Construction on I-4 Ultimate began in early 2015. The project will rebuild 21 miles of I-4 from west of Kirkman Road in Orange County to east of State Road ("SR") 434 in Seminole County, add two new dynamic tolled Managed Lanes in each direction, replace more than 140 bridges, reconfigure 15 major interchanges, reconstruct the entire existing roadway and increase the posted speed to 55 mph.

The existing general purpose lanes, which range from three to four lanes in each direction, are approximately 50 years old and experience significant levels of congestion. Once the project is completed, the Florida Department of Transportation ("FDOT") will set toll rates and collect all revenue. Access and egress will be provided at five exchange areas and by direct connectors at major intersections. The project is expected to be complete in 2021.

**BACKGROUND + PROJECT DRIVERS**

Already a vacation hot spot to more than 4.5 million visitors annually, Florida’s popularity began skyrocketing in the 1950s. The advent of air-conditioning and the expanding space industry in Cape Canaveral are credited with bringing more than 60 new industries to Central Florida by 1960, prompting the Census Bureau to declare Orlando the highest growth area in the US. In 1971, Disney World opened, and Orlando’s tourism industry skyrocketed.

Popularity in tourism and increased economic activity gave rise to increased traffic. In addition to the Orlando metropolitan area’s commuting population of 2.4 million people, Disney World, Epcot Center, Sea World, and Universal Studios attract millions of visitors each year. Just prior to the I-4 Ultimate procurement, a traffic study identified over 210,000 vehicle trips per day in and out of the metro Orlando/Winter Park area on a highway designed and built in 1965 to accommodate 70,000 trips per day.

Over the last 25 years, interim interchange, reconstruction and auxiliary lane widening projects have provided Band-Aid solutions to the serious capacity issues on the I-4 corridor. FDOT forecasted a loss in mobility for the area’s residents, visitors, and employees resulting in a severe threat to the continued viability of the economy and the quality of life in the Orlando region if no major improvements were made to I-4.
Due to inflation and increases in fuel efficiency (and resultant declines in gas tax receipts), FDOT is unable to keep pace with growing demands on the statewide interstate system. FDOT did not have sufficient funding available for the I-4 Ultimate project. In fact, FDOT had approximately half of the $2.3 billion needed for the project in 2014. FDOT completed analysis that showed that if the I-4 Ultimate was built as traditional funding became available; it would take 27 years to complete.

The I-4 Ultimate is a project that involves demolishing, rebuilding and improving — including adding tolled Managed Lanes on 21 miles of existing highway. The project is being designed, built, financed, operated and maintained as a public-private partnership, or P3, which means that the Concessionaire, I-4 Mobility Partners, will shoulder most of the responsibility for designing and building the roadway, as well as making sure it operates correctly and is well-maintained for 40 years.

Construction is scheduled to be completed in 2021 and the roadway will remain open during that time.

The need for the project is driven by:
- Severe congestion in the Orlando region
- Observed and expected population growth around the city of Orlando
- Observed and expected growth in tourism and commercial traffic

The I-4 Ultimate project is expected to achieve the following goals:
- Provide new commuter options on I-4
- Improve traffic flow, safety, community connections, sustainability, and use of technology
- Improve highway throughput
- Deliver improved aesthetic treatments, including a signature pedestrian bridge, accent lighting, fountain illumination, art sculptures and monuments, and other architectural treatments

**DELIVERY METHOD ASSESSMENT**

Limited by prohibitive additional right-of-way purchase costs and the need to navigate environmentally sensitive wetland in the vicinity of the existing highway, FDOT explored the idea of double-decking the existing interstate to create the 12 to 14 lanes that would be needed to handle projected traffic. It was determined to be a non-viable option primarily due to cost. Eventually the managed lanes concept was recognized as a way to expand capacity and give commuters a travel alternative without having to incur significant right-of-way acquisition.

FDOT has successfully delivered two complex infrastructure projects using P3s. The Port of Miami Tunnel ($914 million in 2009) was the first P3 project in the US to use availability payments as a form of compensation to the private sector developer and it was followed by the I-595 Managed Lanes ($1.8 billion also 2009), which also used availability payments. The I-4 Ultimate project, with a capital requirement of $2.3 billion, was the largest project to be considered.

In 2011/2012, a Value for Money analysis was performed by FDOT to compare the benefits of a design-build-finance-operate-maintain model ("DBFOM") with
availability payments against a design-build ("DB") delivery model. Value for money analysis is a tool used to compare the total potential costs over the full life cycle for a project over a fixed time period (which can be anywhere from 30-75 years), adjusted for risk factors under different delivery methods. Risk factors can include elements such as cost and schedule overruns, operations and maintenance cost increases, or increased materials cost risk. This type of analysis allows for a simple apples-to-apples quantitative comparison of the net present value of potential project costs over a specified period under different delivery methods.

The Value for Money analysis performed by FDOT for I-4 Ultimate assumed a post-tax equity IRR (internal rate of return) of 12% and a nominal discount rate of 5% for both the DB and DBFOM alternatives. The analysis showed that the lowest cost delivery option over the project life was a DBFOM.

The 5% nominal discount rate applied by FDOT to its Value for Money analysis is relatively low compared to the few US projects where the analysis has been used. Discount rates are intended to reflect the time value of money. A detailed discount rate calculation will take account of a number of factors, including the public benefit of the project and the cost of capital that would be used to build the project, so they are highly dependent on current financial markets. Typical discount factors in the UK, Canada, and US range from 3.5% - 10%. Higher discount rates (which would be in the range of 9-10%) usually favor the P3 alternative, but it is important to note that several factors contribute to the overall results of the quantitative analysis, including risk assessment and risk allocation, expected equity return requirements, the magnitude of operations and maintenance costs, and public benefits. In the case of FDOT, its cost of borrowing is relatively low as a AAA-rated agency of the state of Florida. Qualitative results also need to be considered when making a decision to proceed with a P3 procurement.

**BENEFITS**

I-4 Ultimate’s Value for Money analysis demonstrated a cost savings of $1.375 billion (35% of project costs) over a 40-year period between a DB and a DBFOM.

By using the P3 procurement method, the project is being designed and built in less than 7 years – 20 years earlier than a traditional procurement would allow.

The results of the received bid compare favorably to the Value for Money analysis, and the results show that FDOT has saved over $70 million from their initial assessment of the value of a DBFOM.
PROCUREMENT APPROACH
FDOT completed its Value for Money analysis in 2012.

In February 2013, Florida Governor Rick Scott and the Florida Legislature gave FDOT approval to move forward with the procurement process for the I-4 Ultimate Project in Central Florida P3, valued at $2.1 billion. Under Florida law, a contractor-financed P3 project requires both the Governor’s approval and a 14-day legislative consultation and notification period.

The transaction was launched to the P3 market in March 2013. Over 1,000 industry players attended the public information session held in early March 2013.

By the time the RFQ was released on March 8, 2013, funding had been lined up and initial environmental permits and 97% of the required right-of-way were in hand for the full 21-mile corridor. Updated toll revenue forecasts were prepared and the design was 60% complete.

FDOT received seven responses to their RFQ and on May 21, 2013. FDOT announced that they had shortlisted four of the respondents to move forward with the procurement and receive a formal RFP.

In October 2013, FDOT issued the RFP.

On February 12, 2014 FDOT received all four technical proposals.

On March 13, 2014 all four financial proposals were submitted.

On April 23, 2014, I-4 Mobility Partners was named as the preferred proponent and all of the unsuccessful, responsive bidders were eligible to receive a $2 million stipend.

Financial close was reached on September 5, 2014.

ORGANIZATION CHART
FINANCING
When the I-4 Mobility Partners team submitted their bid to FDOT, they had secured commitments from banks to provide financing to the project. The commitments were oversubscribed to protect against interest rate movements in the period between selection of the Best Value Proposer and Financial Close. They also had secured credit approvals and letters of support from two underwriters who were prepared to market private activity bonds (“PABs”) to the tax-exempt markets if market movements resulted in PABs being a more efficient financing solution during the time period from selection to financial close.

A TIFIA term sheet had been negotiated by FDOT and made available to the bidders for a maximum TIFIA Loan amount of $950 million.

The winning bidder’s sources of financing included:

- $949 million TIFIA loan (which in turn breaks down into a short-term 8-year tranche A of $127.3 million with an average cost of 2.32% and a long-term 38-year tranche B of $822.2 million with an average cost of 3.17%)
- $483 million senior bank loan with an 8-year maturity (priced at 125 bps over 1-month LIBOR for an average cost of 3.85%)
- $103 million of sponsor equity with a 12% return

The average total debt service cover ratio was 1.26x at the time of bid submission with a minimum TIFIA loan life cover ratio of 1.28x. The debt was rated Baa1 by Moody’s.

At financial close, interest movements went in favor of the project, and the total weighted average cost of capital for the project was 4.45%. The project’s financing mix consisted of 94% debt to 6% equity, which is high gearing for a project financing but reflective of the low-risk nature of the revenue stream and the payment structure offered by FDOT (which includes payments at specific construction milestones and annual availability payments during operations).

The sources and uses chart at the bottom of this page is taken from the proposal submitted by I-4 Mobility Partners. It was adjusted prior to financial close to take account of current interest rates and marginal adjustments in the loan quanta.

FDOT’s milestone and availability payments are funded with a combination of federal, state, local, and private funding sources. Revenue from the I-4 Managed Lanes fund more than half of the project during the 40-year concession period.

<table>
<thead>
<tr>
<th>Sources</th>
<th>Uses</th>
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<tbody>
<tr>
<td>Periodic Payments</td>
<td>Design Build Agreement</td>
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<tr>
<td>Senior Bank Facility</td>
<td>Development Costs</td>
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<tr>
<td>TIFIA Loan Tranche A - Principal</td>
<td>Ongoing Overheads</td>
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<td>TIFIA Loan Tranche A - Capitalized Interests</td>
<td>O&amp;M Startup</td>
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<tr>
<td>TIFIA Loan Tranche B - Principal</td>
<td>Interest during Construction</td>
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<td>TIFIA Loan Tranche B - Capitalized Interests</td>
<td>Arrangement &amp; Underwriting Fees</td>
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<tr>
<td>Equity</td>
<td>Commitment Fees</td>
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<tr>
<td>Interest Income</td>
<td>Reserves and cash accounts</td>
</tr>
<tr>
<td>Total Sources</td>
<td>Total Uses</td>
</tr>
</tbody>
</table>

| 1,034,984,132                   | 2,323,000,000           |
| 488,988,484                     | 27,274,297              |
| 126,825,942                     | 77,258,026              |
| 21,550,225                      | 5,947,209               |
| 823,174,058                     | 251,326,233             |
| 136,837,404                     | 5,812,356               |
| 105,468,201                     | 5,063,796               |
| 7,507                           | 31,364,037              |
| 2,737,835,954                   | 2,737,835,954           |
The I-4 Ultimate project includes reconstructing 15 major interchanges; constructing more than 145 bridges; adding four variable priced toll Managed Lanes in the median; and completely rebuilding the general use lanes along the entire corridor.

FDOT will make capital payments totaling $1.7 billion as specific milestones are achieved during the construction period. Of the $1.7 billion, $688 million will be paid at final acceptance of the facility.

About 99 percent of the material being pulled from the existing I-4 is being recycled and reused as road bed, according to the report. One hundred percent of the steel that is being reclaimed is melted down and turned around as new material.

FDOT and its Construction Oversight Services (“COS”) team (comprised of HNTB, Elipsis Engineering & Consulting, the Corradino Group and New Millennium, among other companies) oversees the Concessionaire, ensuring they are adhering to all requirements in the contract through regular check-ins and audits of processes and procedures, as well as a review of materials and workmanship. Construction is in progress and the Concessionaire is obligated to keep at least two lanes of traffic open at all times.

The Concessionaire has established an informative website for the public to view information about the project, the P3 delivery model, and construction progress.

OPERATIONS
The project is expected to open for operations at the end of 2021. In exchange for fulfilling their obligations under the concession, I-4 Mobility Partners will receive a maximum $75 million annual payment (July 2014 dollars), subject to performance deductions and inflationary adjustment, during each year that the I-4 Managed Lanes are in operation.

Once completed, two dynamic tolled Managed Lanes in each direction on I-4 will provide more reliable travel times for Central Florida drivers and manage traffic efficiently. The Managed Lanes will be operated with variable tolls, which will be adjusted to improve traffic flow throughout the corridor. Pricing will be set by FDOT and will increase or decrease depending on the number of vehicles using the Managed Lanes. The tolls will be collected electronically, with automated signs notifying motorists of the cost, which drivers will lock in when entering the Managed Lanes.

The Managed Lanes will be separated by a concrete barrier and are designed to keep traffic moving around a steady 50 mph. Monumental pylons will be placed at each entry and exit point, adding a unique aesthetic feature to I-4. Direct-access ramps will link the I-4 Managed Lanes with State Road 408 for a smooth transition.

According to the traffic study completed in 2012, the Managed Lanes are expected to gross $27.4 million in 2021. Under its most conservative forecast, the Project is expected to be generating sufficient toll revenue after 10-15 years of operations (depending on the conservatism of the forecast) to cover the annual availability payment and toll collection expenses. Projected estimates show the Managed lanes grossing $200 million (in nominal dollars) by 2040. Therefore, over the long term FDOT is anticipating a significant return on its investments in the Project.

CURRENT STATUS
I-4 Ultimate was honored by the Infrastructure Journal and Project Finance Magazine as the 2014 “Deal of the Year” in the Transportation category.

Construction by all accounts is progressing well and there is significant support for the Project in the local press.
## ROLES + RESPONSIBILITIES

<table>
<thead>
<tr>
<th>RISK</th>
<th>OBLIGATIONS ASSUMED BY FDOT</th>
<th>OBLIGATIONS ASSUMED BY CONCESSIONAIRE</th>
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</thead>
<tbody>
<tr>
<td>Design and Construction</td>
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<tr>
<td>Financing</td>
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<td>Traffic and Revenue</td>
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<td>Toll Rate Setting</td>
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<td>O&amp;M and Major Maintenance</td>
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<td>Insurance</td>
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<td>Change in Law (discriminatory)</td>
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<td>Permitting &amp; Licensing</td>
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<td>ROW Acquisition</td>
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<td>Hand-back</td>
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<td>Police and Emergency Services</td>
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<td>Environmental</td>
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<td>Termination for Convenience</td>
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<td>Protection from Competitive Transportation Facilities</td>
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<td>Federal Requirements</td>
<td>Reasonable Assistance</td>
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</tr>
<tr>
<td>Force Majeure</td>
<td>Shared</td>
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</tr>
</tbody>
</table>
APPLICABILITY TO HWY 37

FDOT is a clear winner in this Project. FDOT officials have confirmed in public statements that the I-4 Ultimate project was advanced by 20 years, and that the safety improvements and congestion relief that are provided by the project are a genuine benefit to the public. Using a P3 for a large, complex project such as I-4 Ultimate or Highway 37 can help accelerate delivery because the project’s funding requirement can be deferred in to the future. In the case of I-4 Ultimate, FDOT was able to make a case that managed lanes toll revenue would be sufficient to cover their payment obligations to the private sector, reducing the impact of the availability-based project on FDOT’s balance sheet.

FDOT officials have noted that the public private partnership creates an alignment of incentives between the public and private sectors, and that lenders and investors are highly motivated to achieve project completion to realize their anticipated returns. While construction oversight and approval is still required at all stages of construction by the public sector, the nature of the contracts in a concession-based P3 provides for a significant level of oversight by lenders and equity investors, who are in a first loss position if the project fails to be delivered. Typical P3 agreements provide lenders with specific rights of enforcement in the event that a contractor fails to perform its obligations. These types of provisions have successfully insulated the public sector from problems that have arisen in other P3 projects in the US.

FDOT has also noted the benefit of the innovation that the private sector has provided to the design and construction of the I-4 managed lanes, which helped to drive costs below engineers’ estimates and add to an efficient delivery of the new lanes. A documented benefit of P3s is that through efficiencies in construction and reduction of interface risk, reduction in construction costs from engineers’ estimates can range from 20-30%.

By utilizing an availability-based structure where funding for the payments is provided primarily through toll revenue, FDOT was able to achieve two important benefits: firstly, FDOT minimized the budgetary impact and funding needs of the project. Secondly, by assuming payment risk over the long term, FDOT effectively offered the private sector a AAA-rated payment stream. As reflected in the private financing that the concessionaire was able to secure, which was far below the tax-exempt rate of debt, the financial markets had a favorable view of this structure. Lowering the costs of financing is one of the ways that a P3 can help provide value to the public sector.

FDOT was able to leverage its reputation for successful P3 projects into its largest project yet. California can similarly take advantage of a newly-established P3 track record (on the heels of Presidio Parkway, South Bay Expressway, Long Beach Courthouse and Long Beach Civic Center), a regional acceptance of tolls, and state-wide experience in managed lanes to make a compelling case to the market that California agencies are high quality partners to have in concession-based P3s.

WHAT LEGISLATION NEEDS TO BE ENACTED TO PERMIT A SIMILAR EFFORT FOR HWY 37?

One area where many governments struggle with P3s is that the procurement process needs to be highly confidential. In the I-4 Ultimate, in response to a question about the biggest challenge, FDOT’s project manager Laureen Bobo was quoted as saying: “The procurement process was very confidential. We had four teams made up of firms from around the world spending millions to pursue the contract. We couldn’t share any of the cool ideas the teams had. Even the meetings were very confidential, where your name had to be on a list to get in and we had to put our cellphones down. We couldn't take anything out of the room, even if we wanted to read up on things after hours. We had about nine months like that.” In a state where sunshine laws dictate that all procurement information is public, special dispensation needed to be given to ensure that the teams’ bid concepts and
questions would be protected to ensure a highly competitive process.

By having the Governor and Legislature approve the project prior to launching the project into the market, FDOT resolved an issue that has caused the downfall of many P3 projects in the US: political risk. Because P3 delivery is still a novel concept, they are viewed negatively by some and are subject to political wrangling. This is a major risk area for private developers, who invest heavily in assembling bids for full DBFOM procurements. Hints of political infighting or potential failure of the project at the last minute will suppress developer appetite and reduce competitive tension among bidders.

Using toll revenue as a source of availability payments is one of the keys to success of this Project, and should be strongly considered by California for the next phase of its P3 program. By assuming the risk of making long-term payments to the private developer, FDOT was able to leverage its AAA rating into securing extremely competitive costs of financing from its private partner. FDOT was also able make a persuasive case to the rating agencies that the Managed Lanes revenue supported over half of the availability payment requirement, which helped to preserve FDOT’s rating and debt capacity.

On the Federal level, the new Fixing America’s Surface Transportation Act includes a five-year, fully paid-for surface transportation reauthorization of federal highway, transit, highway safety, motor carrier safety, hazardous materials, and passenger rail programs. The bill promotes the use of private investment using P3s for the surface transportation system. Perhaps most compelling for California are the new federal matching strategies, particularly the potential use of toll credits in lieu of local funds. This should be considered in the context of the options that are investigated for Highway 37.
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