2022 IRF GLOBAL ROAD ACHIEVEMENT AWARDS

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# TABLE OF CONTENTS

**Chairman's Message** ............................................................................................................................................. 1

**Asset Preservation and Maintenance Management**
New Pavement Technology, Materials & Green Energy Smart IoT Active Safety Operation Management
JD Construction Co., Ltd.......................................................................................................................................... 2

**Construction Methodology**
1915ÇANAKKALE Bridge And Motorway Project
Ministry of Transport and Infrastructure, Republic of Turkey .................................................................................. 3

**Design**
The Second Wuhu Yangtze River Bridge
Anhui Transport Consulting & Design Institute Co., Ltd.................................................................................. 4

**Environmental Mitigation**
The Guizhou Zhengxi Expressway Project
China State Construction International Holdings Limited .................................................................................. 5

**Program Management**
Tal Moreeb Road Project
Aldar Projects............................................................................................................................................................. 6

**Quality Management**
Samuel De Champlain Bridge Corridor Project
TYLin............................................................................................................................................................................. 7

**Research**
Research on Key Technology and Application of Sponge City
CCCC Second Highway Consultants Co., Ltd. .................................................................................................. 8

**Safety**
The Surface Emitting Lighting Type IoT Base Intelligent Road Traffic Sign System
EZ GROUP Inc........................................................................................................................................................... 9

**Technology, Equipment & Manufacturing**
Development of a New Asphalt Binder Test Method (ABT)
US Federal Highway Administration ....................................................................................................................... 10

**Traffic Management and Intelligent Transportation Systems**
San Francisco Oakland Bay Bridge Metering Lights System Upgrade
Parsons Transportation Group ......................................................................................................................................... 11

**Urban Planning and Mobility**
Strategic Transportation Evaluation and Assessment Model (STEAM+)
Integrated Transport Center (ITC) .......................................................................................................................... 12
The IRF Global Road Achievement Awards (GRAA) Program was founded to publicize to the world the innovative, practical, creative, cost-saving and sustainable solutions the road industry provides to societies and economies.

Instituted in 2000, the GRAA Program has distinguished more than 200 projects, products and technologies from around the world. Today, the Awards are recognized as a prestigious industry accolade in their own right, but they also serve to remind a much wider audience that the mobility everyone takes for granted would not be possible without the talent and commitment of our industry. Lastly, the IRF Awards are an accelerator of progress and ideas: by showcasing our achievements, we are able to learn from each other, and build on our successes.

On behalf of IRF Global and our international panel of independent judges, I would like to congratulate the winners of the 2022 IRF Global Road Achievement Awards. They are an asset to an industry that is constantly investing in new solutions to deliver gains and sustainability advances that benefit everyone.

The diversity and quality of this year’s winning projects are also a great testament to IRF Global’s status as the international marketplace for best practices and industry solutions.

I invite you to examine them in detail and to submit your own exemplary projects to the 2023 GRAA Competition.
NEW PAVEMENT TECHNOLOGY, MATERIALS & GREEN ENERGY SMART IOT ACTIVE SAFETY OPERATION MANAGEMENT

JD CONSTRUCTION CO., LTD

With the continuous progress of human science and technology, we have been working hard on road engineering, road maintenance, construction safety, road paving, and traffic cases for years.

Based on the concept of “transparency in construction, digital management, and active safety”, in line with the government’s policies on quality, safety, and digitalization, we have provided the following improvement methods for related new materials, new equipment, new technologies, and new construction methods in five aspects:

1. Smart construction integrated system

This system is designed for road construction, maintenance history, and the safety of the surroundings and personnel of the construction site, the smart construction site safety helmets, APP, IoT, and cloud technology required by the related systems. All the required data and quality monitoring on the construction site are digitized so that they can be monitored at any time, induction equipment is specially designed to monitor in real-time actively and maintain construction safety.

2. Road pavement intelligent management system

The government has relevant standards and specifications for road paving. We have developed a “digital thermometer” for these regulations, which can monitor the track and video record temperature changes in real-time from the website and read the source of the product through track query.

3. AI pothole inspection system

This system is a digital automatic monitoring system used for road paving, this system can detect potholes more effectively and actively in real-time. Using big data, analyzing road usage, traffic flow, and environmental factors enables real-time detection, reporting, dispatch, follow-up monitoring, and grasping of all road damage through deep learning.

4. Innovative materials & advanced equipment technology

Following the principle of energy-saving and carbon reduction, and considering the quality maintenance, we have invented “long-term repair material” and “cold mix foam asphalt” as the application of subsequent road base layer and surface layer paving. In advanced equipment, a new type of cantilever rolling machine is developed to carry out the construction and compaction of pipeline excavation.

5. Traffic safety assistance system

Reducing blind spots and improving pedestrian safety is urgent, we have invented an active radio frequency warning light using the solar power supply. The main application of the active warning system based on the green energy construction site is to remind vehicles in other directions to slow down in advance to reduce traffic accidents at road intersections.
Minister of Transport and Infrastructure of the Republic of Türkiye

“Completed 18 months ahead of schedule, the 1915Çanakkale Bridge and Motorway Project became operational on 18 March 2022 coinciding with the 107th anniversary of the Çanakkale Naval Victory. Considered as “the project of superlatives, breakthroughs and record-breaking accomplishments”, 1915Çanakkale has already begun making remarkable contributions to both national welfare and international trade. Moreover, the project’s inspiring significance in terms of contracting and engineering continues to be recognized globally. Winning another IRF Global Road Achievement Award, this time in the “Construction Methodology” category, confirms this accomplishment once again. Hence, we wholeheartedly thank the international panel of judges for this valued and meaningful award.”
THE SECOND WUHU YANGTZE RIVER BRIDGE

ANHUI TRANSPORT CONSULTING & DESIGN INSTITUTE CO., LTD

The Second Wuhu Yangtze River Bridge is a 55.5km long, six-lane expressway project in China, with 100 km/h driving speed. It is the largest scale Yangtze River Bridge in Anhui Province, with a US$1.41 billion investment cost. The main bridge is a 1,622 meter-long cable-stayed bridge with a span configuration of (100+308+806+308+100) m. Its design scheme adopts two pylons, four cable-planes, and full-floating system.

The project has yielded many original designs, creating “multiple firsts” in the history of cable-stayed bridge construction. The original design, featuring plan looping cables, was the first of its kind proposed in the world, providing solutions to anchorage zone cracking problems in the pylons of a cable-stayed bridge. The bridge also pioneered a double-leg column-shape pylon structure on the Chinese Yangtze River. It is the first long-span cable-stayed bridge to use a full-arc floor and five-fold “wing”-type steel box girder, with strong wind resistance. A two-dimensional damper constraint system for cable-stayed bridges was designed. It is the four-cable plane cable-stayed bridge with the largest span in the world. For the first time, the bridge designed a full-external prestressed, segmented and assembled box girder in China. The industrialized construction degree and scale of the assembled box girder rank the first in China.

The Project achieved the perfect combination of engineering and aesthetics. The bridge has proposed many new design schemes such as four-cable plane, and segmented steel box girders. With a high visual transparency and beautiful shape, the bridge displays great performance in wind and earthquake resistance. Landscape elements, such as herringbone, sails, masts, and single columns, were used to reflect the aesthetic themes of “river crossing” and “voyage”. The bridge is now seen a symbol of modern Chinese bridges, demonstrating its unique attraction.

To solve the complex problem of the Yangtze River’s large navigable width, the cantilever assembly technology for super-long girders was used for the first time. The maximum cantilever length reached 397m, setting a new record for the construction of cable-stayed bridges in China. The project is located in the Yangtze River at a water depth of 50m and turbulent water. The project proposed the unique and innovative designs such as “column pylon + clustered pile caps, large side span and middle span ratio”, and solved the problems of deep water.

These new designs saved engineering costs and achieved significant economic benefits. The plan looping cable concept has now been applied to 12 Chinese bridges. The industrialized design of segmented assembled girders has been applied to the bridge construction of 10 Chinese expressways, including Yanjiang Expressway. The new designs also generated economic benefits of US$220 million. The project was judged by the Ministry of Transport of China as a “Demonstration Project in Science and Technology” and a “Excellent Project in Quality”.

Hongguang XU
General Manager, Anhui Transport Consulting & Design Institute Co., Ltd

“We are very honored to be recognized with the Design award of the GRAA, which is widely respected in the world. This award, and the associated international recognition that comes with it, proves the contribution of our design team in the field of long-span bridge. The Second Wuhu Yangtze River Bridge has pioneered many original designs, such as the plan looping cable, segmental box girder, split-column pylon, four cable-planes, inclined damping, to name a few.”
THE GUIZHOU ZHENGXI EXPRESSWAY PROJECT
CHINA STATE CONSTRUCTION INTERNATIONAL HOLDINGS LIMITED

The Guizhou Zheng'an-Xishui (Zhengxi) Expressway is honored as a wondrous and beautiful expressway in northern Guizhou Province. It is located on high mountain and deep valley areas in Zunyi City, passing through nature reserves, scenic spots, national forest parks, national geological parks and aquatic germplasm resources conservation areas. With a total length of 130.367 kilometers and a connecting line of 22.903 kilometers, the expressway shortens the journey from 10 hours to only 1.5 hours.

The Project adhered to the environmental protection principles from the very beginning of design. An environmentally friendly route was selected to keep away from basic farmlands and reserves. Large amounts of filling and digging were avoided and earthworks were balanced as much as possible. Plant ecological protection was used as the main technology in the slope protection, supplemented by engineering protection. Bridges were designed to fit into the surrounding landscapes. Bridge runoff collection tanks were set up to avoid water pollution to sensitive water bodies under the bridge. Zero extra excavation technology was adopted, and residue soil was reused when building the tunnels.

In the construction phase, measures were taken to minimize the impact to ecological environment. About 110,000 m³ of topsoil was reused, and 6,000 m² of permanent land occupation was avoided. The surface of the land was covered with planting soil, leveled, and planted with trees to restore vegetation and prevent water loss and soil erosion. Hydrological conditions were monitored and protection measures were strengthened to avoid contamination of drinking water sources. Sedimentation tanks were used to collect, treat, and reuse wastewater, in order to reducing water intake from natural water bodies.

During the operation phase, environmental protection was also one of the priorities. Twelve underground integrated treatment units were used to treat domestic sewage in service areas and parking areas. Noise barriers are used to control noise for 35 sensitive points. Guizhou Zhengxi Expressway Project Brief Project Summary to minimize impact to the migration and reproduction of wild animals, 14 flyovers and 45 culverts were built. Protection signs were set up for protected plants such as Ficus virens and Taxus chinensis var. mairei. Special protection plans were developed for scenic spots and nature reserves close to the road. Besides, an additional 193,300 m² of woodland and grassland were planted in the neighboring areas to maintain the health and stability of the regional ecosystem.

As the world’s first expressway project to release an ESG report, Zhengxi Expressway implemented environmentally friendly construction through the whole process and formed a harmonious and sustainable ecosystem fitting in the local environment. Zhengxi Expressway greatly facilitates the travel of local communities, drives industrial transformation and speeds up the development of the Northern Guizhou Economic Cooperation Zone. It has become a road of poverty alleviation and prosperity, a road of ecological and environmental protection, and a road to happiness and well-being.
Tal Moreeb Highway is a new road leads to one of the nation’s most unique landmarks, the Tal Moreeb sand dune, home of the Liwa Tal Moreeb Festival in the Al Dhafra region of Abu Dhabi. The new 22-kilometer, 4-lane highway cuts across the shifting sands and boasts the latest safety features, including wire rope barriers, signage, and road marking. Moreover, five roundabouts, an observation layby with parking areas for visitors and multiple emergency laybys were built as part of this project.

A fast-track program was executed to design, approve and construct the road and related infrastructure work in 6.5 months including earth works, utility relocation, duct crossings, asphalt, storm water drainage and wire rope protection works while maintaining the existing road and avoiding detours.

Aldar’s integrated approach for program management was implemented leading to successful completion of the project within the approved budget and timeline and with excellent safety record with no LTI’s.

Robust coordination among the Client, PMC, and Authorities was achieved by using web-based collaboration platform for project management and coordination between stakeholders. This platform enabled the project team to manage more than 1500 documents and approvals among 11 contractors, 2 consultants and 45 engineers as well as 7 main authorities. Aldar worker welfare policy was strictly implemented to ensure commitment to the health, safety and dignity of workers as well as those employed by our contractual partners. As part of the integrated approach, Project specific Quality Control Plan (PQP) was developed and implemented, and ISO 9001 quality control procedures were followed. Dedicated specialized QA/QC team were hired to ensure quality of work.

Environment and sustainability pillar has been one of Aldar core values, and throughout this project, the consumption of natural resources was reduced by using 100% recycled crushed aggregates which also exceeded the Authority minimum requirement of 40%. Utilizing earth filling locally resulted in a reduction in hauling distance, fuel consumption, pollution, and CO2 emissions. Additionally, energy usage will be drastically reduced over the project lifecycle by installing 622 solar-powered street lighting poles.

Adel Albreiki
Chief Executive Officer, Aldar Projects

“We are delighted to receive this global award from the International Road Federation. It is not only a reflection of Aldar’s ability to deliver high quality real estate assets and infrastructure in the UAE, but recognizes the work of our teams to bring these world class projects to life.”
QUALITY MANAGEMENT

SAMUEL DE CHAMPLAIN BRIDGE CORRIDOR PROJECT, MONTREAL, CANADA

TYLin

The Samuel De Champlain Bridge Corridor in Montreal, Canada is one of the largest bridge projects in North America. The $4.2 Billion CAN project consists of a signature cable-stayed Samuel De Champlain Bridge, the new Île-des-Soeurs Bridge, as well as reconstruction and widening of the federal portion of Autoroute 15. Opened to traffic on July 1, 2019, this Public-Private-Partnership project was delivered in only 48-months (from design to substantial completion) and met all quality objectives through the implementation of a comprehensive design quality management plan (DQMP). It enabled the streamlining of the work flow during design and construction and set up the framework for the owner, constructor, designers, and design checkers to collaborate seamlessly across the globe.

TYLin serves as the Design Quality Manager of the project as well as the managing partner of the Bridge Design Joint Venture. The Samuel De Champlain Bridge came with stringent design requirements and performance criteria. The bridge had to be designed to withstand a long list of site-specific challenges such as ice loading and abrasion, wind and seismic hazards, vessel collision and scour potentials. Adding to these challenges was Montreal’s severe winters which mandated the shutdown of the seaway operations for four months out of the year; this necessitated utilizing precasting and prefabrication off-site to minimize on-site erection time.

Design Quality Management Plan

The private partner developed, implemented, and maintained an ISO 9001-compliant DQMP, which TYLin tailored to contain project-specific missions, visions, and goals; defined roles and responsibilities of the team members; and described 7 main procedures for each major design and construction process:

- Document control and Records
- Design review and checking
- Change management
- Construction surveillance
- Control of non-compliant products and corrective action
- Preventive action
- Quality audits

DQMP training was mandatory for all team members and subconsultants to ensure that everyone was well-versed with the quality system and its procedures. This provided uniformity across the various project teams. It required the design teams to address all comments from stakeholders before the package advanced to the next milestone. Certificates were signed at each stage by the reviewers/checkers and archived as quality records.

“The International Road Federation (IRF) is a significant proponent of quality work in our infrastructure sector and we are honored to receive their award. The success of our project is due to the collaborative efforts of the Owner, the Government of Canada, our design-build contractor, Signature of Saint Lawrence Constructors (partnership of SNC-Lavalin, Dragados, and Flatiron), our design-joint venture partners (Systra-IBT and SNC-Lavalin), and our many specialty subconsultants. As managing partner of the bridge design-joint venture, TYLin thanks the committee for this great honor and looks forward to our continuous engagement with IRF to share the industry’s best practices in delivering world-class, high-caliber projects.”
RESEARCH ON KEY TECHNOLOGY AND APPLICATION OF SPONGE CITY

CCCC SECOND HIGHWAY CONSULTANTS CO., LTD

Addressing the problems of flood disasters, water scarcity and water pollution, the project adopts the methods of theoretical research, field test, analysis & evaluation and demonstration application to research “Sponge City” construction mode, facility system, water ecological restoration, as well as the key technology of permeable surface layer and green space systems.

The innovative achievements of the project research include:

• Technical approaches for Sponge City construction adapted to warm-humid, dry-cold and dry-warm regions, as well as key control objectives in the region.
• Methods to assess first rain based on runoff depth, and to collect and utilize middle-layer water with better water quality, as well as a low-impact development integration technology and standardized facilities, effectively solving the problem of sustainable rainwater utilization.

A multi-level layout strategy of sponge body, which breaks through technologies such as wetland-ecological shoreline and riverside water ecological restoration, studies the optimization method of sponge city green space, and overcomes the bottleneck of sponge body system and quantitative evaluation.

• A design control index for Sponge City road, and a new type of permeable pavement structural material, improving the permeable efficiency by 68.2%, increase the permeable volume by 2 times, and lower the road surface temperature by 3-8 °C. What is more, the project pioneered the intelligent monitoring of the construction of permeable pavement through the Internet of Things System.

• A performance indicator system with 62 factors at 10 levels in the construction period and operation period of the sponge city PPP project, which fills the technical gap.

The project has obtained 21 patents, 15 main/participant editor standards, 2 construction methods, 4 monographs, and 28 core journal papers, forming an advanced and applicable sponge city technology package. The results of the project have been demonstrated and applied in 7 of the first batch of sponge city pilot cities in China with a total contract value of $691 million.

The project has been widely reported by well-known media such as China Central Television, which is remarkable of social, economic and ecological benefits. In general, the project has important value and broad prospects for guiding the construction of sponge cities.

Chujiang Chen
CCCC Second Highway Consultants Co., Ltd.

The project “Research on Key Technology and Application of Sponge City” forms a complete technical system for sponge city construction, which can solve the problems of water resources crisis and effective utilization of water resources. What is more, it can realize the integration of low-impact development and sustainable economic and social development.

This award has fully demonstrated China’s sponge city construction technology on the international stage. Meanwhile, it has shown our company’s brand strength in the field of sponge city construction, and effectively promoted the business expansion and technical level improvement of sponge city construction. Thanks again to the International Road Federation!
SAFETY

THE SURFACE EMITTING LIGHTING TYPE IOT BASE INTELLIGENT ROAD TRAFFIC SIGN SYSTEM

EZ GROUP INC.

EZ GROUP Inc. is a specialized company that develops and produces road signs, traffic safety signs, window-mounted as well as indoor signs, based on the light guide film for sheet light-emitting devices. Similar to the company’s slogan, ‘Where is light, there is EZ GROUP’, EZ GROUP seeks to make the most convenient and free use of light for more people in the world.

EZ GROUP manufactures ‘G-SIGN Way’ based on ‘EZ Free Sheet’ technology which is the world’s first light guide film for surface light-emitting device developed and patented independently by EZ Group. Since 2004, EZ GROUP has conducted R&D to solve the problems of limited size, angle, light reflection, and durability of existing signage. As a result of these efforts, innovative pattern technology was invented.

‘EZ Free Sheet’ is a light-emitting film developed through a special pattern optical adhesion technology. It is the world’s first free pattern light-emitting film that can implement various forms of lighting regardless of LED irradiation direction. ‘EZ Free Sheet’ has excellent benefits such as simplification of manufacturing processes, excellent restoration from external environment, as well as clear advertisement recognition from all angles.

‘G-SIGN Way’ is regarded as an innovative product for the road sign and sign market by developing the world’s first surface lighting sign module. Its pattern brightness is 30~160% brighter than the existing light guide plate, and the electricity consumption is only 1/20th of fluorescent light method and ½ of the existing LED method. In addition, it not only simplifies the processing of application and removes separate equipment, but is also energy efficient and versatile.

The optical guiding film for the patented surface light emitting device has excellent visibility and readability in any direction, and a number of tests show strong endurance without any change to the surface at 40°C, 85% RH during 48 hours and 23°C distilled water during 168 hours. In addition, it also removes blackening phenomenon and sheet separation phenomenon of the sign from temperature difference between the light emitting sheet and the light guide plate. Furthermore, as it is possible to change and install modular ‘G-SIGN Way’ products on the existing road signs, it could reduce costs, save time, and mitigate environmental problems.

‘G-SIGN Way’, which is composed of several modules and can be manufactured by road signs, guarantees a long period of use and can be repaired by detaching only the parts needed without making a whole new road sign or removing it. Compared to the existing indirect lighting method of attaching a sheet to the entire light guide plate, the light guide film has better visibility and readability as it is attached to the text/figure part to minimize light loss and refraction caused by the sheet leading to higher illuminance display.

Kim Ju Young
Chairman, EZ GROUP Inc.

“We are delighted to receive recognition for the technological development efforts and achievements of all our employees under the company vision of “making more people use light most conveniently and freely”. Through the GRAA, we hope that our technology and products will lead to achievements in entering the global market, so that many people around the world can use roads more safely and conveniently.”
TECHNOLOGY, EQUIPMENT AND MANUFACTURING

DEVELOPMENT OF A NEW ASPHALT BINDER TEST METHOD (ABT)
US FEDERAL HIGHWAY ADMINISTRATION

As part of the project, an innovative, simple test method, called the binder Asphalt Binder Test (ABT), for Quality Control and Assurance of asphalt binders was introduced. A new software that uses Artificial Intelligence (AI) to predict PG Grade from the parameters derived from the creep and recovery curve was similarly developed.

The ABT uses an air jet to produce indentation loading. A laser deflectometer installed coaxially to the air jet is used to measure the resulting deflection from the indentation. The ABT is conducted on unaged asphalt binder at an air pressure of 15 psi (10 g) and test temperature of 77°F (25°C). The ABT test protocol is similar to a traditional Penetration test (ASTM D5) except instead of the penetration needle, an air jet is used with a loading time of 20s and recovery time of 70s under no load. Unlike the Penetration test, the ABT measures both the loading and recovery characteristics of a binder. The complete creep-recovery curve is measured and stored. The measurement of recovery properties allows for successful testing of both unmodified and polymer modified binders.

The AI software can successfully predict (greater than 95% success rate, +/- 1°C in PG grade temperatures) the continuous PG Grade of a binder from the creep and recovery curve of asphalt binder conducted using the ABT testing protocols. A possible Penetration-based specification approach is also considered. In this new approach, the Penetration value and the recovery value from the ABT may both be specified for bitumen instead of the traditional Penetration test. So, both unmodified and modified bitumen may be graded by merely specifying the percent recovery requirement at a Penetration value. More data was generated using this approach for Penetration graded bitumen from United States, Europe and Asia.

The ABT device and the PG Grade prediction model was evaluated by five State Departments of Transportation (DOTs) in United States (PennDOT, CDOT, Purdue University, Maine DOT, Maryland DOT and UDOT). Data obtained to date suggests that the ANN application has successfully predicted over 95% of the PG grades accurately at each State DOT.

An FHWA-Transportation Research Board (TRB) panel also evaluated the ABT. The panel consisted of subject matter experts, asphalt suppliers, State DOTs, Industry, and academia. The aim of the evaluation was to determine the effectiveness of research, technology transfer, and collaborative activities. Quantitative estimate of the potential benefits and costs of the ABT were also calculated as part of this evaluation. The evaluation found that without replacing the existing PG test procedures, if the ABT is adopted as a screening tool it would identify more out of specification binders from screening all samples. It would also enable faster field notification, reducing the amount of out of specification binder used in paving. It was found that the potential benefits if adopted as a screening tool could be sizable:

- Average State DOT: Annual Net Benefits $111,000/yr; ROI: 380%; B/C: 5
- Return to FHWA investment are high due to modest investment to date: ROI: 1,996%.

Raj Dongre
Owner/Operator, Dongre Laboratory Services Inc., Springfield VA, USA

“This award recognizes the Asphalt Binder Tester (ABT) for leading the way in excellence and innovation for rapid screening of bitumen during pavement construction. It is indeed an honor to be recognized by the IRF, one of the industry’s most influential organizations globally.”
In October 2021, the San Francisco-Oakland Bay Bridge (SFOBB) received a new state-of-the-art Mainline Metering Light System Upgrade. The one-of-a-kind integration/automation system was delivered by the Bay Area Toll Authority (BATA) with oversight from Caltrans District 4 Bay Area. Over 260,000 vehicles cross the SFOBB a day, passing through the twenty-lane approach to the bridge. The original mainline metering system was outdated and antiquated. The metering light system was installed in 1971 in an effort to maintain the flow of traffic into San Francisco. The entire system was manually operated by the District 4 Transportation Management Center (TMC) operators who would turn the metering lights on/off when they observed an increase in the flow of traffic. The system did not have modern redundancies so when there was a failure, travel time reliability was greatly impacted. With the growth of approximately 2.3 million people since the initial installation of the metering lights, the metering lights have become central to traffic operations for the entire Bay Area, and the lack of advanced features in the previous system was a major risk to daily regional traffic operations.

The goal of the project was to improve regional traffic operations by installing an innovative, fully automated, and redundant system. Using a combination of existing new Advanced Traffic Controllers, newly installed detection, and Variable Message signs, the mainline system is able to assess the flow of traffic in real-time in the highly congested area of the bridge that reduces from 16 to 5 lanes. The upgraded metering lights system uses a fuzzy logic metering algorithm that uses weighted parameters to assess the real-time occupancy and reacts within minutes of a change in traffic conditions. The algorithm seamlessly considers several factors including general-purpose lane and HOV/transit demand, lane utilization imbalances, and downstream congestion, which are all considered to effectively determine when the metering system is activated, and rates need adjustments.

Field and central system equipment and traffic monitoring stations were strategically incorporated in certain areas of the SFOBB Toll Plaza to better respond to both upstream and downstream real-life traffic conditions. Updated advanced transportation management system and controller software, hardware, and Intelligent Transportation System (ITS) devices were implemented for improved traffic operations. The automated metering system includes several layers of redundancies to maintain system performance in the event of emergencies or system failure. The redundancies include redundant communication infrastructure, servers, and networking devices in addition to multiple operational facilities on both sides of the Bridge.

The upgraded metering lights system provides full redundancy and is responsive to real-time traffic conditions. The system is built with multiple feedback loops, which include a performance measure dashboard that reports on real-time and historic performance measures. The fuzzy logic algorithm can be fine-tuned as new detectors are integrated into the system, and also be migrated to other regional toll bridges requiring mainline metering.

The partnership between Caltrans District 4 Bay Area and BATA exemplifies the commitment to providing an efficient transportation system that enhances California’s economy and livability.
Engineer Abdulrahman Al Shizawi  
Executive Director, Planning & Strategic Affairs Sector, ITC

“It is an honor for the Integrated Transport Centre of Abu Dhabi to win the 2022 Global Road Achievement Award (GRAA) in category of “Urban Planning & Mobility. We are glad that our STEAM+ Model has been recognized by the IRF, one of the industry’s most famous and effective organizations globally. This accomplishment has assured our goal to deliver an Integrated and sustainable transport system for a better quality of life in the Emirate of Abu Dhabi.”
2023 GRAA Application Information

APPLICATION DEADLINE: MAY 8, 2023

The application package must include:
1. A completed application form
2. A project summary (<500 words)
3. An explanation of how the project meets the criteria of the category in which it has been submitted (~100 words)
4. Microsoft PowerPoint® presentation (.ppt or .pptx) including but not limited to slides, photographs, drawings, diagrams, videos, or additional explanatory materials. (Presentations should be limited to 30 slides or less).
   • If completing a paper application, please compress all your files into a single ZIP archive and send the files via email (if <5MB) or a file-sharing service (if ≥5MB) such as Dropbox, WeTransfer, ShareFile or other like service.
   OR
   • Complete our online application, which includes built in file uploading (https://irf.wufoo.com/forms/2023-graa-application)

Incomplete applications will not be considered. All materials must clearly identify the name of the project, the award category, and contact information of the submitting applicant.

Please note:
The submission of copyrighted material to IRF for the Global Road Achievement Awards shall constitute a general grant of permission to IRF to use the materials for promotional purposes.

Each application package must be accompanied by a non-refundable entry fee of $400 for IRF Member, $875 for non-members. A separate application package (accompanied by payment of the entry fee) must be submitted for each project entered in each category.

Entry packages must be received by the IRF, at the address listed below, by 5:00pm EST on May 8, 2023. Entries must be addressed to:

Global Road Achievement Awards
c/o International Road Federation
500 Montgomery Street.
5th Floor
Alexandria, VA 22314 USA

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