# ALTERNATIVE DELIVERY EXPERIENCE Transportation Solutions for Owners







## **Reliable Alternative Delivery Expertise for:**

- **Customer Service**
- Efficiency
- Economy
- The Best Value
- **Creativity and Innovation**
- **Durability and Maintainability**
- Mobility
- Success

# (IV)WGI.

is a full-service consulting firm specializing in design-build and other alternative project delivery methods. We have what it takes to be your partner and deliver alternative delivery projects safely, smoothly, and efficiently. We have delivered 65 alternative delivery transportation projects worth a total \$5.7B. We know how to leverage alternative delivery processes to maximize value and constructability and optimize service to your customers.

The fact that we provide comprehensive professional services makes review and approval easier for you. We are a one-stop shop for Civil, Transportation, Structural, Hydrologic, and Environmental Engineering; Geospatial; Subsurface Utility Engineering; Landscape Architecture; Land Planning; Right-of-Way Acquisition; Environmental Sciences and Permitting; Architecture; Traffic Analysis Operations; 3D Engineered Modeling for Construction; Parking Solutions; and Construction Engineering and Inspection.

We design projects to give you the best value and to help you be the best steward of infrastructure. This means we are informed about each project, its needs, and community values. We design projects to be durable, with low-maintenance details that save you money on maintenance and have low life cycle costs. We design projects to save you money on the project itself. For example, WGI was the first to use right-of-way acquisition on a design-build project as an alternative technical concept for the Florida Department of Transportation. We've now done it on three projects, saving FDOT millions. We've eliminated or shortened bridges on numerous alternative delivery projects, and avoided, minimized, or phased permitting to facilitate construction, reducing administrative costs.

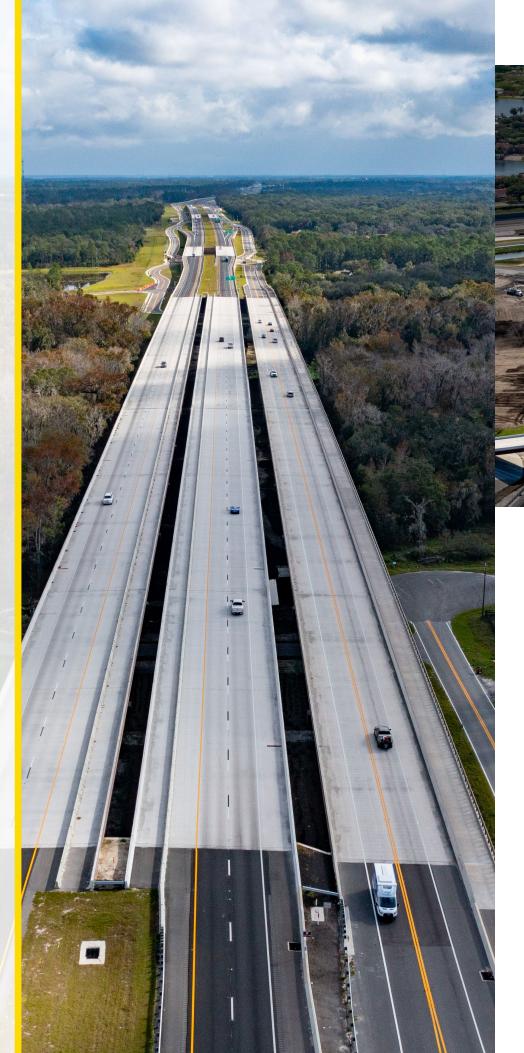


WE WILL exceed your expectations by providing a collaborative alternative delivery experience that maximizes safety, economy, constructability, efficiency, and customer service from NTP to ribbon-cutting.

## WGI has the people, expertise, and capacity to deliver big jobs.

### Wekiva Parkway (SR 429), Section 6, Lake and Seminole Counties, FDOT D5, \$234.5M

WGI delivered this environmentally challenging design-build project which is creating six miles of a limited-access toll road from State Road 46 to just west of Longwood-Markham Road. It includes construction of a non-tolled service road for local travel, a tolled four-lane elevated expressway, three new segmental bridges over the Wekiva River (a designated wild and scenic river), two ramps connecting SR 46 to the new parkway, a roundabout, a total 23,000 feet of wildlife bridges, three pairs of 3,900-foot-long bridges, another three pairs of 1,800-foot-long bridges, and a 12-foot multi-use trail. The project was delivered on-schedule and was honored with seven awards.



I-75 Segment AB is the third of three consecutive design-build projects that WGI won with different lead contractors. Our ability to deliver all three segments (with a total construction value of \$466M) illustrates our capacity to deliver large projects.

### I-75 Express Lanes, Segment AB, FDOT D4, \$234M

### WGI has the people, expertise, and capacity to deliver big jobs.

- We have nearly 600 personnel and we continue to grow
- We have over 260 licensed structural engineers, civil engineers, roadway engineers, surveyors, and landscape architects ready to develop the best technical solutions
- Our outstanding creative and marketing talent are poised to win the job
- ENR Southeast Design Firm of the Year, 2021
- #171 on ENR's list of Top 500 Design Firms
- Our alternative delivery projects have received 36 awards

We are proud of our record of providing the best customer and public service through our projects. In alternative delivery projects the owner is a crucial part of the project team. We join you with a spirit of partnership to deliver the best value project with outstanding service to you and your customers. We work with our build partners and subconsultants to develop project solutions that achieve your wishlist project within your budget, satisfying project stakeholders.

## **THE CAPACITY TO DELIVER**



### **WGI SERVICES**

- Conceptual and Final Engineering
- Roadway Design
- Transportation Design (all stages)
- Streetscape Design
- Complete Streets
- SMART and Connected Technologies
- Grant Funding Coordination and Assistance
- Plan/Peer Reviews
- Permitting
- Budgeting and Cost Estimating
- Feasibility Studies
- Construction Management Services
- Bidding Assistance
- Certification Coordination
- Local Agency Program (LAP) Coordination
- Utility Location, Design, Coordination, and SUE
- Geospatial Services
- Parking Garage Design
- Transportation Architectural Design
- Stormwater Management Design
- Water Distribution System Design
- Wastewater Collection System Design
- Reclaimed Water Distribution Design
- Site Paving, Grading, and Drainage Design
- Facilities Design
- Park and Recreational Design

### THE CAPACITY TO DELIVER

WGI's technical expertise consistently creates the best value.





### Alternative delivery enables you to get the best project at the best price.

Coupling the latest technology with superior innovation, our professionals are known for providing economical and long-lasting solutions to the most difficult transportation infrastructure challenges. As experienced alternative delivery professionals, WGI knows how to leverage the alternative delivery process, working with trusted build partners to develop technical innovations that achieve your vision - within or under budget.

WGI developed an innovative solution for drainage construction on JTA's Kernan Boulevard Project, earning a technical score that won the job. The project's challenging constraints included constructing sheet pile walls under electrical transmission lines and around a large force main at the proposed pond location. We eliminated the sheet pile walls, avoiding utility impacts, and designed an innovative linear pond system adjacent to the roadway. This project is on-time and on-budget.

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## **DELIVERING THE BEST VALUE**



### **Dixie Highway, Palm Beach and Broward Counties, FL, FDOT D4**

WGI developed innovative solutions to provide the best value on the Dixie Highway Project. Developing a better roadway alignment and improving safety, WGI designed a realigned road over the Hillsboro Canal, RR tracks, and three intersections. WGI's design eliminated an at-grade RR crossing. The project was completed 95 days ahead of schedule and \$7.5M under budget.

**Our designs and** collaboration accelerate project delivery.

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WGI's design for the historic Main Street Bridge over Hogan's Creek in Jacksonville enabled the contractor to complete the project 49 days ahead of schedule and earn \$250K in incentives. This project has received several awards, including two national DBIA awards.

### Plantation Oaks Boulevard Emergency Culvert Repair, Clay County, FL, FDOT D2, \$1.14M

### WGI's innovations and design alternatives consistently result in completing projects ahead of schedule.

In fact, WGI's design innovations have helped build partners earn \$4M in incentives in the last four years. Alternative delivery projects are often the most time-sensitive projects, and we know how important it is to your customers to get roads and bridges opened quickly. We can do that. When FDOT D2 needed to rapidly replace a culvert on Plantation Oaks Boulevard (an emergency replacement), WGI's innovative design and approach to permitting and collaboration allowed the project to be completed just 45 days from NTP. The early completion resulted in a \$200K bonus for its build partner. The project also received an award of merit from DBIA Florida.

WGI's alternative delivery expertise also enabled the important express lanes on I-75 Segment AB to be opened weeks ahead of schedule. Segment AB is the largest, most complex and last segment of the I-75 corridor and is 3.1 miles long. The project includes bridges, flyovers, ramps, interchanges, and, most importantly, express lanes that needed to be completed as soon as possible so that the other segments could be opened and tolls could be collected. WGI's design delivered. The express lanes' early opening relieved congestion, accelerated the commencement of tolling, and earned the build partner \$1.12M in incentives.

### **RAPID PROJECT DELIVERY**







Our ATCs on this project optimized water flows; reduced environmental impacts and future maintenance; and improved mobility during construction. We accelerated construction and reduced project costs by \$745,000.

**Our environmental expertise** accelerates project delivery and protects resources.

### I-75 from the Hernando County Line to CR 470, Sumter County, FL, FDOT D5, \$77M

WGI redesigned the widening of 13 miles of I-75, drastically minimizing drainage construction. Our permitting experts negotiated phased permitting of the project with the Army Corps of Engineers and Water Management District, greatly accelerating project delivery.

### WGI's environmental scientists value environmental resources. Their regulatory knowledge and on-the-ground experience mean each project is designed and permitted for the best outcomes for people, the environment, and smooth delivery.

We design projects to avoid impacting wetlands, protected habitat, threatened and endangered species, water quality, historical and archaeological resources, protected trees, and contaminated soils. Permitting is one of the greatest schedule and cost risks in alternative delivery projects. We identify the risks for each project and develop creative design options that avoid/minimize impacts, permitting, and delays.

#### WGI's professionals have the certifications needed to solve any environmental issue:

- Certified Environmental Professionals
- Professional Wetland Scientists
- Certified Arborists
- Certified Pesticide Applicators
- Professional Geologists
- Professional Engineers
- Certified Divers
- FDEP Stormwater, Erosion, and
- Sedimentation Control Inspectors
- FWC Authorized Gopher Tortoise Agents
- Professional Surveyors and Mappers



## **PROTECTING RESOURCES**





### **ENVIRONMENTAL SERVICES**

- Construction Inspection and Monitoring
- Contamination Assessments
- Dune Restoration
- Environmental Impact Statements
- Erosion Control
- Geographic Information Systems (GIS)
- Global Positioning Systems (GPS) Surveys
- Mangrove Permitting
- NEPA Compliance
- NPDES Compliance
- Phase 1 and 2 Environmental Site Assessments
- Seagrass and Coral Surveys
- Threatened and Endangered Species Relocation
- Tree Surveys
- Vegetation Removal Permitting
- Water Resources Planning
- Water Use Permitting
- Wetland Delineation and Permitting
- Wildlife Surveys

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State Road 7 Widening Design-Build, Hollywood, FL, FDOT D4, \$32M

### Alternative delivery teams delivering projects on accelerated time lines need to have firm control of the risk posed by utilities.

A project's success requires a comprehensive understanding of how existing utilities may affect its schedule and budget.

WGI's close relationships with utility agency owners and its cutting-edge technology enables us to produce accurate record data that ultimately keeps projects moving forward. Because record drawings are sometimes unreliable, a project designed without precise utility locations could be substantially delayed during construction. With WGI's full range of Subsurface Utility Engineering (SUE) services, delays and unexpected additional costs are avoided.

Effective utility locating and coordination requires innovation, experience, and a team approach. WGI owns and operates state-of-the-art air/vacuum excavation and ground-penetrating radar systems. We perform "soft digs" around existing utilities to confirm both horizontal and vertical location. Additionally, SUE services encompass a wide range of activities that facilitate a project's progress. Armed with this information, we design projects that minimize utility impacts, ensure safe work sites, and prevent damage to utilities while controlling costs and schedule.

## **UTILITY LOCATING & COORDINATION**

This 2.1-mile roadway widening project includes installing a new stormwater system, sanitary sewer, and two 12-inch water mains. Construction crews know the precise location of utilities thanks to WGI.

### **UTILITY LOCATING**

- Subsurface Utility Engineering (SUE)
- Utility Designation Surveys
- Vacuum Excavation Services
- Ground Penetrating Radar (GPR)
- Interior and Concrete Radar Mapping
- Sunshine State One Call of Florida (SSOCOF) Ticket Response

### UTILITY COORDINATION

- FDOT Utility Agreements and Work Schedules
- Utility Work by Highway Contractor (UWHC) Agreements
- Utility Records Research
- Identification of Property Rights
- Utility Estimates, Billing, and Reimbursement Packages
- Reimbursement and Subordination Agreements
- Utility Conflict Resolution
- Relocation Design
- Utility Conflict Matrix and Impact Analysis
- Field Investigations
- Value Engineering Analysis
- Constructability Reviews
- Damage Prevention Programs

UTILITY LOCATING & COORDINATION







### The best alternative delivery team has a thorough and precise understanding of site conditions. WGI provides that understanding with cutting-edge geospatial technology.

We have the expertise, specialized technology, and analytical tools to capture detailed spatial data on virtually any transportation infrastructure. By using aerial, mobile, and terrestrial lidar along with comprehensive data-processing tools, we efficiently, quickly, and safely gather a comprehensive point cloud that is absolutely instrumental in determining the scope of work, quantity of materials required, and unique completion challenges not readily apparent, such as existing underground utilities. The WGI Geospatial Team has a proven track record of quickly providing contractors crucial information that ultimately leads to successful bids. For example, on a recent pursuit of an interstate project, our mobile lidar scan allowed the WGI Design Team to recognize that significantly less asphalt was required for this resurfacing project (as compared to initial estimates based upon traditional cross-section observations).

**Cutting-edge geospatial technology** gives us the advantage of detailed and accurate knowledge for the best design solutions.

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### **GEOSPATIAL SERVICES**

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- Boundary Surveys
- Topographic Surveys
- Platting
- Construction and Heavy Infrastructure Support
- 2D and 3D Utility Mapping Surveys
- Global Positioning System Surveys
- Geographic Information Systems Services
- Hydrographic Surveys
- Static, Mobile and Backpack Lidar Services
- Building Information Management Services
- Photogrammetric Surveys
- Unmanned Aerial Systems Surveys
- Subsurface Utility Engineering Services
- Expert Witness Services



## **CUTTING-EDGE TECHNOLOGICAL SOLUTIONS**

### Wekiva Parkway, Section 6, Lake and Seminole Counties, FDOT D5, \$234.5M

WGI developed 3D-engineered models, including the one shown here, to facilitate roadway construction on this \$234.5M project. The contractor's equipment uses data from the models to enhance equipment operation; in this case, for creation of a pond.



WGI uses cutting-edge technologies to facilitate project pursuits, design, collaboration, and construction. Our team stays up-to-date on the latest innovations implemented by project owners.

Alternative delivery teams need to be able to work as if they are in the same room, even when they are not. From pursuit through ribbon-cutting, we use on-line collaboration tools to rapidly provide you with the information you need and to get your expertise. We have user-friendly options to share files and collaborate remotely.

Our designers work with you to develop solutions that leverage your strengths. On Wekiva Segment 6, the contractor's roadway equipment was able to use data from 3D-engineered models for control. We designed the project with 3D-engineered models for easy transferability of data to the contractor. This enhanced precision, materials usage, and overall control.

WGI also delivered Brevard County's first diverging diamond interchange at St. John's Heritage Parkway and I-95 in Palm Bay, FL. The project's RFP concept included a partial cloverleaf for the interchange. WGI developed a diverging diamond interchange design and submitted it as an alternative technical concept. It was approved, resulting in the high technical score and the low bid, due to the savings on the bridge and ramp construction.

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- Static, Mobile, and Backpack Lidar
- 3D Visualization/3D Engineered Models for Construction
- 4D, 5D, and 6D Building Information Modeling
- Augmented Reality
- Virtual Reality
- Artificial Intelligence
- Machine Learning
- Connected & Autonomous Vehicles
- Bus Rapid Transit
- Connected/SMART Cities
- Accelerated Bridge Construction



### **Cocoa-Brevard Operations Center, Brevard County,** FDOT D5, \$16M

WGI completed RFP development for design-build services, including a Design Criteria Package.

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### When an alternative delivery project calls for a building sound barrier, parking structure, or architectural elements WGI is the firm to select. Our architectural services tear specializes in transportation-related architecture.

Our design focus is on doing more with less, without unnecessary decorativ embellishments that mask the absence of true design, yet expand project budgets. Our inventive design solutions are expressed through practical construction detailing, and incorporate long-life, high-performing, and lowmaintenance materials and systems. Added value is designed into every project using Building Information Modeling (BIM) technologies, and the innovative application of commonsense sustainable design principles.

#### WGI has unmatched truck parking, rest area, and weigh station/ weigh-in-motion expertise, having delivered:

- Nine truck parking projects
- 15 truck weigh-in-motion (WIM) projects for FDOT Motor Carrier Size and Weight Division

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### **ARCHITECTURAL SERVICES**

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### **ARCHITECTURAL SERVICES**

- Project Management
- Master Planning and Site Design
- Building Programming and Space Utilization
- Building Design from Concept through Construction Documents
- RFP Development and Criteria Design
- Permitting Assistance
- Bidding and Negotiation Assistance
- Construction Administration
- Building Information Modeling (BIM)
- Feasibility and PD&E Studies
- Data Collection for Existing Facilities
- Owner Representation
- Cost Estimating



NB I-75 Ruskin Rest Area Design-Build, FDOT D7, \$17M

### **Children's Medical Center of Dallas, Parking Structures and Pedestrian Bridges, Dallas, TX**

WGI designed this 2,245-space context-sensitive precast concrete parking structure, expanded an existing parking structure, and added pedestrian bridges between the parking structures and facilities. WGI's design helped the contractor win ABC's Excellence in Construction Award of Merit for the design-build project.







### On alternative delivery projects, parking structures are often revenue-generating and need to be operating as quickly as possible.

Many parking structures are delivered alone or as part of larger developments and delivered with design-build procurement. WGI's Parking Solutions team specializes in the creative planning and design of sustainable parking structures, supported by the rapidly changing automation technology transforming its marketplace. The firm's diverse portfolio of innovative work includes parking solutions at international airports, universities, municipalities, hospitals, sporting arenas, shopping and urban plazas, mixed-use developments, and cultural centers.

WGI is proficient in the design and detailing of all types of structural systems, including reinforced concrete, post-tensioned concrete, precast prestressed concrete, structural steel, and masonry. Services include sustainable design, functional design, parking structure site feasibility, lighting, and graphics/signage.

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### **PARKING SOLUTIONS**

### **PARKING SOLUTIONS SERVICES**

#### Parking Engineering

- Structural Engineering
- Functional Design
- Architecture
- Access & Revenue Control Systems
- Site Feasibility Studies
- Sustainable Design
- Prime Design
- Design-Build Criteria
- Lighting
- Building Information Modeling (BIM)
- Expansions
- Structural Investigations
- Durability Design
- Automated & Mechanical Parking
- Flexpark Autonomous Vehicle Planning
- Construction Cost Estimating

#### **Parking Planning**

- Strategic Planning
- Financial Analysis
- Site Feasibility
- Supply/Demand
- Parking Master Planning
- Technology Assessments & Studies
- Parking Management & Operations
- Parking RFP & Contract Info
- Public-Private Partnerships

**PARKING SOLUTIONS** 

# **OFFICE LOCATIONS**

ARLINGTON 1201 Wilson Blvd, 27th Floor Arlington, VA 22209 571.438.9440

ATLANTA (VIRTUAL) 5051 Peachtree Corners Circle, Suite 200 Norcross, GA 30092 470.336.5058

**AUSTIN** 4700 Mueller Blvd, Suite 300 Austin, TX 78723 512.669.5560

**CHARLOTTE** 14045 Ballantyne Corporate Place, Suite 380 Charlotte, NC 28277 704.716.8000

#### **CHICAGO** 18W140 Butterfield Road, Suite 1500 Oakbrook Terrace, IL 60181 630.307.3800

**DALLAS** 8144 Walnut Hill Lane, Suite 340 Dallas, TX 75231 214.307.4767

**DENVER** 1801 California Street, Suite 2400 Denver, C0 80202 720.398.6060

FORT LAUDERDALE 3230 W. Commercial Blvd, Suite 300 Fort Lauderdale, FL 33309 954.660.1660

GAINESVILLE

4011 NW 43rd Street, Suite B Gainesville, FL 32606 352.565.6850

**HOUSTON** 2727 Allen Parkway, Suite 1350 Houston, TX 77019 832.730.1901

HUNTSVILLE 305 Church St Southwest, Suite 601 Huntsville, AL 35801 256.971.9991 INDIANAPOLIS 8910 Purdue Road, Suite 210 Indianapolis, IN 46268 317.735.3349

JACKSONVILLE 4371 U.S Highway 17 South, Suite 203 Fleming Island, FL 32003 904.470.4503

MIAMI 11410 NW 20th Street, Suite 101 Miami, FL 33172 305.553.0500

MICHIGAN (VIRTUAL) 455 East Eisenhower Parkway, Suite 300 Ann Arbor, MI 48108

**ORLANDO** 800 N. Magnolia Avenue, Suite 1750 Orlando, FL 32803 407.581.1221

**PORT ST. LUCIE** 548 NW Mercantile Place Port St. Lucie, FL 34986 772.408.5258 **CORPORATE** 2035 Vista Parkway West Palm Beach, FL 33411 561.687.2220

**RALEIGH** 5640 Dillard Drive, Suite 200 Cary, NC 27518 919.852.0468

SAN ANTONIO 755 East Mulberry Avenue, Suite 501 San Antonio, TX 78212 210.860.9224

**TALLAHASSEE** 2316 Killearn Center Blvd Building C, Ste 100 Tallahassee, FL 32309 850.210.0101

**TAMPA** 3111 W Dr. MLK Jr. Blvd, Suite 375 Tampa, FL 33607 813.574.3190

WINTER GARDEN 1232 Winter Garden Vineland Road Suite 124 Winter Garden, FL 34787 407.581.1221





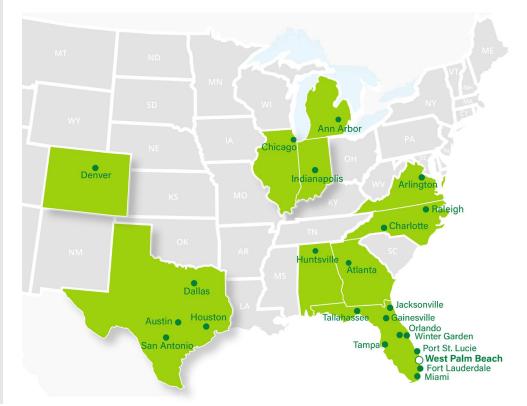










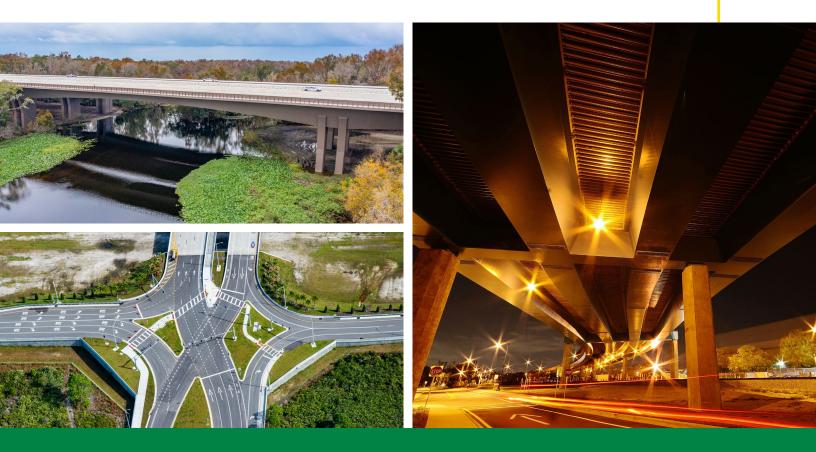






Tomorrow's Infrastructure Solutions, Today





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