisory services. We believe in the value of infrastructure to our communities and are proud to serve clients as they work to:

- Rebuild and modernize existing infrastructure
- Invest wisely in new infrastructure to address new and changing needs, enable growth and achieve a higher quality of life for communities
- Bring innovation, foresight and sound economic stewardship to their major projects, programs and investments, and/or
- Identify and attract the funding and financing required to invest in infrastructure.

We provide finance, business planning, policy, procurement, modeling, valuation and tax advice for large-scale infrastructure projects, programs, investments and public-private partnerships. We serve state and local government clients through our affiliate, Ernst & Young Infrastructure Advisors, LLC, a registered municipal advisor. We help clients to achieve their goals.

Please contact: **Mike Parker,** Senior Managing Director, Ernst & Young Infrastructure Advisors, LLC
+1 215 448 3391, mike.parker@ey.com; or
Jay Zukerman, US Infrastructure Tax Leader,
+1 212 773 3270, jay.zukerman@ey.com.

At **HDR,** it's our job as consultants to help you keep pace with today's rapidly changing marketplace. We help you make decisions based on rigorous analysis of the economic climate, a thorough understanding of your organizational needs and priorities, and nearly 100 years of experience in delivering infrastructure. From strategy and finance to design and delivery, we help you develop innovative, reliable and cost-effective solutions to your infrastructure challenges.
Learn more at hdrinc.com or contact us:
Bill Damon, managing director—Power, (734) 332-6400, bill.damon@hdrinc.com
DJ Gribbin, managing director—Transportation, (703) 888-6344, dj.gribbin@hdrinc.com
Carter Strickland, managing director—Water, (212) 542-6129, carter.strickland@hdrinc.com

GRANITE

Formed in 1922, **Granite Construction Incorporated** is today one of the largest heavy civil contractors in the United States. It is positioned in all the major U.S. markets with offices located throughout the country serving over private and public clients. Over the past 88 years, Granite has earned a nationwide reputation as the preeminent builder of quality projects in a timely manner. Always progressive, Granite has developed into one of the top Design-Build contractors in the U.S. and has recently enacted an Environmental Affairs Policy to take a leading role in the construction industry in protecting the environment and our natural resources. Through our corporate Sustainability Plan, we actively engage in industry, and direct efforts at the local, state, and federal levels to advocate for adequate and sustainable public infrastructure funding to maintain and improve America's transportation system. Granite is nationally recognized for its expertise in the majority of construction sectors including tunnels, highways and roadways, dams, bridges, railroads marine, airports, heavy and light mass transit, and have become renowned design-build and mega project constructors. Granite leads the market in the design-build turn-key delivery of complex fast paced transportation projects.

Contact **Kent Marshall** (831) 728-7549, or 585 West Beach St. Watsonville, CA 95077-5085 www.graniteconstruction.com

Elias GROUP

Elias Group LLP provides legal and consulting services to government and industry. We are a boutique law firm internationally recognized for our expertise in project finance, public/private partnerships, industrial outsourcing, joint ventures and strategic alliances, and M&A of regulated and non-regulated entities. The firm's unique accomplishments include the first 20-year concession agreement executed in the U.S. for the rehabilitation and operation of a municipal wastewater treatment facility. Our skills and practical experience are evident in the multitude of transactions successfully completed.

Contact **Dan Elias** or **Michael Siegel** at 411 Theodore Fremd Avenue, Rye, NY 10580; tel: (914) 925-0000; fax: (914) 925-9344; or visit our web site: www.eliasgroup.com

Hawkins DELAFIELD & WOOD LLP

Hawkins Delafield & Wood provides legal advisory services to governmental owners on P3 and alternative delivery infrastructure projects in the United States and Canada. The firm also represents P3 project investment bankers and lenders.

Our infrastructure legal practice is widely recognized for its quality and depth. Over a 20-year span, Hawkins has negotiated and closed more than 200 design-build, design-build-operate, design-build-finance-operate, construction-manager-at-risk, concession, asset management, operating services and franchise agreements for public sector clients in 25 states and three provinces. We practice in the transportation, water, wastewater, solid waste, renewable energy and social infrastructure sectors. Leading projects on which Hawkins has served as owner's lead counsel include:

- *Carlsbad Seawater Desalination Project* (San Diego County Water Authority), a Project Finance International water infrastructure P3 deal of the year.
- *New Long Beach Court Building* (State of California), a Bond Buyer social infrastructure P3 deal of the year.
- *Vista Ridge Regional Water Supply P3 Project* (San Antonio Water System)

Contact:
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Ron Grosser (212) 820-9423 (rgrosser@hawkins.com)
Joe Sullivan (212) 820-9513 (jsullivan@hawkins.com)
Rick Sapir at (973) 642-1188 (esapir@hawkins.com)
or through our website at www.hawkins.com

For information about how to list your firm in PWF's Public-Private Services Directory contact William Reinhardt at (908) 654-6572 or www.pwfinance.net or email: pwfinance@aol.com

GLOBALVIA

Globalvia was founded in 2007, being its shareholders (50:50) the construction and environmental services company Fomento de Construcciones y Contratas S.A. and Spanish savings bank Bankia. Globalvia, one of the world's largest transport infrastructure developers by number of concessions, according to PWF, is specialized in DBFOM and DBFM projects. Globalvia has the financial capability to accelerate delivery of projects, as well as the construction and operational expertise to meet the highest standards for the life of a project. We take pride in working with local contractors, employing area business and individuals during operation and incorporating community feedback to deliver the best possible public service. Currently, the company manages 29 PPP projects in seven countries, including highways, railways, hospitals and ports. Over 250m vehicles and 54m passengers travel annually on our safe, reliable modern road and railways, which total 1,600km long.

Contact **Joaquín Madrigal** +34 91 456 58 50
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mlapolla@globalvia.com

AIAI

ASSOCIATION FOR THE IMPROVEMENT OF AMERICAN INFRASTRUCTURE

AIAI is a non-profit organization formed in the District of Columbia to help shape the direction of the national Public Private Partnership marketplace. AIAI serves as a national proponent to facilitate education and legislation through targeted advocacy. AIAI's Board is comprised of leaders of the construction and development industry. Their extensive national and international experience and industry knowledge provides AIAI with a clear direction for developing and advocating policy and legislative solutions, allowing more equitable and effective partnerships across diverse market sectors from transportation and energy to educational, health and public service institutions.
Contact **Lisa Buglione** (516) 277-2950
lbuglione@aiai-infra.org

BAKER & MCKENZIE

Baker & McKenzie has a long history of involvement in the development of infrastructure projects and P3 projects in North America. We have represented bid leaders, consortium partners and lenders in a number of high profile projects, placing us among the few law firms with true expertise in the area. Our experience covers the many complex tasks involved in the development of such major infrastructure and P3 projects, including:

- project and transaction structuring
- consortium structuring
- tax planning
- project financing
- negotiation of key project documents
- public offerings

Our broad experience enables us to act efficiently for our clients through the use of relevant and effective precedents that have been executed in past transactions.
We offer our clients:

- an understanding of the key drivers that influence public agencies in evaluating bids;
- a proven project management capability and ability to bring together legal arrangements in complex infrastructure projects in tight timeframes; and
- an in-depth knowledge of applicable, federal, state, provincial, local and/or municipal laws with an unparalleled international perspective.

Key contacts: **José A. Morán** at (312) 861-2829, jose.moran@bakermckenzie.com; **Michael S. Smith** at (312) 861-8930, michael.s.smith@bakermckenzie.com; or **James P. O'Brien** at (312) 861-7588, james.p.o'brien@bakermckenzie.com

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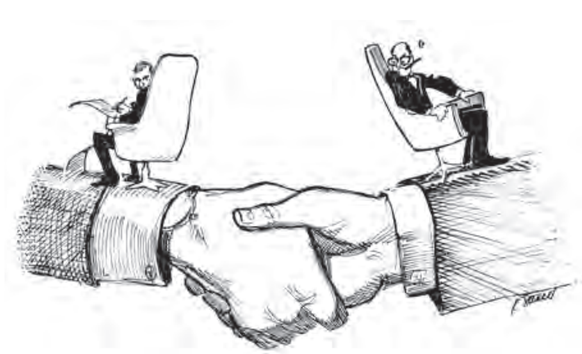

PUBLIC-PRIVATE SERVICES DIRECTORY

Engineering and Environmental Solutions

TYPSA-AZTEC is an international consulting engineering firm with nearly 50 years of experience successfully executing major infrastructure projects. Our 2000 professionals work in multidisciplinary teams to improve and sustain enhanced living conditions around the world. Our major services include: Transportation / Architecture / Building Technology / Energy / Environmental Services. We are internationally recognized with top industry rankings and awards. In all we do, we seek balanced solutions for our clients, the public and the environment.

For more information, please contact **Javier Machi** 011-34-600-592-010 / jmachi@typsa.com or **Robert L. Lemke, Jr.**: (602) 402-8683 / rlemke@aztec.us

www.typsa.com www.aztec.us

Egis has an unrivalled experience in most types of infrastructure P3 and concessions: motorways, bridges, tunnels, urban infrastructures and airports. We are experienced with all types of remuneration (real toll, shadow toll or availability schemes). Egis Projects relies on the specialized skills of its shareholders: Groupe Egis, a leader in infrastructure engineering, and Caisse des Dépôts. Egis Projects acts as promoter, developer and investor in concession/P3 projects, as turnkey equipment integrator, as operator and manager of airports and, via its wholly owned subsidiary Egis Road Operation, as operator of roads and motorways. Egis Projects has also extended its activities to electronic toll collection, toll network interoperability, and safety enforcement as well as associated services for road users under the Easytrip brand.
Egis Projects has financially closed 23 infrastructure projects for a total value of 12 bn €.
Egis Road Operation is operating 30 motorways totalling 2,400 km in 16 different countries.

Contact: **Alain Poliakoff** in Paris, France at +33 1 39 41 45 13, fax (33) 1 39 41 57 37 or alain.poliakoff@egis.fr or visit our website:
www.egis-projects.com

Abertis is the world leader in the toll roads sector with 29 concessions and over 8,300 kilometers under management. The Group, with a presence in 12 countries and over 14,300 employees, is geared towards value creation through infrastructure investments that contribute to economic and social development in these areas. Since its inception in 2003, Abertis has invested over 15,000 million euro in the countries in which it operates.

After a successful internationalization process in the last 5 years, more than 70% of Abertis' revenues are generated outside Spain. France is nowadays its biggest market by revenues and Ebitda, followed by Spain and Brazil. Abertis is listed on the Spanish Stock Exchange and is a constituent of the IBEX 35. It is present also in the main international indexes such as FTS Eurofirst 300 and Standard & Poor's Europe 350.

Contact: **Communications Direction** (34) 93 230 50 39

Your ad here reaches the universe of private and public-sector industry leaders who depend on *Public Works Financing* for timely, accurate news and analysis of infrastructure delivery options in North America and the world. To join them, call us at (908) 654-6572, or email PWFinance@aol.com

CDM Smith provides lasting and integrated solutions in water, environment, transportation, energy and facilities to public and private clients worldwide. As a full-service consulting, engineering, construction, and operations firm, we deliver exceptional client service, quality results and enduring value across the entire project life cycle.

CDM Smith is internationally recognized for utility, toll road and public-private partnership expertise, serving public and private sector clients on hundreds of infrastructure projects worldwide. For more than 60 years, CDM Smith has worked to place $85 billion of revenue-based financings and provide unparalleled credibility in today's financial markets.

Visit us at cdmsmith.com—or contact **Ed Regan** (803 251-2072), **Kamran Khan** (630 874-7902)**, Grant Holland** (404 720-1283) or **Joe Ridge** (603 222-8320).

Assured Guaranty, the leading provider of bond insurance, has helped public-private partnerships reduce the cost of financing essential public infrastructure and achieve smooth transaction execution for decades, even during extremely difficult market conditions. With financial strength rated AA by S&P, AA+ by KBRA, and A2 by Moody's, all with stable outlooks, Assured Guaranty Municipal Corp. helps broaden the investor base and improve the cost efficiency of infrastructure financings by unconditionally guaranteeing timely payment of principal and interest. Investors are attracted to the insured bonds' increased market liquidity, as well as Assured Guaranty's credit selection, underwriting, negotiated terms, construction period coverage and ongoing surveillance.

Contact: **Lorne Potash** at lpotash@assuredguaranty.com
(212) 261-5579, or
Mary Francoeur at mfrancoeur@assuredguaranty.com
(212) 408-6051

For additional information, visit AssuredGuaranty.com.

Cintra is the leading private-sector transportation infrastructure company in the world with experience spanning more than 47 years of innovative highway development on three continents. Today, our portfolio includes 28 concession projects in seven different countries totaling approximately 1,230 miles of managed highways worldwide, representing a total global investment in roadway improvements of more than $24 billion. Cintra's parent company, Ferrovial is recognized as one of the world's largest private operators of transportation infrastructure and a leading services provider. It generates net revenues of nearly $10 billion a year, has operations in more than 25 countries and assets totaling approximately $29 billion. Ferrovial's business model is focused on end-to-end infrastructure management, design, construction, financing, operation and maintenance. With this aim, the company is active in complementary sectors, such as airport and toll road construction and operation, as well as services.

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