



Dynamic solutions to traffic congestion in the USA

In the USA, individual states are embracing the Public-Private Partnership model (P3) to help meet an anticipated \$1 trillion shortfall in infrastructure investment over the coming decades. John Laing's track record of successful project delivery around the world makes it the partner of choice for consortia approaching the US market.

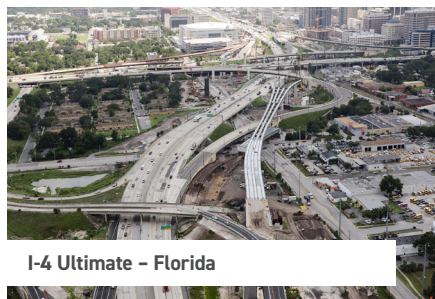
For example, we have been working on a number of highway projects, bringing best practice experience and working closely with partners, state governments and local communities to improve traffic flow, reduce pollution and introduce new thinking to highway construction, operations and management.

This demonstration spotlights our work on four major highways projects in the US:

- I-75 Modernisation - Michigan
- I-4 Ultimate - Florida
- I-77 HOT Lanes - North Carolina
- Transform 66 - Virginia



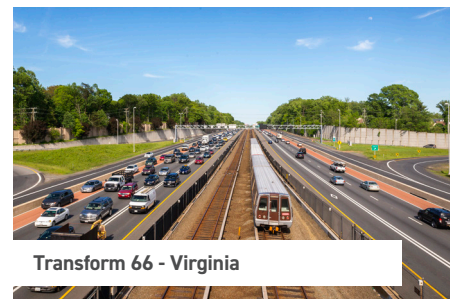
I-75 Modernisation - Michigan



I-4 Ultimate - Florida



I-77 HOT Lanes - North Carolina



Transform 66 - Virginia

Highway reconstruction

John Laing has financed and is managing and actively delivering critical long-term improvements to several major highway routes throughout the nation. With many states in the USA only recently exploring the opportunities that P3s offer, it's vital that we play a leading role in bringing good project practice to these highway expansions, with a focus on safety, quality and on-time, on-budget delivery.



I-75 Modernisation – Michigan

KEY FACTS:

- Reconstruction of 5.5 miles of I-75 corridor
- Improvement to 28 bridges
- Safety upgrades to entryway
- Construction of new 4-mile storage and drainage tunnel
- Long-term operations, maintenance and rehabilitation
- 30-year contract term
- Cost: US\$1.4bn
- Start date: Fall 2019
- Completion date: Fall 2022
- Model: Design-Build-Finance-Maintain

This project, which reached Financial Close in November 2018, is for Segment 3 of the I-75 modernisation project; a segment that covers a stretch of 18 miles in total. This crucial corridor has not received any comprehensive improvements since its construction in the 1960s. The state of Michigan needs to increase capacity on this stretch of highway in order to ease congestion – this part of I-75 carries up to 174,000 vehicles every day. This project is essential to Michigan's Department of Transportation, which is relatively new to the P3 model. The project is expected to accelerate completion of the highway upgrade by as much as 12 years over the Department's original modernization plan.

Investment in the I-75 Improvement Project is just one of John Laing's recent contributions to US road reconstruction. Since 2014 John Laing has been working with state authorities to alleviate congestion. This is a fast-growing sector as urbanization increases and we will continue to build partnerships that bring results and benefits for the community and state authorities.



KEY PARTNERS:

- Equity partners: John Laing, AECOM Capital, Dan's Excavating, Ajax Paving Industries and Jay Dee Constructors
- Lead designers: AECOM
- Construction: Dan's Excavating, Ajax Paving Industries, Jay Dee Constructors and C.A. Hull

“ We are very pleased to be working with the Michigan Department of Transportation in its I-75 modernization program. Alongside our partners Aecom and within the Oakland Corridors Partners consortium, we are looking forward to providing a safer driving experience for the residents of southeast Michigan. We have a strong team of John Laing professionals delivering the project on the ground in Metro Detroit, and are delighted to expand our US footprint to the State of Michigan.

This significant equity investment builds upon John Laing's strong presence throughout the US, and maintains our commitment as a leading developer and investor in PPP infrastructure, bringing best practice and innovation from around the world to this important market. ”

Anthony Phillips, Regional Managing Director for North America.



I-4 Ultimate Highway

KEY FACTS:

- Reconstruction of 21 miles of I-4
- 15 major interchanges and more than 140 new or reconstructed bridges
- Four variable toll lanes, managed by the Florida Department of Transportation
- 40-year concession
- Capital Cost: US\$2.3bn
- Start date: 2014
- Completion date: 2020-21
- Model: Design-Build-Finance-Operate-Maintain
- Awards: IJGlobal Americas Award 2015 (North American Transport Deal of the Year)

The I-4 Ultimate project is the largest single infrastructure project in Florida's history, commissioned by the Florida Department of Transportation (FDOT) and led by the I-4 Mobility Partners consortium comprising John Laing and Skanska Infrastructure Development.

The project will reduce congestion and provide additional capacity along a busy 21-mile section of Interstate 4 from west Kirkman Road in Orange County to east of State road 434 in Seminole County, that also serves as a major tourist route through central Florida.

The project has excellent sustainability and environmental credentials. Nearly all of the concrete and steel removed from the old road and bridges is being recycled, and recycled materials are being used wherever practical in the new construction.



KEY PARTNERS:

- Equity and management: John Laing and Skanska Infrastructure Development
- Construction: Skanska USA Civil SouthEast Inc., Granite Construction Company, The Lane Construction Corporation
- Engineering: HDR Engineering, Jacobs Engineering Group Inc.

“ It’s a massive, multi-faceted project with a strong Public-Private Partnership in an obviously busy corridor that’s critical to the region. This project will have some physical and social impact, and it will improve mobility in the community, which allows it to thrive, compete, and remain attractive for business and travelers. ”

Dr. Steven E. Polzin, Director at the Center for Urban Transportation at the University of South Florida.



Managed Lanes

States across the USA are experiencing increased problems with highway congestion in expanding urban areas. This has led to an investigation into how innovation and technology can facilitate capacity expansion in congested corridors, keeping people and freight on the move.

One of the solutions is to build and operate 'managed lanes' – these are either new-build lanes or conversions of existing High Occupancy Vehicle lanes for toll-paying drivers. The lanes run alongside traditional free-to-use lanes, and the toll prices are fluid – based on the number of vehicles on the road at any given time to maintain a level of speed and service, rather than on a fixed price basis.

The first managed lanes project was opened in California in 1995, and the USA now has around 400 corridor-miles of managed lanes. The cost of designing, building and operating this type of road infrastructure is most effectively managed through Private-Public Partnerships, and John Laing is currently invested in two major projects – the I-77 in North Carolina and Transform 66 in Virginia.



I-77 Managed Lanes

KEY FACTS:

- 25.9 miles of managed lanes on the I-77 in Charlotte region
- Concession period: 50 years
- 3,603 workers employed throughout the project
- 211 firms working within the project
- Capital Cost: US\$665m
- Completion date: mid-2019
- Model: Design-Build-Finance-Operate-Maintain

This project is close to completion and will deliver a significant stretch of dynamically-priced managed lanes, running alongside general highway lanes, in order to ease congestion in the urban Charlotte area. John Laing is part of the private consortium, I-77 Mobility Partners, which will be responsible for ensuring a minimum speed along the managed lanes at all times. Toll rates can be adjusted as often as every 5 minutes, to reflect the volume of traffic using the lanes. The managed lanes will be cash-less. Drivers can either have a pre-paid NC Quick Pass account, from which tolls are automatically deducted, or can be charged through the Bill by Mail programme, which captures license plate numbers and bills the owner direct.



KEY PARTNERS:

- Equity: I-77 Mobility Partners - John Laing, Cintra, GCM Grosvenor, Aberdeen
- Construction: FA Southeast, ENGLISH Construction





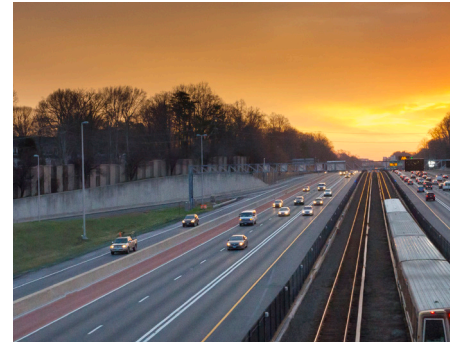
I-66: Transform 66

KEY FACTS:

- 22.5 miles of managed lanes
- Concession period: 50 years
- Capital Cost: \$2.3bn
- Safety and operational improvements
- Enhanced Park & Ride facilities, including 4,000 new parking spaces
- 11 miles of new bike and pedestrian trails
- Bus Rapid Transit provision
- Start date: 2018
- Completion: 2022
- Model: Design-Build-Finance-Operate-Maintain

The Transform 66 project is the largest ever greenfield toll road project in the USA delivered and financed through a Public-Private Partnership. It is also the first such project procured under modified rules in Virginia for identifying and approving PPP projects.

Two managed lanes will be added in each direction to the 22.5-mile stretch of the I-66 in the Washington DC suburbs. These lanes will run alongside the existing free-to-use lanes and will allow between 2000 and 4000 more people to use the road per hour – a significant and much-needed increase in capacity on one of the busiest stretches of highway in the USA. The tolls lanes will be dynamically managed, with toll prices changing depending on the volume of traffic using the lanes at any given time, using sophisticated algorithms and electronic tolling. Users will be able to choose between driving on the free lanes or enjoy a faster and less-congested drive by paying a toll.



KEY PARTNERS:

- Equity: I-66 Express Mobility Partners – John Laing, Cintra, Meridiam, APG Groep
- Construction: Ferrovial Agromán, Allan Myers

“ Following the I-77 in 2015, this is our second investment in managed lanes in the US. We see managed lanes as attractive and sophisticated projects which enable us to deploy our investment expertise. Because they provide an effective solution to address urban congestion, we see them as a growing asset class in the future. We are delighted to be teaming up with Cintra and Meridiam who have a great track record in this sector. Looking ahead, we continue to have a strong pipeline of attractive investment opportunities, particularly in North America and Australia. ”

Oliver Brousse, CEO, John Laing