

November 18 - 19, 2020

ISI & ZPH Present

SHOVEL WORTHY



Ideas For A Fresh Start

Leveraging Infrastructure Investments for Public Health, Social Equity, and Economic Recovery

DAY 1

WEBINAR 1 / 10:00 a.m.

Opening Session, Shovel-Worthy Ideas for a Fresh Start

Session A: Opening Remarks and Moment of Recognition / 10:00 a.m.

Session B: Keynote Speakers/ 11:00 a.m.

WEBINAR 2 / 2:00 pm Equity and Social Justice

Session A: Connecting Equity & Social Justice with Meaningful Progress in Infrastructure / 2:00 p.m.

Session B: Infrastructure Projects that Lead the Change / 3:00 p.m.

Micro-networking session with Webinar 2 moderators and speakers / 4:00 p.m.

Networking Session – World Cafe / 5:00 p.m.

DAY 2

WEBINAR 3 / 10:00 a.m.

RECOVERING FROM A GLOBAL PANDEMIC

Session A: COVID-19 and Public Health / 10:00 a.m.

Session B: Recovery and Infrastructure Investments / 11:00 a.m.

Micro-networking session with Webinar 3 moderators and speakers / 12:00 a.m.

WEBINAR 4 / 2:00 p.m. RESILIENCY

Session A: Transformative Solutions for Sustainability and Health / 2:00 p.m.

Session B: Resiliency Planning / 3:00 p.m.

Micro-networking session with Webinar 4 moderators and speakers / 4:00 p.m.

Networking Session – Table Topics / 5:00 p.m.

Acknowledgements:

Special thanks to all speakers, moderators, Zofnass Program Sustainable Infrastructure Advisory Board (SIAB), and ENVISION qualified companies (listed on pages 22-23).

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**Institute for Sustainable Infrastructure and the
Zofnass Program for Sustainable Infrastructure**

Shovel-Worthy Ideas For A Fresh Start

**Leveraging Infrastructure Investments for Public Health,
Social Equity, and Economic Recovery**

November 18-19, 2020
Virtual Conference

Emerging from a turbulent year, rife with systemic racism and a global pandemic, infrastructure will be at the forefront of progress while continuing to provide reliable essential services to recovering communities. How will infrastructure assets meet these demands? What do the owners, planners, developers, engineers, constructors and operators need to do to make sure we get it right?

This thought-provoking virtual conference answers these questions and more, posturing that the solutions lie in infrastructure investments that are driven by a focus on social equity, public health, and economic recovery. Leaders in resiliency and sustainable infrastructure from around the world will share the commitments made and projects delivered that will help communities in crisis recover and build for a more sustainable future.

Conference Agenda

WEBINAR 1

Starts at 10:00

Opening Session, Shovel-Worthy Ideas for a Fresh Start

Moderated by Anthony Kane, President and CEO, ISI

10:00 am

Session A: Opening Remarks and Award Ceremony

Spiro Pollalis Professor and Director of the Zofnass Program
Harvard University

Lorenzo Orsenigo President and General Manager
ICMQ

Anthony Kane President and CEO
Institute for Sustainable Infrastructure

Melissa Peneycad Managing Director
Institute for Sustainable Infrastructure

11:00 am

Session B: Keynote Speakers

Lucinda Babers Deputy Mayor for Operations and
Infrastructure, Washington DC

Richard T.T. Forman PAES Professor of Landscape Ecology Emeritus,
Harvard University

<End of Webinar 1>

WEBINAR 2

Starts at 2:00 pm

Equity and Social Justice

Moderated by Melissa Peneycad, Managing Director, ISI

2:00 pm

Session A: Connecting Equity & Social Justice with Meaningful Progress in Infrastructure

Maya Trotz

Professor of Civil and Environmental Engineering
University of South Florida

Michael McMeekin

Executive Director
Engineering Change Lab – USA

3:00 pm

Session B: Infrastructure Projects that Lead the Change

Jennifer Ninete

Sustainability Consultant
HDR

Hélène Dubé

Project Manager, Environment and Envision Specialist
SNC-Lavalin

Sofia Zuberbuhler-Yafar

Program Director, Sustainable Infrastructure
New York City Department of Design and Construction

With –

**Ankita Nalavade &
Kenneth Almario**

Sustainability Coordinators, Sustainable Infrastructure
New York City Department of Design and Construction

4:00 pm

Micro-networking session with Webinar 2 moderators and speakers

5:00 pm

Networking Session – World Café

<End of Day 1>

Conference Agenda

WEBINAR 3

Starts at 10:00

Recovering from a Global Pandemic

Moderated by John Williams, CEO at Impact Infrastructure, makers of Autocase software, ISI Board Chair

10:00 am

Session A: COVID-19 and Public Health

Michael Mucha

Chief Engineer and Director
Madison Metropolitan Sewerage District

Suzanne MacCormick

Global Healthcare Business Growth Director
WSP

11:00 am

Session B: Recovery and Infrastructure Investments

Maria Lehman

Director US Infrastructure, GHD
ASCE Executive Committee Member

Rebecca Zofnass

Managing Partner
EFCG

Stephane Larocque

Chief Operating Officer
Impact Infrastructure Inc. makers of Autocase Software

12:00 pm

Micro-networking session with Webinar 3 moderators and speakers

<End of Webinar 2>

WEBINAR 4

Starts at 2:00 pm

Resiliency

Moderated by Jim Grant, Associate Vice President, Sustainable Energy and Utilities Director, HNTB Corporation & SIAB

2:00 pm

Session A: Transformative Solutions for Sustainability and Health

Veronique “Ronnie” Hakim	Senior Vice President, National Transit & Rail Market Sector Leader, HNTB Corporation
David Smith	Senior Vice President, Director of Strategy Stantec & SIAB
Anna Mehrotra	Discipline Leader – Process Modeling and Industrial Treatment, Senior Wastewater Engineer, CDM Smith
Amy Corriveau	Vice President, Director of Digital Solutions CDM Smith

3:00 pm

Session B: Resiliency Planning

Piero Pelizzaro	Chief Resilience Officer City of Milan
Brendan Reed	Director of Planning & Environmental Affairs San Diego County Regional Airport Authority
Brian Swett	Principal and Group Leader, Director of Cities and Sustainable Real Estate, Arup & SIAB

4:00 pm

Micro-networking session with Webinar 4 moderators and speakers

5:00 pm

Networking Session – Table Topics

<End of Conference>

Detailed Agenda

WEBINAR 1

November 18, 2020 from 10:00 am

Opening Session, Shovel-Worthy Ideas for a Fresh Start

Moderated by Anthony Kane, Institute for Sustainable Infrastructure (ISI).

Speakers will set the stage for the topics that will be discussed throughout the workshop, including how infrastructure can best address equity and social justice, COVID-19 impacts and recovery, and planning for the future. Recent projects that have made significant strides in sustainability, resiliency, and equitable achievements will be recognized during an awards presentation. ISI will acknowledge the individuals and project teams who had an impact in the past year.

Session A

10:00 am

Opening Remarks and Award Ceremony

Welcome and opening remarks

Prof. Pollalis, Zofnass Program for Sustainable Infrastructure, Harvard University



Professor Pollalis is Research Professor of Design, Technology and Management at the Harvard Design School. Since 2016, after 30 years at the position of Professor, he dedicates his efforts to research and consulting. Since 2008, he is the Director of the Zofnass Program for the Sustainability of Infrastructure that has led to the Envision® Rating System. He is also the Principal Investigator of the project "Gulf Sustainable Urbanism" for ten cities in the Arab Gulf. He has taught as a visiting professor at the ETH-Zurich, Switzerland; TU-Delft, Holland; Uni-Stuttgart, Germany; U-Patras, Greece; and has offered joint courses with the Harvard Business School on planning and development.

Prof. Pollalis is the chief planner for the new sustainable DHA City Karachi of 11,500 acres (46 sqkm), currently under development, and the concept designer of the information infrastructure in the new administrative city in Korea. He served as the Chairman and CEO of the public company of Hellinikon, the former Athens airport, preparing the base master plan and business plan for the investors of redeveloping the 1,500 acres (6 sqkm) land, has served in the Athens Planning Committee and played a central role in the iconic cable-stayed Zakim Bridge, the new symbol of Boston. Prof. Pollalis is Distinguished Fellow at the King Salman Center in Saudi Arabia, has served as co-chair at the Singapore-ETH Centre for Global Environmental Sustainability, and has conducted research on lifecycle sustainability for the National Research Council of Canada. He leads as a consultant the National Urban Assessment of Pakistan for the Asian Development Bank, he is advisor to the Construction Industry Development Board (CIBD) in Malaysia and, since 1999, he is a contractor to the General Services Administration (GSA) in the USA.

Professor Pollalis received his first degree from the University in Athens (EMP) and his Master's and PhD from MIT. His MBA in high technology is from Northeastern University. He has an honorary Master's degree in Architecture from Harvard.

Opening remarks

Lorenzo Orsenigo, President and General Manager, ICMQ



President and General Manager at ICMQ, the leading certification body for the construction sector in Italy, Member of the Board of Directors of Accredia, recently joined the ECO Platform organization as European EPD Program Operator.

Advocate for successful projects with first-level companies in the public and private sector such as RFI, Italferr, Enel, Terna. Strongly committed to sustainability, thanks to the collaboration with the Institute for Sustainable Infrastructure in Washington DC has been launching the Envision rating system in Italy.

Opening remarks, acknowledgements and Moment of Recognition

Anthony Kane, President and CEO, ISI

Melissa Peneycad, Managing Director, ISI



Anthony Kane is President & CEO of the Institute for Sustainable Infrastructure in Washington, DC where he oversees the organization's overall operations and leads the development of the Envision framework for sustainable infrastructure. He is also a commissioner on the Washington DC Commission on Climate Change and Resiliency. Anthony was formerly a research director at the Zofnass Program for Sustainable Infrastructure at Harvard University's Graduate School of Design, a research associate with the Materials, Processes, and Systems Group at Harvard University, and an instructor at the Boston Architectural College. He holds a Bachelor of Architecture summa cum laude from Virginia Tech and a Master in Design Studies from Harvard University. Anthony is a co-author of Ceramic Material Systems in Architecture and Interior Design and a contributing author of Infrastructure Sustainability and Design.



Melissa Peneycad, Managing Director, Institute for Sustainable Infrastructure (ISI). She has 20 years of professional experience, most of which have focused on developing, implementing, and administering sustainability and resiliency standards, frameworks, and rating systems for infrastructure, commercial real estate, and industrial products. Since joining ISI in 2016, Melissa has verified the sustainability and resiliency of more than 70 infrastructure projects across the US, Canada, and overseas, collectively worth more than US\$25 billion with another US\$25 billion in infrastructure development under her purview. Prior to ISI, Melissa was an associate of sustainable development at Stantec, a global engineering, consulting and design services firm and was the national sustainability program manager for BOMA Canada, a prominent commercial real estate association. Melissa has a Bachelor of Commerce degree, a Master of Environmental Studies degree and a Graduate Diploma in Business and Sustainability.

Q & A Led by Anthony Kane.

Keynote

Lucinda Babers, Deputy Mayor for Operations and Infrastructure, Washington DC



Lucinda Babers was appointed as the Deputy Mayor for Operations and Infrastructure (DMOI) on March 5, 2019. She previously served as the Director of the District of Columbia Department of Motor Vehicles (DC DMV). As the DMV Director, Lucinda led the agency in significant and innovative changes, including the closure and opening of three service centers, elimination of passenger vehicle safety inspections, creation of a more secure credential (along with central issuance), and implementation of REAL ID and Limited Purpose Credentials. Under her direction, DC DMV added numerous online services—and received several International Customer Service and Communication Awards from the American Association of Motor Vehicles Administrators (AAMVA), as well as several regional AAMVA awards.

Prior to being confirmed as DMV Director, Lucinda served as the Deputy Director for DC DMV from 2003 until 2006. As Deputy, she was responsible for the review and revision of customer service processes that led to the DC Federation of Citizens Association unanimously recognizing DC DMV for the Greatest Improvement in Public Service for 2006.

Before coming to DC DMV, Lucinda served in several senior management positions at Amtrak. She was the project manager for the company's service guarantee initiative. And, Lucinda is no stranger to DC Government; she previously worked on management reform projects for the city manager during the Control Board era and served as an internal consultant and project manager for the city administrator and corrections.

Lucinda started her career as an officer in the military. She holds a Master of Science in Business from Johns Hopkins University and a Bachelor of Industrial Engineering from the Georgia Institute of Technology. She currently resides in Ward 6.

Keynote

Prof. Richard T.T. Forman, PAES Professor of Landscape Ecology Emeritus, Harvard University



Richard T. T. Forman, Harvard University professor emeritus, taught ecology for 36 years in the Graduate School of Design and Faculty of Arts and Sciences. His books and articles helped pioneer landscape ecology (e.g., *Landscape Ecology*, 1986; *Land Mosaics*, 1995), road ecology (*Road Ecology*, 2003), urban ecology (*Urban Regions*, 2008; *Urban Ecology*, 2014), and town ecology (*Towns, Ecology, and the Land*, 2019). He is a Fellow of American Association for the Advancement of Science and the Ecological Society of America, served as president or vice president of three professional societies, and received two honorary doctoral degrees plus honors/awards in six nations.

Values of Large-versus-Small Urban Greenspaces, and Their Arrangement

Using empirical data plus ecological principles, one large park (greenspace) is compared with 16 small parks of the same total area, for air cooling, biodiversity, flood reduction, and recreation. One large park is better than many small ones for air cooling and biodiversity. In contrast, many small parks are better than a single large one for flood reduction and recreation. A collection of small parks can be converted into a park system by interconnecting flows/movements, using corridors, stepping stones, and internal designs of adjacent parks. The qualitatively recorded values of large and medium-size greenspaces, within or adjacent to 27 urban areas, are much greater in adjacent greenspaces (large or medium), than the values in those within a city. Major values of within-city parks are overwhelmingly recreation, tourism, and socio-cultural value, whereas edge parks provide many additional values. In essence, an optimal arrangement maintains both one large and many small parks within a small/medium city, and in each major section of a large city. Also, a medium-to-large edge greenspace provides a range of additional values.

Q & A Led by Anthony Kane.

WEBINAR 2

2:00 pm

Equity and Social Justice

Moderated by Melissa Peneycad, Managing Director, ISI.

As we work to learn more to address persistent and systemic racism, it is becoming clear that infrastructure will be critical in ensuring an equitable distribution of benefits. Speakers in this session will share their experiences in working to overcome these challenges and will offer examples from projects that begin to make progress toward a more equitable and just future for everyone in the community.

Session A

2:00 pm

Connecting Equity & Social Justice with Meaningful Progress in Infrastructure

Connecting justice, equity, diversity, and inclusion with environmental engineering education

Prof. Maya Trotz, Professor of Civil and Environmental Engineering
University of South Florida



Maya Trotz, Ph.D. ENV SP, is a professor of Civil and Environmental Engineering at the University of South Florida (USF). Her students are currently investigating reef and marine inspired land-based solutions that include green infrastructure for stormwater management and resource recovery for municipal and onsite wastewater in Tampa, Belize and Barbados. She currently directs STRONG Coasts, a collaborative National Research Traineeship program with the University of the Virgin Islands (UVI) to foster food, energy, and water solutions with coastal communities.

She is the past President of the Association of Environmental Engineering & Science Professors (AEESP) and sits on the board of Fragments of Hope Corp, an NGO committed to coral restoration in Belize. She teaches an Envision sustainable communities course, and has introduced Envision™ credentialing in Barbados through a Water Sector Resilience Nexus for Sustainability project at the Barbados Water Authority. Prof. Trotz holds a BS in Chemical Engineering with a minor in Theater Arts from the Massachusetts Institute of Technology and MS and Ph.D. degrees in Environmental Engineering from Stanford University.

Public Policy and Racial Inequality

Michael McMeekin, Executive Director, Engineering Change Lab



Mike is one of the founders of Engineering Change Lab-USA and currently serves as chair of the Board of Directors. He took on the role as ECL-USA's first Executive Director in August 2019. McMeekin is also Senior Advisor to Lamp, Rynearson, an engineering, landscape architecture, and surveying firm headquartered in Omaha, Nebraska. He has over 44 years of engineering experience and has played a leadership role in numerous signature projects in the Omaha area. Mike is a graduate of the American Council of Engineering Companies' Senior Executives Institute, an advanced

management, leadership, and public policy training program for current and emerging leaders of engineering and architectural firms. Mike is deeply involved in the Omaha-area community, including serving as Chairman of the Board of Directors of Omaha by Design and Chairman of the Board of Directors of ACE Mentor Omaha.

Q & A Led by Melissa Peneycad.

Session B Infrastructure Projects that Lead the Change

3:00 pm

Historic Fourth Ward Park: Community-inspired stormwater solution sparks neighborhood transformation

Jennifer Ninete, Sustainability Consultant, HDR



Jennifer Ninete is a Sustainability Consultant for HDR's Office of Sustainability. She is an Envision Sustainability Professional and a Sustainable Transportation Professional (STP). She serves as HDR's primary knowledge manager for the Envision sustainable infrastructure framework, including presenting credentialing trainings, facilitating Envision feasibility studies and working on Envision projects, such as Historic Fourth Ward Park in Atlanta, Georgia, and Kansas City Streetcar in Kansas City, Missouri. She has worked on more than 20 Envision projects and is an ISI-approved trainer and Envision verifier. Her role also focuses on marketing and communication for the company's sustainability projects and internal sustainability initiatives, collaborating across all of HDR's business sectors.

Envision and sustainability initiatives for the New Samuel De Champlain Bridge Corridor Project.

Hélène Dubé, Project Manager, Environment and Envision Specialist, SNC-Lavalin

The Samuel De Champlain Bridge Corridor Project in Montréal, Québec, represents a critical and iconic addition to the local infrastructure and is a major regional transportation system with a significant thoroughway supporting an annual traffic of 50 million commuters, as well as over \$20 billion in international trade. This important infrastructure project received in 2018 the Envision Platinum award for sustainable infrastructure. Numerous sustainability initiatives put in place by the Government of Canada and Signature on the St. Lawrence (the consortium) contributed to earning the highest Envision award and the first Envision award in Québec. This short presentation of the project will put emphasis on active stakeholder engagement and innovations.



Ms. Hélène Dubé graduated in biology and holds a Master's degree in Environmental Sciences. She has more than 20 years of experience in the environmental and sustainability fields. As a SNC-Lavalin project manager, she has worked on and obtained certifications such as ENVISION, ISO 14001, ISO 9001, LEED and Green Marine. She has been actively involved in the implementation of environmental management system and quality management systems. In the course of her career, she has also managed or collaborated to numerous environmental

studies such as environmental impact assessments, biophysical characterizations and waste management plans. She has been the Envision Lead for the Samuel De Champlain Bridge Corridor Project, a P3 project of \$4.2 Billion that obtained Envision's Platinum award in June 2018. She has worked for the sustainability team of the John-F-Kennedy Terminal One Project in New York, for the Montreal-Trudeau airport redevelopment and now work for the city of Montreal to develop an Envision strategy for multiple projects. As an Envision Lead and mentor at SNC-Lavalin, she is also involved in service proposals that require Envision and has been sharing her experience at several conferences. Ms. Dubé is ENV SP, Envision verifier and Envision trainer.

The Mentoring Program at NYC DDC (New York City Department of Design and Construction)

Sofia Zuberbuhler-Yafar, RLA Program Director, Sustainable Infrastructure
With – Ankita Nalavade & Kenneth Almario, Sustainability Coordinators
New York City Department of Design and Construction

The official strategic plan of New York City - ONENYC 2050 is based on principles of growth, equity, sustainability and resiliency. NYC DDC, the city's primary capital project manager, has incorporated these principals throughout various units in the agency. This presentation will shed light on how the Sustainable Infrastructure program's use of the Envision framework is helping DDC improve on its existing Equity and Social Justice efforts.



Sofía Zuberbuhler-Yafar is Program Director for the Sustainable Infrastructure Unit with the New York City Department of Design and Construction. She manages design contracts and ensures the on-time delivery of NYC's Department Environmental Protection's various multi-million-dollar city-wide green infrastructure contracts. Currently she is integrating sustainable design measures and goals within the agency standards and contracts. Sofia is the only NYC public agency certified ENV SP Trainer and is preparing fellow colleagues to become ENV SPs.

Mrs. Zuberbuhler-Yafar is a licensed Landscape Architect with a graduate degree in Urban Design and over 19 years of varied experience including urban planning with the NYC Department of City Planning and landscape architecture design in the private realm.



Ankita graduated with a master's in Sustainable Environmental Systems from Pratt Institute, New York. She has a background in architecture and practiced as an Architect in Mumbai, India. Her portfolio is a combination of strong design background and understanding of sustainable planning systems. Currently, she is working with the agency as Sustainability Coordinator and Project Manager in the Infrastructure unit. Her role involves encouraging Sustainability and Resiliency measures in various NYC DDC's Infrastructure Capital Projects such as road reconstruction, coastal resiliency and step street project.



Kenneth Almario is a Sustainability Coordinator and Project Manager at the New York City Department of Design and Construction. He holds a Bachelor of Architecture from the New York Institute of Technology and a Master of Science in the interdisciplinary program, Sustainability in the Urban Environment, from the City College of New York. Kenneth has experience working in both the public sector, under the Build-it-Back program, and private sector in an interior design firm. He now works for DDC's Sustainable Infrastructure Unit on sustainability assessments for urban design projects such as the East Side Coastal Resiliency Project in Manhattan and the Red Hook Integrated Flood Protection System Project in Brooklyn. Kenneth is a Green Infrastructure Project Manager at DDC, overseeing the design and construction of bioswales (also known as rain gardens) and porous pavement and asphalt pilot projects throughout New York City.

Q & A Led by Melissa Peneycad.

<End of Webinar 2>

4:00 pm

Micro-networking session with Webinar 2 moderators and speakers

5:00 pm

Networking Session – World Café

In an effort to keep the virtual environment fresh and engaging, ISI and ZPH are pleased to offer networking sessions throughout the 2-day event. This special-format networking session is called "World Café". This format is a structured conversational process for knowledge sharing in which groups of people discuss a topic at several "tables" (Zoom break-out rooms). Individual participants switch tables periodically and are introduced to the previous discussion at their new table by a "table host". This structure allows for engaging conversations among small groups of people while maintaining a common theme with the overall discussion.

<End of Day 1>

WEBINAR 3

November 19, 2020 from 10:00 am

Recovering from a Global Pandemic

The approach to recovery will need to address two critical questions: how can public health be addressed through infrastructure systems; and how will infrastructure systems spur much-needed economic recovery? Public health experts and economists will be invited to address what we're seeing in the recovery phase so as to better plan for the future.

Moderated by John Williams, CEO at Impact Infrastructure, makers of Autocase software, ISI Board Chair



John has over 40-years of experience as an advisor to infrastructure and building development programs, 16-years as a principal owner of an international architecture and engineering company, and 13-years as an adjunct faculty member at Columbia University. For the past 8 years he has been CEO of Impact Infrastructure, Inc., a Software as a Service company focused on bringing credible, objective, and affordable economic assessments to sustainable infrastructure and building investments.

He developed a series of awarding winning business practices including a framework for determining the value of GREEN. He is a three term Board Chair at the Institute for Sustainable Infrastructure, is a Subject Matter Expert for Sustainability Accounting Standards Board (SASB), an Steering Committee member for RELI, and served as Co-Chair of the West Coast Infrastructure Exchange Business Standards Committee, and on the LA Metro Sustainability Council.

Session A COVID-19 and Public Health

10:00 am

Adaptive Leadership in Real Time

Michael Mucha, Chief Engineer and Director, Madison Metropolitan Sewerage District



Michael is the Chief Engineer and Director for the Madison Metropolitan Sewerage District. He has dedicated his 30-year career in local government to building public trust through sustainability. "Anything can be accomplished if you have the public working with you."

Michael has his BS in Civil Engineering from the University of Wisconsin Milwaukee, his Masters in Public Administration from the University of Washington-Seattle. He is a registered professional engineer and an Envision sustainability professional.

He teaches courses in sustainable infrastructure management and adaptive leadership at the University of Wisconsin and Edgewood College.

Health, healthcare and human flourishing

Suzanne MacCormick, Global Healthcare Business Growth Director, WSP



Suzanne is a clinical planner and global healthcare lead at WSP. She joined WSP in 2018 following 25 years running her own healthcare consultancy.

Suzanne has spent much of her career championing the delivery of clinical excellence. She uses her expertise as a clinical planner to underpin the delivery of strategic and operational solutions for healthcare and ensure robust solutions that meet the brief and exceed expectation. She has taken several organisations through capital project development from inception to delivery and has shown them how estates can be an enabler to deliver their clinical aspirations.

Most recently, she has been working with clients across the globe helping them to prepare, respond and recover from the impacts of COVID 19. She has also been advising clients on how to adapt urban environments, from offices, to malls, to international airports, to meet the challenges of pandemics.

In 2018 she co-developed WSP's future ready™ healthcare toolkit which provides a robust foundation to ensure that all estates- based developments meet the demands of today and are fit to deliver tomorrow's technology.

Q & A Led by John Williams.

Session B

11:00 am

Recovery and Infrastructure Investments

Systems thinking for the Built Environment for Better Future Outcomes

Maria Lehman, Director US Infrastructure, GHD &
ASCE Executive Committee Member



Maria Lehman, P.E., F.ASCE, ENV SP, joined GHD as the Infrastructure Market Leader – United States in May of 2020. Maria was the former Vice President for Critical Infrastructure for Parsons, COO and Acting Executive Director of the New York State Thruway Authority and Commissioner of Public Works for Erie County, NY. She has over 39 years of diverse, increasingly responsible, multi-disciplinary technical and leadership experience, both in the private and public sectors. She received her BS in Civil Engineering at the State University of New York at Buffalo, Magna Cum Laude, and is a licensed Professional Engineer in several states. She is currently the National Treasurer for the American Society of Civil Engineers (ASCE), and is a current candidate for National President-Elect of ASCE.

Maria has won numerous national, statewide and local awards including the ASCE President's Medal, UB's School of Engineering Alumna of the Year, and the New York State Society of Professional Engineers Engineering Manager of the Year. She lives in Orchard Park, NY with her husband Carl, also a Civil Engineer, and has 3 married sons as well as

grandchildren. She loves to spoil her grandchildren, travel, craft, is a gourmet cook and baker and is very public service oriented.

Industry Financial Update & Outlook

Rebecca Zofnass, Managing Partner, EFCG

Historically, the A/E/C industry has been recession resilient, but the current downturn presents a new set of unique challenges (and opportunities) for firms. During this session, we will be discussing what we've learned from past recessions around the financial and operational metrics that drive success in a downturn. We will then discuss the strategic implications for navigating through the impacts of the current global pandemic, and how to use the downturn as a springboard to accelerate market position.



Rebecca leads EFCG's Financial and Strategic Advisory and valuations work, with expertise in post-merger integration, corporate and growth strategy, organizational design, marketing, and cost management. Prior to joining EFCG, Rebecca was a Manager at Bain & Company, a global management consulting firm. Rebecca worked across Bain's Private Equity Group and General Practice work, supporting private equity clients in due diligence as well as working directly with leadership teams at Fortune 100 companies. Rebecca holds an MBA from Harvard Business School and a BA with Honors from Harvard University.

Optimizing Investments Using the Triple Bottom Line

Stephane Larocque, Chief Operating Officer, Impact Infrastructure, Inc. makers of Autocase Software

The conversation about sustainability is changing rapidly as America and the world struggles with multiple crises at once. It wasn't long ago that people were asking should I build sustainably, nowadays people are more likely to ask how to build sustainably. Similarly the question used to be how much more will sustainability cost and now it's more likely to be what is the value of the benefits from this investment. Whether it's the raging public health pandemic, the renewed struggle for true equity or the need to avoid an existential climate disaster people's minds have been sharpened to the need to build better. This session will shed light on how leaders can answer these questions using cost-benefit analysis in order to deliver us a better built environment.



Stéphane brings a background as an internationally recognized professional in the field of triple-bottom line economic analysis. Over his 20-year career, he has established himself as a thought leader in this space, co-developing the Sustainable Return on Investment (SROI) framework and leading that practice at an international architecture and engineering company. Along with his co-founders he has helped propel Autocase into being the undisputed leader in the economic analysis software space.

Q & A Led by John Williams.

<End of Webinar 3>

12:00 pm

Micro-networking session with Webinar 3 moderators and speakers



WEBINAR 4

2:00 pm

Resiliency

The conference wraps with a look into the future and forward-thinking strategies for resiliency planning will be shared. Projects that “get it right” will be showcased, and upheld as examples for continued recovery, development, and resilience. As we build back stronger, we need to be able to address the unknown challenges that face future generations. A foundation with resilient infrastructure assets will help define the path forward.

Moderated by Jim Grant, Associate Vice President, Sustainable Energy and Utilities Director, HNTB & SIAB.



Mr. Grant has over 39 years' experience and currently serves as Director for the Energy & Utilities Services Group in HNTB's Bellevue, Washington, office. He provides subject matter expertise in central utility plants, renewable energy systems, distributed resources, energy conservation and aviation fueling systems for airports. Jim is currently leading utilities master plans at SEA and SFO involving over \$1 Billion in Capital Improvement Projects. He has prepared several white papers and studies on self-generation and shifting electrical demand to save energy costs. Jim has served as a Sustainable Infrastructure Advisory Board (SIAB) member on the Zofnass Program for Sustainable Infrastructure at Harvard since 2010.

Session A

2:00 pm

Transformative Solutions for Sustainability and Health

Post-Pandemic Transit Landscape Measure to Promote Safe Mobility

Veronique “Ronnie” Hakim, Senior Vice President, National Transit & Rail Market Sector Leader, HNTB Corporation



Veronique “Ronnie” Hakim, a career transit and transportation professional who has led some of the largest transportation agencies in the country, joined HNTB as national transit and rail market sector leader and is based in HNTB's New York City office in the Empire State Building to work with clients across the country.

“Ronnie has been a recognized trailblazer for many years, leading transportation agencies to new levels of success with innovative programs and delivery of industry-leading projects that have transformed the New York metropolitan area,” said Rob Slimp, PE, HNTB chairman and CEO. “It’s a time of great change and great opportunity for our clients. Ronnie is an exceptional leader and will use her tremendous industry network, wealth of experience, talent and innovative thinking to partner with our clients and stakeholders to drive the most complex projects and programs to improve mobility throughout the United States.”

Hakim is responsible for collaborating with HNTB leadership nationwide on strategic planning and implementation, industry representation, business development, service delivery, and client collaboration and satisfaction.

Before joining HNTB, Hakim had 33 years of industry leadership experience. She most recently served as managing director of the New York State Metropolitan Transportation Authority, where she was responsible for leading more than 70,000 employees in five operating agencies, overseeing transit systems that carry 9 million riders each day. She also was responsible for promoting the 2015-2019 \$32.5 billion MTA Capital Program as well as working on the framework for the 2020-2024 \$51.5 billion Capital Program.

The increasing need for solutions in the round

David Smith, Senior Vice President, Director of Strategy, Stantec & SIAB



As SVP, Director of Strategy, David drives Stantec's corporate and global strategy and growth initiatives using knowledge of trends and best practices from across the world. He is a proven senior executive with more than 30 years of utility and infrastructure sector experience.

David has created and led industry thinking, representing Stantec as a content expert on water strategy, and was instrumental in the publication of Stantec's Water Futures and Community Futures foresight documents. His insights are strengthened by experience gained across several major operational roles, enabling key conversations with client communities. David is a passionate leader on health & safety and sustainability, ensuring this is a priority in all business practices. He is a member of the industry steering committee for the UK's Carbon Project.

David completed the University of Cambridge Programme for Sustainability Leadership, and he has a Master of Business Administration (MBA) from Henley Management College. He is also a graduate of Harvard Business School's Advanced Management Program and a Fellow of the UK's Institution of Civil Engineers. He holds Board Director positions within Stantec's Global, Europe and UK operating and JV companies.

Wastewater Surveillance for COVID: Lessons Learned from Detroit

Anna Mehrotra, Discipline Leader – Process Modeling and Industrial Treatment, Senior Wastewater Engineer, CDM Smith

Wastewater testing for SARS-CoV-2, which is increasingly being used to track COVID in the US and around the globe, represents the most recent application of the well-established field of wastewater-based epidemiology (WBE). WBE is the analysis of substances in raw wastewater to obtain information on community health. This presentation will cover the fundamentals of WBE, how it has been used in the past to monitor drug use and viral diseases, how it is being applied right now during the pandemic, and what the biggest unknowns in the field are. Details related to ongoing research on COVID wastewater surveillance in Detroit will also be presented.



Anna Mehrotra, PhD, PE: Anna is a technical leader in the firm's wastewater process engineering practice. With more than 15 years of experience, Dr. Mehrotra has performed process analysis and modeling, developed sampling and pilot study plans, and prepared designs for a wide variety of municipal and industrial wastewater treatment applications. She is a licensed PE with a MS in environmental engineering science from Stanford University and a PhD in civil/environmental engineering from UC Berkeley. Anna has worked from CDM Smith offices around the globe – from Boston to Brisbane – and is currently spearheading the firm's COVID-19 wastewater-based epidemiology research.

Digital Solutions for a Post-COVID Water Industry

Amy Corriveau, Vice President, Director of Digital Solutions, CDM Smith

Digital Solutions are critical for enabling flexibility to adapt to changing demand while ensuring continuity of water services. Advances with leading-edge technology to support remote monitoring and the remote workforce can help water utilities manage strains on infrastructure and personnel, as well as allow proactive management of water systems. These digital solutions can help future-proof the water industry as well as reinforce its role as public health steward in a post-COVID world.



Amy Corriveau, PMP, CBAP: Ms. Corriveau is a Vice President and Director of Digital Solutions with CDM Smith. She has 22 years of experience working with water, wastewater and electric utilities applying technology to help solve their operations and business problems. With a passion for leading and collaborating with teams to drive innovative and sustainable solutions, she works with clients, technologists, and engineers to extend cutting-edge technology to the utility industry. She is active in a number of industry associations including AWWA and WEF, holding leadership positions among their various Task Forces and Committees. She has a master's of Civil & Environmental Engineering from MIT, BS in Hydrology, and is both a certified Project Manager and Business Analyst.

Session B

Resiliency Planning

3:00 pm

Dual Use Infrastructure for Milan Resilience

Piero Pelizzaro, Chief Resilience Officer, City of Milan



Piero has 10 years of experience in climate change policies and urban resilience planning.

Currently he is the Milan Chief Resilience Officer and the City Lead for the H2020 Lighthouse project Sharing Cities at the Municipality of Milan. He is an advisor of the Italian Ministry of Environment Land and Sea on Urban Adaptation Policy to Climate Change.

In recent years was the Co-Founder of Climalia, specialised consulting company providing climate services in Italy, where he operates as Resilience Specialist. Piero was an Acclimatise Associate.

Piero is a member of the European Commission Mayors Adapt Practitioners Work Group and Member of FiRe 2016 Implementation Working Group at Climate Policy Initiative. He is member of the Advisory Board of the EU FP7 Ramses Project that aims to structure a cost/benefit analysis methodology for Urban Adaptation Plans. He has extensive expertise in projects financed by the European Commission, including the LIFE+ project BlueAP Bologna Local Urban Environment Adaptation Plan for a Resilient City (Senior Expert), LIFE+ RECOIL Recovered waste cooking oil for combined heat and power production (Technical Director), MED Greenpartnerships as Senior Expert and MED ZeroCO2 Small communities for big changing.

He further specialised in Urban Resilience, Environmental Economic Accounting, Energy Scenario and Climate Change Impact Models through his working experience at the Stockholm Environment Institute – Tallinn Office. In past years he collaborated with EU MP, Umberto Guidoni.

He writes for different specialised magazines and web-portals on climate change issues.

What Even is “Normal” Anymore?!

Brendan Reed, Director of Planning & Environmental Affairs, San Diego County Regional Airport Authority

With the multiple “shocks to the system” experienced during 2020, resilience planning is now even more critical to help ensure an organization’s business continuity and expedited recovery from operationally disruptive events. Brendan Reed, Director of Planning & Environmental Affairs at the San Diego International Airport (SAN), will share some examples of how climate resiliency considerations have been programmatically integrated into airport governance and decision-making processes, as well as individual infrastructure projects’ design and construction. Brendan will also note how airport leaders have addressed uncertainty as part of implementing its SAN Climate Resilience Plan.



Brendan is the Director of Planning & Environmental Affairs for the San Diego County Regional Airport Authority, which owns and operates the San Diego International Airport. As part of the Airport's Development Division leadership team, he is responsible for guiding the organization's policies concerning airport master planning and land use compatibility planning, noise mitigation, environmental compliance, and corporate sustainability. Brendan spearheads numerous enterprise-wide initiatives including the integration of sustainability principles into capital projects and business strategies, ongoing certification through the Airport Carbon Accreditation program, and coordination with federal and state regulatory agencies. He also represents the Airport Authority on numerous regional and industry committees, including the San Diego Association of Governments (Regional Energy Working Group), California Airports Council (Environmental Affairs Committee), and Airports Council International - North America (Environmental Affairs Committee - Chair). Mr. Reed received a Master of Science in Ecology from San Diego State University and a Bachelor of Science in Biology from the University of Richmond.

Resilient Growth in a Rapidly Changing World

Brian Swett, Principal and Group Leader, Director of Cities and Sustainable Real Estate, Arup & SIAB



Brian Swett is a Principal and Group Leader of Arup's Boston office and serves as Director of Cities and Sustainable Real Estate for Arup in the Americas. In this role, Brian leads the work of Arup in the Americas to integrate its advisory services with its key strengths in design, engineering and planning, delivered in the city context. He is a nationally recognized leader in resilience, climate change and sustainability strategy with over a decade of leadership experience in municipal government, real estate development, federal government, and non-profit sectors. Brian brings a breadth of experience on the government and private sides of sustainable urban development and management that allows him to deliver integrated and actionable strategies and solutions for major clients.

Brian is Chair of Historic Boston, Inc's Council of Advisors and Co-Chair of the Greater Boston Chamber of Commerce's Climate & Energy Leadership Council. He is also a long-time and active member of the Urban Land Institute, currently serving on the ULI Center for Sustainability and Economic Performance's Advisory Board and as a member of the Sustainable Development Product Council.

Q & A Led by Jim Grant.

<End of Webinar 4>

4:00 pm

Micro-networking session with Webinar 4 moderators and speakers

5:00 pm

Networking Session – Table Topics

<End of Conference>

Envision Qualified Companies

- 300 Engineering Group, P.A.
- 3COTECH, Inc.
- 3T-Design & Development LLC
- 5engineering
- Advanced Drainage Systems, Inc.
- Advanced Infrastructure Technologies
- AECOM
- Aero Aggregates of North America LLC
- AKRF Inc.
- Alisto Engineering Group
- Anderson Bogert
- ARC Alternative and Renewable Construction LLC
- Arcadis
- Arup
- Autocase by Impact Infrastructure
- B. Thayer Associates
- BA Blacktop Ltd
- Baxter & Woodman
- Beals and Thomas, Inc.
- Bechtel Infrastructure
- BETA Group, Inc.
- Black & Veatch Corporation
- Blue Ocean Civil Consulting
- Brightworks Sustainability
- Brooks + Scarpa Architects, Inc.
- Brown and Caldwell
- Burns & McDonnell
- C&S Engineers
- Calibrate Collaborative Inc
- Carollo Engineers
- CDM Smith
- CES Consultants, Inc.
- CHA Consulting
- Chastain & Associates LLC
- Chastain-Skillman, Inc.
- Chen Moore and Associates
- CIMA s.e.n.c
- CivilTech Engineering, Inc.
- Clark Dietz, Inc.
- Clark Nexsen, Inc.
- Costello, Inc.
- COWI North America
- CPH, Inc
- Crawford, Murphy & Tilly, Inc.
- CWE
- DAC Engineering
- Dar Al-Handasah (Shair and Partners)
- Design Management Services, Inc.
- Dewberry
- Diaz Yourman & Associates
- Donohue & Associates, Inc.
- Ductile Iron Pipe Research Association
- EA Engineering, Science, and Technology, Inc., PBC
- Ecology and Environment, Inc.
- Economides Consulting
- Ecovert Sustainability Consultants
- EHRA Engineering
- Emmons & Olivier Resources
- Enso Infrastructure, LLC
- Erickson Consulting Engineers, Inc.
- EXP Global
- Expanded Shale, Clay, and Slate Institute
- Flatiron
- Freese and Nichols, Inc.
- Fukunaga & Associates
- Fuscoe Engineering, Inc.
- Gannett Fleming, Inc.
- Garver
- Gedeon GRC Consulting
- GeoEngineers
- GHD Inc.
- Golder Associates S.r.l
- Granite Construction Inc.
- Greeley and Hansen
- Greenman-Pedersen, Inc
- Gresham Smith
- Haley & Aldrich, Inc.
- Hanson Professional Services Inc.
- Harper Corporation
- Harris & Associates
- Haskell
- Hatch
- Hazen and Sawyer
- HDR Inc.
- HNTB Corporation
- HR Green, Inc.
- Huitt-Zollars, Inc.
- ICMQ S.p.A.

- Impact Infrastructure, Inc
- Jacobs
- Jones Edmunds & Associates, Inc
- Kabbes Engineering, Inc
- KCI Technologies, Inc
- Keish Environmental, PC
- Kennedy/Jenks Consultants
- KERAMIDA, Inc.
- Kiewit Corporation
- Kim Lundgren Associates, Inc.
- Kleinfelder
- KMEA
- KS Engineers, P.C.
- Lamp Rynearson
- Land Design
- Latin American & Caribbean Council on Renewable Energy
- Louis Berger
- Lumsden Associates, P.C.
- Luuceo Consulting Inc.
- McElhanney
- McGowan Consulting
- McKim & Creed, Inc.
- McWane Ductile
- Merrick & Co
- Michael Baker International
- Moffatt & Nichol
- Moore & Bruggink
- Mott MacDonald
- MS Consultants
- MSA Professional Services
- MSI Marine Solutions
- Naik Consulting Group
- Nitsch Engineering
- Nova Consulting
- NovelEsolutions, Inc.
- NV5, Inc
- O'Brien & Gere
- Otak, Inc.
- Parametrix
- Pare Corporation
- Parsons
- Pennoni Associates
- Pinyon Environmental, Inc.
- PMCS Group, Inc.
- Powell CWM, Inc.
- Power Engineers Inc.
- Professional Land Services LLC
- Psomas
- Quad Knopf, Inc.
- R. G. Miller Engineers, Inc.
- R. M. Towill Corporation
- R2T Inc. (River To Tap, Inc.)
- Renaissance Infrastructure Consulting
- RPS Group
- SANPEC Inc
- Schnabel Engineering
- Shockey Consulting Services, LLC
- Short Elliott Hendrickson Inc.
- Sigma Construction Group
- Skanska USA
- Smith Seckman Reid
- SPEC Services, Inc.
- SSFM International, Inc.
- Stanley Consultants Inc
- Stantec Consulting, Ltd.
- Strand Associates, Inc.
- STV Inc.
- Sundt Construction, Inc.
- SunPeak LLC
- Taliaferro and Browne
- Taylor Future Solutions
- TERRA Engineering, Ltd.
- Terracon Consultants, Inc.
- Tetra Tech, Inc.
- The Berkley Group
- Thornton Tomasetti
- TranSystems Corporation
- TREKK Design Group, LLC
- Ulliman Schutte Construction
- Verdunity, Inc.
- VHB
- Volkert, Inc.
- Wade Trim
- Waggoner Engineering
- Walter P. Moore and Associates, Inc.
- West Yost Associates
- Westwood Professional Services
- Whitman, Requardt and Associates, LLP
- Wood
- Woodard & Curran
- Woolpert Inc.
- WSP
- YU & Associates, Inc.

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