



INTELLIGENT TRANSPORTATION

Smart infrastructure that helps mitigate gridlock. Connected and autonomous vehicles that know when a traffic signal is about to change. These are not just the stuff of science fiction – they are a real and rapidly approaching piece of our Transportation future. Get a glimpse here.

- 1** Autonomous, low-speed shuttles – no driver, no steering wheel – will transport passengers around city centers, college campuses, airport parking lots and industrial parks.
- 2** Sensors in roads and bridges will manage traffic flow and share real-time information with motorists and operators for more efficient travel and improved safety.
- 3** Vehicles approaching an intersection will be able to communicate with traffic signal controllers and know the signal timing – helping drivers avoid running a red light.
- 4** Vehicles may communicate with smart infrastructure and identify a pothole developing on a street and relay information to public works so that it can be repaired.
- 5** The rise of the “mobility as a service” model where users procure “door-to-door” multimodal transportation services using interconnected, semi- or fully automated vehicles.
- 6** Connected infrastructure can provide information and routing support for emergency responders on deteriorating road and weather conditions on road segments.

Some data points provided by ITS America: <https://www.its.dot.gov/infographs/index.htm>

NEW LIFE FOR THE WINONA BRIDGE

Michael Baker International rehabilitates a historic Minnesota bridge

The Winona Bridge is a magnificent structure. It carries Trunk Highway 43 across the Mississippi River, linking the bustling inland port of Winona, Minnesota, and the state of Wisconsin. Constructed in 1942, the 2,288-foot bridge is an iconic historical artifact, Minnesota's only surviving prewar cantilever-through-truss bridge. As such, the iconic span has been named to the National Register of Historic Places.

The bridge is just as important to the region's economy, carrying approximately 12,000 vehicles per day, a heavy volume that includes commuters and cargo-shipping trucks. It also serves as a lifeline for a number of Wisconsin towns that depend on a Winona-based ambulance service — and thus the bridge — for emergency response. In these ways, the bridge has been a bulwark of history and commerce.

By 2014, the Winona Bridge had experienced significant deterioration and was in need of significant rehabilitation. The bridge had been posted to prohibit heavier modern permit vehicles from utilizing this key crossing. Could a renovation/modernization project feasibly extend the venerable span's service life by 50 years while still maintaining its historic status?

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This is the story of how Michael Baker International partnered with the Minnesota Department of Transportation (MnDOT) and Ames Construction to design and implement a strategy that added 50 years to the productive life of the grand old structure.

Tougher Standards in the Wake of Tragedy

August 1, 2007, was a key date for the Winona Bridge — for all bridges in Minnesota, in fact. It was on that tragic day that the I-35W Bridge in Minneapolis collapsed, making national news. Prompted by that disaster, the Minnesota Legislature enacted Chapter 152 of the state Bridge Improvement Program, which requires incorporating redundancy on state-owned bridges.

A 2008 inspection concluded that the Winona Bridge was experiencing significant deterioration. A load limit was imposed on the bridge, which soon was closed temporarily for emergency repairs, forcing motorists to detour 60 miles or more round trip to alternate crossings. Although the shutdown lasted only 11 days, the local chamber of commerce estimated it cost the regional economy millions, an indication of how vital the structure is.

After considerable study, MnDOT, which maintains the bridge for the state, determined that the Winona Bridge could be upgraded to satisfy the tougher standards imposed in the wake of the I-35W Bridge tragedy.



Use of a Construction Manager/General Contractor approach, where the designer and contractor work closely together, allowed the team to reduce construction costs and the construction schedule, while improving constructability.

Due to increasing traffic volumes, the impacts of a detour and the complexity of the bridge rehabilitation work, the state would also need to construct a new parallel bridge; ultimately, the companion bridge would carry westbound traffic exclusively, but it would carry all traffic during rehabilitation of the original structure. Once traffic was shifted to the new span, MnDOT could then implement a large number of complex repairs to the historic bridge.

It was an ingenious, elegant solution, but according to Keith P. Molnau, Major Bridge Projects Engineer in MnDOT's Bridge Office, it didn't spring to the agency full blown.

"We realized there was no way we could rehabilitate the Winona Bridge under traffic," Molnau says, "and a detour was unacceptable. We started to go through the exercise of pricing a temporary bridge and had conversations with the U.S. Coast Guard about navigational issues. When we determined that a temporary bridge would cost \$30 million to \$40 million, we realized we would be better off building a permanent bridge."

An Innovative Approach to Procurement

In 2014, MnDOT engaged Michael Baker as the Engineer of Record and Ames Construction as prime contractor for the rehabilitation. The near-simultaneous hirings were enabled by another legislative act that authorized use of a Construction Manager/General Contractor (CMGC) approach through which the designer and contractor work as a team, under the direction of MnDOT, from the outset.

This marked the first-ever use of CMGC for MnDOT — indeed, it had never been tried before by any Department of Transportation in the Midwest. Thanks to that approach, Michael Baker and Ames were able to collaborate, which resulted in a reduced construction cost, improved constructability, and enabled the construction schedule to be reduced. Says Kent Zinn, P.E., S.E., Great Lakes Regional Director for Michael Baker who served as the Project Manager:

"It's a unique procurement method that has the designer and the contractor collaborating during the design stage while they both work simultaneously for the owner. It allows the owner to retain more control over the process while encouraging innovative construction ideas."

Daniel Baxter, P.E., S.E., Michael Baker's Bridge Department Manager in Minneapolis, notes that CMGC also facilitates cost control.

"It allows the owner to get more pricing information before the project is bid," Baxter says. "There's a lot more price and schedule certainty for the owner before the project is bid and it's too late."

Steel Plating for Reinforcement

The companion bridge never was formally named — MnDOT refers to it by the nondescript moniker Bridge 85851 — but its importance was enormous. When the parallel span opened in 2016, all vehicular traffic was diverted to it, enabling the Michael Baker-Ames team to focus on rehabilitation and upgrading of the original bridge. The primary goal was to completely reconstruct the deteriorated approach spans, replace the bridge deck, strengthen the underwater foundations, strengthen the steel truss members, and address

“Making this bridge internally redundant and strong enough for another 50 years of 21st century traffic loading while maintaining its historic status — threading that needle was the challenge.”

— Kent Zinn, P.E., S.E. —
Great Lakes Regional Director, Michael Baker

the numerous fracture-critical steel truss tension members, since a failure of one of these members could threaten the bridge's safety.

Using such sophisticated techniques as 3D finite element modeling, Michael Baker determined that many of the tension members on the bridge's through truss were, indeed, fracture critical. Under other circumstances, replacement of the truss might well have been the recommended action. Yet it's the truss that helps give the Winona Bridge its unique visual appeal and historical significance.

"Making this bridge internally redundant and strong enough for another 50 years of 21st century traffic loading while maintaining its historic status — threading that needle was the challenge," Zinn says. "We needed to navigate the historical concerns and sensitivity about the bridge — which limits what you can do to it — versus state statutes and modern bridge design criteria, which would push us to wanting to do more."

To strengthen the truss while achieving internal redundancy, the team bolted on steel plating to reinforce numerous members where needed, including both the top and bottom chords of the through truss.

For the vertical and diagonal members, the team devised an innovative solution by inserting multiple high-strength steel bars inside the existing built-up box sections. The diagonals and verticals are most recognizable to motorists, so the team designed the modifications to minimize impacts to the appearance of these prominent features.

The solution was not without challenges, as Baxter notes:

“The retrofit of the truss members was challenging. When you attach new steel plates, the new bolt holes must align with existing rivet holes. There wasn’t a whole lot of uniformity in the existing parts. Ames Construction even made a mock-up of one of the more complex connections to make sure the strengthening bars would fit.”

Struts, Geobags and Riprap

Even with tension member redundancy assured, the rehabilitation of the proud old bridge was not complete. Through foundation analysis and

other tools, the team discovered several additional threats to the original structure.

The bridge is supported by soil-embedded wooden piles that, the team determined, may no longer be able to sustain modern barge impacts. To resolve that issue, a cutting-edge strut system was installed to connect the old and new spans. Now, the two bridges share any barge impact.

In addition, the piles were endangered by what’s known as “scour,” soil erosion that could weaken the foundation. The team developed a scour protection system that features geobags and riprap — rock and other materials used to armor the pilings against scour.

MnDOT didn’t have to wait long to evaluate the results of these updates. Shortly after the strut system was completed, a barge careened into the old bridge. Zinn’s description of the collision is short and sweet.

“The barge lost,” he says.

Carrying Traffic for Another 50 Years

The Winona Bridge reopened on July 1, 2019. The original structure now has no posted load restrictions and boasts the redundancy mandated by the legislature. Just as importantly, the bridge retains its historical character and uniqueness; that was the verdict of the Minnesota Historic Preservation Office, which issued a formal certification to that effect.

Minnesota Governor Tim Walz attended the re-opening ceremonies and stated: “This is an iconic bridge that we’re on. It connects our two great states. It’s an architectural wonder. I think for many of us, it’s just plain beautiful.”

Perhaps most remarkable of all, the project was completed — five months ahead of schedule and within its programmed budget — with no interruption to vehicular or river traffic, no crushing blows to the regional economy and no disruptions to the lives of residents on either side of the river. That’s a tribute to the creativity, expertise and

versatility of the MnDOT-Michael Baker-Ames CMGC team.

“We have a safe, internally redundant structure restored to carry traffic for another 50 years,” Molnau says, “and we did that without having any adverse effects on the historic structure. It’s a balanced, safe, historic solution.”

When the old bridge reopened and visitors were invited to tour it, Baxter took advantage of the opportunity.

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— Keith P. Molnau,
Major Bridge Projects Engineer, MnDOT

“I was pleased that when we got to walk across the bridge, the retrofits weren’t very noticeable,” he recalls. “If you hadn’t worked on the project, you wouldn’t have known they were there.”

The initiative earned widespread recognition, including the Minnesota Grand Award from the American Council of Engineering Companies (ACEC) and the Prize Bridge Award of the American Institute of Steel Construction (AISC) and National Steel Bridge Alliance (NSBA).

There was yet another benefit of the project’s success: it validated the CMGC procurement approach, particularly in the important area of cost control. The new and historic bridge construction cost a total of \$146 million.

“We knew the projected price but not how much cost growth there would be,” Molnau says. “At the end of construction, there turned out to be literally zero cost growth. We’ve used that method on a couple more projects, and they’ve also worked out very well for us.” 🦋



The project was completed five months ahead of schedule and within its programmed budget.



(Left to right) MnDOT’s Major Bridge Projects Engineer Keith Molnau and Principal Engineer Beth Burton with Minnesota Governor Tim Walz, Michael Baker’s Great Lakes Regional Director Kent Zinn, Bridge Department Manager Daniel Baxter and Technical Manager – Structural Engineering Terrence Tiberio.

MICHAEL BAKER HONORED BY WTS INTERNATIONAL

Firm recognized for promoting equity and access for women in the transportation industry

Michael Baker International has been named the 2020 Employer of the Year by WTS International, which is focused on advancing the transportation industry and the professional women who are a growing part of it. The Employer of the Year is awarded to organizations for their commitment to strengthening the transportation industry through recruiting, retaining and advancing women within the industry, providing career development and opportunities for professional growth within their organization and supporting WTS at local and national levels.

WTS recognized Michael Baker for encouraging and participating in the advancement of women in transportation through student internship and shadowing opportunities, project management and leadership training programs, and career development including financial assistance for license registrations, professional certifications, conference participation and tuition reimbursement. The firm was acknowledged for recognizing the importance of having a diverse and innovative workforce at all employment levels comprised of diverse backgrounds, passions, experiences and capabilities, and has partnered with organizations such as WTS to attract outstanding talent through meaningful performance-based rewards and exceptional development and growth opportunities. Additionally, women serve in all levels of leadership at Michael Baker, including the firm's Board of Directors, Executive Leadership Team and office leadership.

"Michael Baker is honored to receive this prestigious recognition from WTS and is extremely proud of all our employees who made this award possible," said Brian A. Lutes, Chief Executive Officer at Michael Baker. "We remain committed to supporting WTS' mission of advancing both the transportation industry and the professional women who are an integral part of it."

“With more than 100 active WTS members across the organization, Michael Baker is a strong supporter of WTS at the national and local levels and encourages its employees to host and attend WTS events that add value to the transportation industry.”

"Michael Baker was nominated by the Northeast Chapter of Ohio for being a strong partner of WTS in many local chapters across North America and as an Advocate Corporate Partner at the International level," said Sara Stickler, WTS International Executive Director. "The firm supports many of its employees to take leadership roles within WTS. Congratulations for the recognition of a firm that wholeheartedly supports the vision and mission of WTS."

With more than 100 active WTS members across the organization, Michael Baker is a strong supporter of WTS at the national and local levels

and encourages its employees to host and attend WTS events that add value to the transportation industry. Throughout the country Michael Baker has also been recognized as the Employer of the Year by WTS Chapters including Greater New York (2006), Atlanta (2007), Colorado (2010), Central PA (2012) and Wisconsin (2016). Michael Baker was previously recognized as the WTS International Employer of the Year in 2012.



Kimberly Guice, P.E.,
Project Manager –
Bridge, named 2020 WTS
Member of the Year

Kimberly Guice, P.E., Project Manager – Bridge, in Michael Baker's Cleveland Office was also named the 2020 WTS Member of the Year for her involvement in the organization's Northeast Ohio Chapter and her dedication to fostering the future of the industry through her participation in the Transportation YOU program, an interactive mentoring program that offers young girls an introduction to a wide variety of transportation careers. Guice has developed several mentoring opportunities over her eight years as Transportation YOU Committee Chair, including partnering with the Cleveland Engineering Society to assist with the Engineering Roadshow program, mentoring students through the Cleveland Metropolitan

“Kimberly Guice, P.E., Project Manager – Bridge, in Michael Baker's Cleveland Office was also named the 2020 WTS Member of the Year for her involvement in the organization's Northeast Ohio Chapter.”

School District Bridge Building Initiative, and helping mentees find funding to support their attendance at the Transportation YOU DC Youth Summit for two consecutive years.

"Kim's commitment to the mission of WTS and the Transportation YOU program is evident by the many mentoring opportunities she has developed over the years," said Malcolm Dougherty, National Practice Executive, Transportation. "I cannot think of a more deserving person for this distinction."

"WTS has been instrumental in growing my career and providing me with multiple opportunities for leadership training, mentorship and growth," says Guice. "I am truly honored by this recognition and look forward continuing the great work of WTS for generations to come."



INTERCHANGE BOOSTS CAPACITY, SAFETY AND PRESERVATION

Redesigned Newark interchange creates positive impact on residents and community



The Michael Baker team added missing moves to the interchange and installed appropriate signage so that motorists could more easily and safely reach their destinations.

The connection between Interstate 280 and New Jersey Route 21 may be one of the most important and unusual interchanges in America's interstate highway system. The interchange carries about 90,000 vehicles per day through Newark, New Jersey's largest city, delivering them to other interstates and such vital nearby arteries as the New Jersey Turnpike and the Garden State Parkway.

But the I-280/Route 21 interchange definitely is not a typical interstate setting. It's bordered by historic commercial and residential neighborhoods; indeed, per the original design, a number of ramps connected directly to Grant and State streets in those neighborhoods. Moreover, that original design was missing a number of what are called "moves"; that is, if you were traveling in certain directions on I-280 or Route 21, you couldn't access the interchange. "You can't get there from here" was the cry of many frustrated motorists as they sought vainly to reach the interchange.

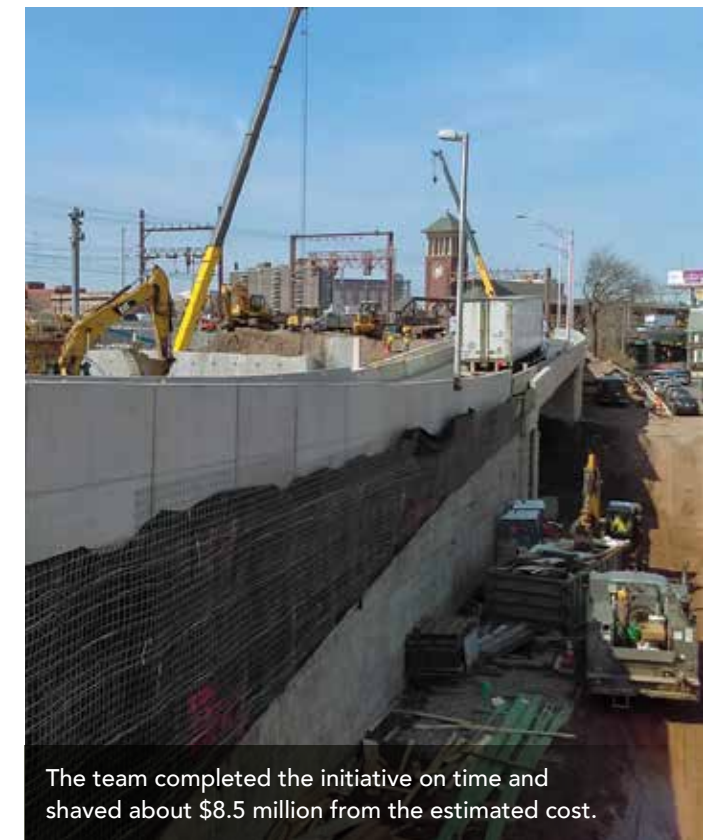
Also alongside the interchange are active NJ Transit railroad tracks and a number of historically significant structures. Most notable among them is Plume House/House of Prayer Episcopal Church and Rectory, located within 30 feet from the project construction footprint. It was built in the early 18th century and considered by some to be Newark's oldest building.

The interchange itself features a number of landmark elements, including the William A. Stickel Memorial Bridge, a drawbridge over the Passaic River that is infrequently raised but still functional, and the Martin Luther King Bridge. Finally, beneath the interchange is an active and sensitive, approximately 12-foot-diameter brick-lined sewer system that services downtown Newark.

Its unique character notwithstanding, by the turn of this century, the interchange had become a problem. The bridges — and other associated components — had deteriorated significantly while the long lines of traffic on Grant and State were creating bottlenecks and wear and tear on

venues unable to accommodate the load. As a result of the dated design, many components of the interchange no longer met current professional standards. Worse, according to the New Jersey Department of Transportation (NJDOT), crash rates on the interchange were "considerably higher than the statistical average for interstate highways" elsewhere in the state.

NJDOT studied the situation extensively and, in 2012, engaged Michael Baker International to design improvements to the interchange. The \$95 million initiative would become one of Michael Baker's most fascinating and successful projects, involving innovations to achieve multiple objectives: update all obsolete components; improve the interchange's operational capacity without actually building new roadway; maintain traffic flow during construction; add the missing moves; rehabilitate and replace deteriorating structures; minimize impact to historic structures during and after construction; and avoid disturbances to the railroad tracks and the sewer system.



The team completed the initiative on time and shaved about \$8.5 million from the estimated cost.



The team designed and built elevated temporary roadways retained by mechanically stabilized earth (MSE) walls atop permanent MSE walls.

A Flexible, Inclusive Communications Process

For a project with so many goals — and a construction zone so tightly constrained — one of the first missions of the team, including Michael Baker and primary contractor George Harms Construction Company, was to develop a process that ensured timely communication, flexibility and inclusiveness.

To do this, once construction began in 2015, the team met every two weeks — more often if situations required. All project subunits could keep tabs on every aspect of the initiative through data-sharing software.

“The teams were located in multiple offices and used data-sharing software and worked with files in real time so changes would not fall through the cracks,” says Mike Sidani, P.E., PMP, Director of Project Delivery Excellence for Michael Baker and Project Manager for the interchange initiative.

The team met frequently with stakeholders — which included businesses, residents and preservation groups in addition to NJDOT and other government agencies — to solicit input,

provide information and build trust in the process that was initially lacking.

“We engaged two community outreach firms,” Sidani recalls. “One had intimate knowledge of the local community while the other coordinated public information meetings.”

“The teams were located in multiple offices and used data-sharing software and worked with files in real time so changes would not fall through the cracks.”

— Mike Sidani,
Director of Project Delivery Excellence –
Michael Baker

Through such sessions, the team kept the community apprised of developments that would affect them, outreach that the community came to value. Says Jose Sotto, Engineer – Transportation for Michael Baker:

“Every time we had to close a roadway in a residential area, we communicated with the community two weeks out, letting them know

the details and where they could park. They appreciated that and understood that the project ultimately would benefit them.”

Arpita Upadhyay, Project Manager for NJDOT, notes that the communications/input process included such components as project fact sheets, project portfolios, display boards, comment forms and a project website.

“Throughout the public involvement process, the principles of environmental justice, community preservation and context-sensitive solutions were communicated and incorporated,” she says.

Temporary Roadways to Maintain Traffic Flow

One of the most critical objectives of the project was maintaining the interchange’s heavy traffic flow — with minimal disruptions and shutdowns — while maintaining the existing moves between I-280 and Route 21 for the duration of construction. The team accomplished this in an

innovative way; it designed and built elevated temporary roadways retained by mechanically stabilized earth (MSE) walls atop permanent MSE walls. All east- and westbound traffic was diverted to the temporary roads, providing for free traffic flow and eliminating the need for numerous, and potentially unsafe, substages and cattle chutes — a nickname for a narrow corridor that guides traffic during construction.

“This left a large work zone available to the contractor to do the work in its entirety,” Sidani says. “Plus, it significantly minimized traffic disruptions.”

The team also modified the interchange’s original design so that ramps would no longer dump traffic directly onto Grant and State streets; instead, I-280 traffic would exit to Route 21 and from there to local roadways — an enormous safety update. Just as important, the team added all the missing moves and installed appropriate signage so that motorists could more easily and safely reach their destinations.



The project earned numerous awards and honors from ROADS & BRIDGES magazine, ENR New York, American Society of Civil Engineers – North Jersey Branch, and the American Council of Engineering Companies – New York.

Replacing Four Bridges, Rehabilitating Two Others

Bringing bridges up to standard and extending their useful lives also was a key project goal. In all, the team addressed six bridges, replacing and constructing four new spans and rehabilitating two existing bridges.

Perhaps the biggest challenge in the project's bridge component was the rehabilitation of the MLK Bridge on I-280, where the superstructure had deteriorated substantially. To minimize traffic disruptions, the team employed principles of a cutting-edge approach known as Accelerated Bridge Construction (ABC).

Consistent with ABC, the team prefabricated the main beams in pairs together with the deck off site, shipped them to the project area, hoisted them into place and secured them. The whole process occurred in remarkably short order.

"We installed the beams in each direction over two weekends," reports Libin Yin, P.E., Michael Baker's Technical Manager – Bridges. "In each case, we closed the bridge Friday at 10 p.m. and reopened it Monday at 5 a.m."

Other bridges brought other challenges that the Michael Baker-Harms team met with similar creativity. For example, for deck replacement for the I-280/Broad Street Bridge, the team used lightweight concrete to improve live-load capacity and minimize structural steel retrofitting. At two bridge locations, integral post-tensioned concrete pier caps were used to maintain tight vertical clearances over existing roadways.

At another location and to salvage an existing full height bridge abutment, working from Michael Baker's design, Harms removed the backwall and made the superstructure semi-integral with the substructure, allowing for the reduction of design loads and elimination of certain joints. That added an estimated 75 years to the life of that abutment.

Preserving Newark's History

For some local stakeholders, preserving Plume House was the most vital aspect of the project, and the Michael Baker-Harms team worked diligently to make that happen.

For the construction phase, the team installed a sophisticated vibrations monitoring system to ensure that the contractor's operations produced no adverse effects on Plume House — or the brick-lined sewage system. Then, to buffer Plume House as much as possible once construction ended, the team strengthened the existing bridge pier footing next to Plume House with post-tensioning and pin piles to reduce any impact of vibrations.

Upadhyay observes that NJDOT, the Federal Highway Administration and the New Jersey Historic Preservation Office entered into a comprehensive Memorandum of Agreement for preservation of historic structures:

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Moreover, the Michael Baker-Harms team completed the initiative on time and shaved about \$8.5 million from the estimated cost. The project was a remarkable success on all fronts, and the engineering/construction community took notice.

"We factored in vibration monitoring for the foundation at the Plume House since there were concerns raised by them regarding the structural integrity, and NJDOT was keen on supporting the request. I must say that the memorandum was very well managed and adhered to during the entire construction phase."

Once the project was completed and traffic backups reduced, there were fewer cars idling and fewer exhaust fumes that could damage Plume House. The initiative created a healthier environment for the historic structure in several ways.

The project enhanced capacity of the interchange while allowing traffic to flow more freely — and more safely.



A Success by Every Standard

The I-280/Route 21 project was completed in 2019 with impressive construction accomplishments: 11 retaining walls of various types built and installed; six bridges replaced or renovated; ramps redesigned and reconfigured; utilities successfully relocated; four new sign structures, a bulkhead and a new traffic signal installed; and hazardous materials safely removed.

The benefits to motorists and the community were immediately apparent. The project enhanced capacity of the interchange while allowing traffic to flow more freely — and more safely. Protection for historically significant structures was strengthened. Grant and State Streets now feature improved pedestrian access and resident parking; freeway ramps no longer deposit traffic there, making those streets far safer. As Sidani puts it:

"Within a very constrained site and footprint, we were able to meet the project goals of upgrading the interchange to current standards, to provide the missing moves, to improve mobility and traffic operations and to gain community trust by improving aesthetics while keeping traffic

moving, with minimal impacts and disruptions — and without compromising safety. This defined our success story."

Moreover, the Michael Baker-Harms team completed the initiative on time and shaved about \$8.5 million from the estimated cost. The project was a remarkable success on all fronts, and the engineering/construction community took notice.

ENR New York named it the Best Highway/Bridge Project of 2019 while the American Society of Civil Engineers (ASCE) North Jersey Branch cited it as the 2019 Project of the Year. The American Council of Engineering Companies (ACEC) New York bestowed its Platinum Award on the project, and ROADS & BRIDGES magazine ranked it #7 in its national Top 10 Roads of 2019.

Perhaps the most important tribute came from the client.

"Overall, this remarkable infrastructure is very essential and helpful for the economic vitality of Newark businesses," Upadhyay says. "It also has a positive effect on the quality of life and economic prosperity of city residents." 🦋

CHAIRMAN'S AWARD HONOREES DEMONSTRATE EXCELLENCE

In February, Michael Baker International Chairman Thomas J. Campbell presented the Chairman's Award to three outstanding employees for their contributions to the Company's proud 80-year legacy of *Making a Difference* for clients and the communities it serves.



John Alberghini, P.E., National Federal Lead – Navy (Virginia Beach, Virginia), was recognized for his integrity and commitment to developing strong client relationships and growing the Company's share of the Navy market. "It's very much an honor to be among the diverse group of consummate professionals – to be a part of that group was overwhelming," said Alberghini.



Steve Huff, P.E., Regional Practice Lead – Transportation (Santa Ana, California), was recognized for his intense focus and dedication for more than two years leading the I-10 Design-Build project – a game changer for the West Region. "I've had a lot of tremendous people I've worked with in the past, and it's their support that has allowed me to be in this position today," said Huff.



Joseph J. Romano, P.E., Regional Practice Lead – Bridge (Hamilton, New Jersey), was recognized for being one of the largest contributors to bridge work at Michael Baker and for his impressive string of award-winning projects. "Michael Baker's legacy of completing complex projects throughout the years can be attributed to one word – credibility. I enjoy the challenge of being held responsible for winning work in the Northeast Region that helps us grow into the future," said Romano.

Congratulations to each of the chairman's award winners and finalists, and their nominators, for demonstrating such excellence.



The 2019 Chairman's Award finalists gathered with Chairman Thomas J. Campbell and CEO Brian A. Lutes during the ceremony.



The Chairman's Award is Michael Baker's highest honor. It was established in 2018 to recognize employees who exemplify the Wolf Pack philosophy — that we are stronger together — and who have made impactful contributions to the Company.

KEEPING THE WORLD'S BUSIEST AIRPORT SAFE, MODERN, GROWING

Michael Baker International's long-standing partnership with ATL yields far-reaching results

When passengers at Hartsfield-Jackson Atlanta International Airport enjoy a safe and pleasant journey, they may not appreciate that the high quality of that experience is attributable, in a large measure, to a dedicated public-private partnership that keeps the airport's infrastructure modern and safe.

The airport, known as ATL in industry shorthand, is the busiest in the world, serving more than 107 million passengers each year. Atlanta's Department of Aviation realized many years ago that the challenge of upgrading and modernizing ATL's runways and other facilities could be daunting. In 2003, the department began to assemble a design/construction team that could be contracted regularly for those projects. Now known as the Aviation Infrastructure Solutions (AIS) Joint Venture, the team includes Michael Baker International, Pond & Company and CERM.

Over the years, the joint venture has completed more than 35 initiatives — valued at more than \$500 million — ranging from runway repair and replacement to improvement of passenger corridors.

"We usually operate under five-year contracts," says Quintin Watkins, P.E., Office Executive for Michael Baker in Georgia and Tennessee, "and we work on about seven projects a year."

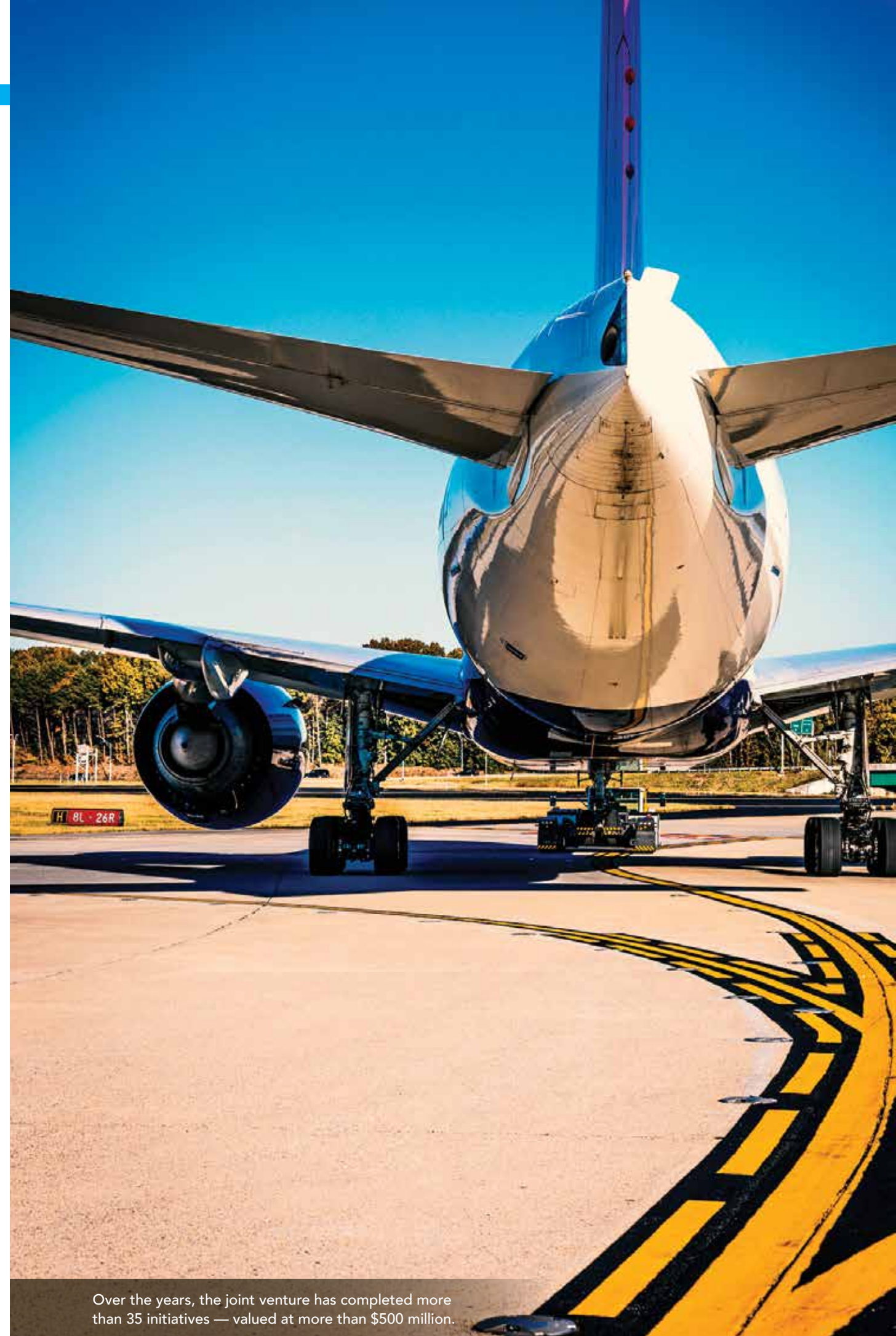
The length and depth of the relationship between the airport and the joint venture has produced a comfort level that is rare in such partnerships. Says Joseph Snyder, P.E., Michael Baker's Department Manager – Aviation:

"It's a terrific relationship. We're like an extension of their staff at this point. They sometimes come to us with questions that don't even pertain to the projects we're working on."

Norma Click, Director Airside/Landside/Cargo for ATL, calls the partnership between the airport and the joint venture "unique."

"That's a good way to describe it," she says. "Michael Baker has a long history here, and they make a point of partnering. They listen, they're responsive, they're respectful, they have a good understanding of what the airport wants. That's what sets them apart."

The joint venture has helped ATL improve and expand while introducing technology that will provide for even greater growth and enhanced customer experiences in the future. Here's a look at some of the most important and fascinating projects.



Over the years, the joint venture has completed more than 35 initiatives — valued at more than \$500 million.



To minimize disruption to the airport on a pavement condition assessment, the team used Unmanned Aerial Systems (UAS) - drones equipped with powerful cameras that can survey more than 3,000 linear feet of runway in less than 20 minutes

Replacing a Bustling Runway in Less Than a Month

One of the team's most complex initiatives was the 2014 replacement of Runway 8L/26R, one of five at ATL and the busiest arrival runway. The runway would need to be closed during construction — a major disruption that added considerable pressure to design and build the new runway quickly.

To help accelerate the project, Michael Baker visually inspected the runway and reviewed historical design data. This helped the joint venture determine that the existing underdrain system could serve the new runway adequately, and that not all concrete panels would require replacement.

“Thanks to such innovations, the joint venture was able to design a replacement of more than 100,000 square yards of concrete and reopen the runway in an almost unbelievable 29 days, a huge benefit for ATL, its airline passengers and other stakeholders.”

“The outside panels of the runway were still structurally adequate since the wheels of the plane don't get out that far,” says Snyder, who managed the project. “So we replaced just the middle section, or keel, as it's known.”

The team also employed cutting-edge technology to reduce the time necessary to gauge the strength of the new concrete panels. In the traditional approach, concrete beam samples are broken at certain timed intervals (seven, 14 and 28 days) to test concrete strength. Instead, Michael Baker dramatically shortened that process by utilizing maturity meters.

“Instead of waiting for the beams to be broken,” Snyder explains, “we monitor the meters that we've inserted in the slabs. Once they reach a certain temperature, we can determine the strength that correlates with that temperature. The contractor can get back on the runway faster.”

Thanks to such innovations, the joint venture was able to design a replacement of more than 100,000 square yards of concrete and reopen the runway in an almost unbelievable 29 days, a huge benefit for ATL, its airline passengers and other stakeholders.

“We have a history of doing projects in a short amount of time,” Click says, “and it was crucial that we complete this one quickly. We spent the entire design process working with stakeholders, including the Federal Aviation Administration and the airlines. We had all the right players at the table and a well-thought-out plan — we knew exactly what would happen down to the hour. We knew as long as we didn't have weather problems, we would make it.”

A Pioneering Use of Unmanned Aerial Systems

In May 2017, another major runway, 9L/27R, was the focus. Here, ATL called on the Michael Baker-Pond-CERM team to evaluate the physical state of the strip — a pavement condition assessment, as it's called — as a blueprint for any future maintenance plans. Once again, innovative technology was the key to the project's success.

The conventional inspection approach involves manually walking the runway, a process that can require a shutdown of more than four hours. Instead, the team deployed the technology of

Unmanned Aerial Systems (UAS) — flights by drones equipped with sophisticated imaging equipment. Michael Baker is a pioneer in UAS technology, maintaining a large fleet of drones and a staff of trained, experienced pilots who are also planners and/or engineers for such tasks as bridge and roadway inspections.

Before the project could begin, the joint venture obtained FAA approval to conduct UAS operations in Class B airspace at ATL. Then, Michael Baker flew a Topcon Falcon 8 aircraft that surveyed more than 3,000 linear feet of runway in less than 20 minutes and produced high-resolution DPM topographical imagery — approximately 630 images of the strip — as well as video. The detailed imagery was analyzed by experts using sophisticated software, providing ATL with a valuable tool as it considers future maintenance options.

The flight was the first of its kind to deploy UAS on the airfield of an international airport in the U.S. during active daily operations and suggests the promise of UAS technology.

But 9L/27R also needed immediate work — specifically, replacement of portions of the runway and adjacent taxiways. Beyond installing new pavement, the team adjusted airfield lighting and signage, relocated drainage structures and lines, re-graded a portion of the parallel taxiway that dropped the elevation by four feet and adjusted airfield striping and navigational aid structures.

The initiative was designed and executed in such an environmentally friendly manner that the Institute for Sustainable Infrastructure honored it with an Envision Silver Award, a first for ATL.

“We are focused on instituting sustainability in all construction projects,” Click says. “We met the Envision goals by using recycled materials and LED lighting as well as protecting groundwater.”

Going International

When the Maynard H. Jackson Jr. International Terminal debuted in 2012, it greatly expanded ATL’s capacity to accommodate international flights. Before the airport could reach that point, however, the joint venture had to develop creative solutions to a pair of challenges.

Because an underground, automated people-mover system transports passengers between concourses, ATL charged the team with the mission of extending the tunnel to the new terminal. The path of the new tunnel took it under a taxiway, which meant that utility connections had to be maintained. Recalls Snyder:

“We had to come up with ways to suspend utilities in the air while the tunnel was built underneath.”

Another obstacle was even more challenging. When the new terminal was built, it was constructed within the foundation of a previously halted project, leaving a gap between the prior retaining wall and the new one that had to be addressed.

“We had to span the space with slabs of concrete pavement that are hinged on one side but not tied on the other. We called it the ‘Gap Slab,’” says Snyder.

Rolling out LiDAR to Improve Passenger Experiences

Speaking of the international terminal, ATL asked the joint venture to provide a visual survey of the

lengthy corridor passengers must traverse to reach customs check-ins. To achieve this, Michael Baker rolled out yet another technology — LiDAR.

LiDAR is an acronym for light imaging, detection and ranging (or light detection and ranging). Sometimes called laser scanning or 3D scanning, LiDAR is a surveying method that gauges distance to a target by illuminating it with pulsed laser light and measuring reflected pulses with sensors. The differences in laser return times and wavelengths are then used to fashion digital 3D representations of the target. Think of LiDAR as radar with laser beams instead of radio waves.

Through a LiDAR scan, Michael Baker presented ATL with an accurate, representational view of the corridor that the airport will use to implement improvements to augment the passenger experience.

In addition, the joint venture provided ATL with a mobile LiDAR scan of the facility’s complete network of roadway signage that guides visitors entering or leaving the airport. ATL used the data for 3D modeling and entered it into a database complete with industry signage codes and tied into the airport’s consolidated maintenance management system. It is a new tool that allows ATL’s signage group to generate service requests to have signs changed, repaired or updated.

3D Mapping the Electrical System

ATL’s existing electrical system is massive, with more than 20,000 airfield lights, 700 guidance signs, 600 electrical manholes and three electrical vaults. But the team harnessed it all through the innovative use of mapping and generating a 3D layout of the system.

The team utilized night closures of the airfield to trace each circuit from the electrical vault to all lights or signs. “We used surveyors to capture the location of each change in direction of the circuit,” explains Snyder. The manholes, handholes and junctions were photographed and labeled for the purpose of creating butterfly drawings in CAD.

Michael Baker employed 3D CAD Utility software to model the circuits as they left the vault and accurately depicted precisely which duct in each ductbank the circuit resided. Furthermore, generic AutoCAD was incorporated with toggle buttons to allow Airport Operations and Maintenance to “turn on” and “turn off” circuits digitally to allow them to pinpoint circuits in the event of an issue. ATL’s team now has access to the airport’s underground electrical system from their offices instead of having to go to the electrical vault on the airfield to test circuits to determine locations.

“The effort created a more functional as-built record of what was in the ground, which allowed the ATL team to improve their system by removing unused and abandoned cables and better utilize the duct/conduit system that they had,” says Mark Kistler, P.E., Regional Practice Lead – Aviation.

Safer, longer-lasting runways. More satisfying customer experiences. A Gap Slab. The far-reaching work of Michael Baker and its joint venture partners has included all this and more. With each project, the joint venture has applied innovative thinking and technologies to help ATL meet its goals. Says Click:

“They’re a great team that’s delivering an outstanding product. We’ll be keeping them as fully engaged as possible.” 🦋



A runway replacement project was designed and executed in such an environmentally friendly manner that the Institute for Sustainable Infrastructure honored it with an Envision Silver Award, a first for ATL.

MICHAEL BAKER PROJECTS WIN 20 AWARDS

Firm's projects recognized coast to coast across 12 states

Michael Baker International was honored with 18 regional Engineering Excellence Awards (EEAs) from the American Council of Engineering Companies (ACEC) for the 2019-2020 season. The awards recognize engineering firms for projects that demonstrate a high degree of achievement, value and innovation. Michael Baker received statewide recognition in Arkansas, California, Georgia, Illinois, Massachusetts, Minnesota, Mississippi, New Jersey, New York, Ohio, Pennsylvania and South Carolina.

These award-winning projects represent only a handful of the many initiatives we undertake to help solve the complex infrastructure challenges for our clients and communities.

Additionally, two of Michael Baker's iconic bridge projects – the Andy Warhol (Seventh Street) Bridge in Pittsburgh and the Winona Bridge in Winona, Minnesota – won Prize Bridge Awards from the American Institute of Steel Construction (AISC) and National Steel Bridge Alliance (NSBA). The biennial Prize Bridge Awards honor significant and innovative steel bridges constructed in the U.S. Recognizing innovative design and engineering, the award is the highest honor bestowed on bridge projects by the U.S. structural steel industry.

Michael Baker received the following honors:

Arkansas



Arkansas Statewide Airport System Plan (Honor Award)

Arkansas



I-40 Mississippi River Bridge Inspection (Honor Award)

California



Orange Coast College Recycling Center (Merit Award)

California



I-15/Temecula Parkway Interchange (Merit Awards)

Georgia



Courtland Street Bridge Replacement (State Award)

Georgia



Runway 21L EMAS at the DeKalb-Peachtree Airport (Honor Award)

Illinois



Winona Bridge Rehabilitation and Reconstruction Project (Grand Award)

Massachusetts



MBTA Tunnel Inspection Manual (Bronze Award)

Minnesota



Winona Bridge Rehabilitation and Reconstruction Project (Grand Award)

Mississippi



Colony Park Boulevard Project (Honor Award)

Mississippi



Spring Lake Dam (Honor Award)

New Jersey



I-280/Route 21 Interchange Improvements Project (Platinum Award)

New York



I-280/Route 21 Interchange Improvements Project (Bronze Award)

Ohio



Cleveland Hopkins Intl Airport (Honor Award)

Ohio



Norfolk Southern Bridge CF-35.40 (Honor Award)

Ohio



Towpath Trail Stage 3 Extension (Honor Award)

Pennsylvania



Navy Gateway Inns and Suites (Diamond Award)

South Carolina



Greenway Extension and Bergen Road Tunnel (Engineering Excellence Award)

ADVANCING TOP TALENT

New Hires and Promotions Add to Michael Baker's Strengths



Paul Baginski, P.E.
VP and Office Executive
Richmond, Virginia

Paul Baginski, P.E., has joined Michael Baker to continue our focus on serving our federal, state and municipal clients in the central Virginia area. He has more than 25 years of leadership and management experience, as well as a background in civil and environmental consulting and large-scale operations.

Most recently, Paul was CEO/CMO for PAB Consulting, Inc., where he cofounded a proprietary mapping technology. As COO for Professional Environmental Engineers, Inc., he oversaw HR, safety, risk management and project delivery, execution and performance. Earlier in his career, he was SVP and National Director of Buildings and Infrastructure for Parsons Brinkerhoff (now WSP). Paul also spent nearly 14 years with Kleinfelder, Inc., rising to the position of Director of Federal Programs.



Al Bowman, P.E.
VP and Office Manager,
Georgia
Norcross, Georgia

Al Bowman, P.E., was named Office Manager for Georgia and will focus on expanding client relationships with innovative solutions in the Southeast Region.

Bowman has 32 years of industry experience and has been with Michael Baker for 21 years, most recently as a Director of Transportation. Bowman is a dedicated leader with an impressive résumé for project excellence and client engagement, including many years working closely with the Georgia Department of Transportation and numerous cities and counties throughout the state. His professional experience includes project management, design of transportation structures, roadway design and construction engineering inspection.

He earned his Bachelor of Science degree in Civil Engineering from Clemson University.



Caroline Brabrook, P.E.
AVP and Office Manager
Seattle, Washington

Caroline Brabrook, P.E., has joined Michael Baker and will oversee all business activities in the Seattle office, including adding new markets, developing clients and further expanding our capabilities.

Caroline has more than 20 years of operations management and transportation engineering experience, most recently as Seattle Area Manager for Kleinfelder. Earlier in her career, Caroline was a Senior Project Manager – Transportation for AECOM in the Pacific Northwest and a Department Manager with HNTB Corporation.

Caroline earned a Bachelor of Applied Science degree in Civil Engineering from the University of Waterloo in Waterloo, Ontario.



Brad Brown, P.E.
VP and Regional Practice
Lead for Transportation
and Construction
Services
Houston, Texas

Brad Brown, P.E., has joined Michael Baker as Vice President and Regional Practice Lead for Transportation and Construction Services. Brown will help drive strategic growth in the Gulf Coast Region, which encompasses Texas, Louisiana, Arkansas, Oklahoma and New Mexico, and provide expertise through all phases of the Company's transportation business, from predesign to closeout.

With his nearly 40 years of industry experience, Brown has been responsible for successfully managing traditional delivery projects, providing construction management services and leading alternate delivery projects, most recently as a Senior Division Manager at Atkins North America and Vice President of Transportation at RPS Klotz Associates.



John Dietrick, P.E., S.E.
SVP of Design-Build
Cleveland, Ohio

John Dietrick, P.E., S.E., was named Senior Vice President of Design-Build as Michael Baker continues to expand its capabilities in the Design-Build market, one of the fastest growing sectors in the construction industry.

Dietrick will collaborate with client service teams, local offices and Practice leads to develop national strategies and identify capabilities and resources to grow our portfolio of Design-Build projects.

Dietrick has been with Michael Baker for more than 20 years. He brings to his new role a range of experience covering all aspects of design, analysis, rehabilitation and inspection of bridges. Throughout his career, Dietrick has partnered with departments of transportation and other agencies across the U.S., as well as the Federal Highway Administration, to further grow our project portfolio.



Amanda Furr, P.E.
VP and Office Executive
Little Rock, Arkansas

Amanda Furr, P.E., has joined Michael Baker and will oversee the growth of our business portfolio in Arkansas, while broadening our outreach to new markets and clients. Furr has nearly 20 years of engineering experience, including the last nine years in federal positions with the Department of Veterans Affairs in Arkansas, Arizona and Oklahoma.

Most recently, she served as Chief of Engineering Services for the Department of Veterans Affairs—Central Arkansas Veterans Healthcare System. In this role, she was responsible for providing comprehensive facility management advice and services.

She earned a Bachelor of Science degree in Industrial Engineering and a Master of Science degree in Operations Management, both from the University of Arkansas in Fayetteville, Arkansas.



Dale Gray,
VP and Office Executive
Alexandria, Virginia –
Emergency
Management Office

Dale Gray, who has been with Michael Baker for 26 years and has built an outstanding track record serving the Federal Emergency Management Agency (FEMA), has been promoted to lead our Alexandria – Emergency Management office and its expanded work across numerous other Michael Baker offices.

Under Gray's leadership, Michael Baker achieved the highest client satisfaction scores for both our Community Engagement and Risk Communication (CERC) and MT-1 programs in FEMA's history. He also led our successful pursuit of a five-year award on the FEMA Customer and Data Services (CDS) project, the acquisition of an additional Call Center contract that expanded Michael Baker's support of FEMA's "Customer Experience for Communities" initiative and the successful pursuit of the MT-1 program contract.



Brian Kozy, P.E.
National Practice
Lead – Bridge
Baltimore, Maryland

Brian Kozy, P.E., has joined Michael Baker as National Practice Lead – Bridge, where he will provide extensive client outreach and close collaboration with lead Bridge staff across the Company to ensure projects are executed with a high level of efficiency and technical excellence.

Kozy is a recognized leader in the engineering profession and brings more than 20 years of technical expertise, thought leadership and leadership skills to his new role. Most recently, he served as Principal Bridge Engineer for the Federal Highway Administration (FHWA), where he provided national technical leadership and led the FHWA Structural Engineering team to improve bridge and tunnel design, construction and performance nationally. He previously served as a Transportation Business Manager for Parsons Brinckerhoff and a Structural Project Manager for HDR Engineering.



Kenneth Mobley
VP and Office Executive
Alexandria, Virginia

Ken Mobley brings 31 years of industry experience, including 18 years with Michael Baker, to his new role and will focus on expanding client portfolios in engineering, planning, architecture, construction engineering, construction services, landscape architecture, rail and transit, and more.

As a Transportation Planner, he has experience in all modes of transportation planning, including environmental studies, transit planning, freight studies, alternative transportation systems, heavy rail, light rail, bus rapid transit and airport access studies. As the Planning and Urban Design Department Manager in Alexandria, he led a team of Federal planners, landscape architects, urban designers and transit planners who provided planning services not only locally but also internationally through several military planning contracts.



Tommy Montgomery, P.E.
SVP and Regional Director,
Southeast Region
Norcross, Georgia

Tommy Montgomery, P.E., has been promoted to Senior Vice President and Regional Director of the Southeast Region to help accelerate growth and ensure project delivery excellence throughout the entire Region, which includes Alabama, Florida, Georgia, Mississippi and Tennessee.

Montgomery is a seasoned leader with more than 30 years of experience, including 24 years with Michael Baker. Throughout his tenure, he has been a trusted client adviser and assumed positions of increasing responsibility, most recently serving as the Office Executive responsible for the Company's Georgia and Tennessee operations.

Montgomery earned his Bachelor of Science degree in Civil Engineering from the Georgia Institute of Technology.



Mark Pitchford, PSM
VP and Office Executive
Tampa and Orlando,
Florida
Tampa, Florida

Mark Pitchford, PSM, has joined Michael Baker to oversee the growth of the Company's portfolio of business in Central Florida, while broadening its outreach to new markets and clients.

Pitchford brings more than 25 years of operations management experience within the survey and geospatial industries. Most recently, he served as Regional Manager at WGI, Inc. where he oversaw the growth and expansion of survey and subsurface utility engineering services offered by the geospatial division in the United States.

He earned a Bachelor of Science degree in Surveying and Mapping from the University of Florida in Gainesville, Florida.



Alfonso Riera,
VP and Army Regional Federal Lead in the Gulf Coast and West Regions
Dallas, Texas

Alfonso Riera has been promoted to Vice President and Army Regional Federal Lead in the Gulf Coast and West Regions, an extension of his successful efforts in business development throughout the Gulf Coast. Riera is now responsible for the continued expansion of the Michael Baker network within the Army's scope of projects in these key geographies.

Riera's extensive knowledge of homeland security requirements and multiagency procedures, combined with his 26 years of active-duty Army experience, position Michael Baker to further grow our Federal work and meet the needs of our Army clients. Before joining the firm in 2008, Riera was a career Army Engineer Officer managing civil action and military construction projects.



Aaron Stover, P.E., S.E.
VP and Regional Practice
Lead – Bridge
Louisville, Kentucky

Aaron Stover, P.E., S.E., has been promoted to Vice President and Regional Practice Lead – Bridge for our Great Lakes Region. Stover will lead regional efforts to grow the Bridge Practice by broadening our existing capabilities, expanding into new markets and ensuring quality standards, technical expertise and project excellence for new and existing Bridge clients.

Stover brings 23 years of industry experience to his new position and has executed several of the largest and most complex bridge design and rehabilitation projects in Michael Baker's recent history, including the Ohio River Bridges Project, the Milton-Madison Bridge and the Land Between the Lakes Replacement Bridges. He also has significant project leadership experience in traditional bid-build and alternative delivery projects.



Timothy Thiele, P.E.
VP and Office Executive
Carlsbad, California

Tim Thiele, P.E., has been named Vice President and Office Executive, reflecting leadership of the Carlsbad office and extensive work with local municipalities. He previously served as the Carlsbad Land Development and Office Manager at Michael Baker, managing public works and land development projects, including grading, street design, storm drainage, sewer and water.

In addition to serving as Del Mar's City Engineer for 10 years, he continues to work with the cities of San Diego, Oceanside, Encinitas, San Marcos, Imperial Beach and Carlsbad, among others. He is a member of the American Council of Engineering Companies (ACEC), San Diego Chapter, and the American Public Works Association (APWA), San Diego Chapter.



Quintin Watkins, P.E.
VP and Office Executive,
Georgia and Tennessee
Norcross, Georgia

In the Southeast Region, Quintin Watkins, P.E., was appointed as Vice President and Office Executive for Georgia and Tennessee and will help continue to drive growth in this important market.

Watkins brings nearly 30 years of industry experience to his new role and most recently served as a Department Manager for the Company's Aviation Practice. Watkins is nationally recognized for his expertise in airfield improvement, with a résumé that includes work at Hartsfield-Jackson Atlanta International Airport, the busiest airport in the country.

He earned his Master of Science degree in Civil Engineering from the University of Arkansas and his Bachelor of Science degree in Civil Engineering from the Georgia Institute of Technology, where he also did graduate studies work.

New Executive Leadership Team Members



Dan Kieny,
Chief Technology Officer
Pittsburgh, Pennsylvania

Dan Kieny has joined Michael Baker as Executive Vice President and Chief Technology Officer, where he will lead all facets of the firm's technology. Ed Gentilcore has been named Executive Vice President and Chief Legal Officer, assuming the role from H. James McKnight, who retired after 25 years at Michael Baker. Both serve on the Company's Executive Leadership Team and report to CEO Brian A. Lutes.

Kieny's 30 years of IT experience include several prominent leadership positions within our industry, including at MWH Global and Black & Veatch. His comprehensive knowledge of the engineering and construction, energy, water and manufacturing industries will be invaluable as he helps advance our technology and IT operations. His background spans all aspects of IT, including technology, innovation and cybersecurity.



Ed Gentilcore,
Chief Legal Officer
Pittsburgh, Pennsylvania

Gentilcore's more than 30 years of nationally recognized experience in engineering and construction law and litigation includes most recently serving as Michael Baker's Senior Vice President and Deputy General Counsel.

Prior to joining Michael Baker, Gentilcore was Vice President and Deputy General Counsel at the New York Racing Association and spent seven years at Sherrard, German & Kelly, P.C., as Shareholder, Director and Chair of its Construction Services Group.

OUR COMMITMENT TO EXCELLENCE

TO OUR CLIENTS...

We believe in building strong, long-term relationships that put your needs and aspirations first. We will move mountains to leverage our full continuum of expertise, experience and innovation — with respect and integrity — to help you solve your most complex problems. We will serve as your change agents and trusted advisers, guiding you and your communities through transformational change.

WE DELIVER PERFORMANCE.

TO OUR EMPLOYEES...

We cultivate a culture of excellence that fosters collaboration, career development, diversity, creativity, differentiating innovation and an impassioned entrepreneurial spirit. We will invest in your education and training. We will seek opportunities for you to develop your careers. We will reward innovation, teamwork and leadership.

WE DELIVER CAREERS.

TO THE COMMUNITIES WE SERVE...

We care deeply about the communities we serve. We will give you our best as we deliver improved quality of life, peace of mind and a more prosperous future. We also are dedicated to giving back around the world with our time, talents and financial support to lift up those in need. You represent our families, neighbors and friends.

WE DELIVER A HELPING HAND.



*“...the strength of the Pack is the Wolf,
and the strength of the Wolf is the Pack...”*

Michael Baker

INTERNATIONAL



We Make a Difference



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