Infrastructure is relied on for all basic human needs and services. As the pandemic laid bare in dramatic fashion, the infrastructure of yesterday is no longer sufficient: communities are expecting more.

Higher quality infrastructure and expanded services are needed to support the new way we live, work, and play. Infrastructure is increasingly viewed as the key to community success and economic recovery by governments across the political spectrum. How can we deliver on infrastructure's promise?

Our two-day virtual event opens with a focus on the challenges and opportunities that exist in the current operating environment, exploring how infrastructure systems need to change to deliver more.

On Day 2, we shift gears to focus on actionable strategies to use right now! New infrastructure funding offers a limited window of opportunity to build the infrastructure needed to support thriving communities in the 21st century and having the right game plan will be essential.

Participants in this conference will come away with a better understanding of the critical issues facing the infrastructure industry today and will find ready-to-use tools and insights to deliver more value in their projects and infrastructure assets.



ENVISION<sup>™</sup>

# 2022 ISI VIRTUAL CONFERENCE

**EXPECTING MORE** 

# DAY 1 Wednesday. November 16th DAY 2 Thursday, November 17th **BIOGRAPHIES SPONSORS**



# DAY 1

WEDNESDAY, NOVEMBER 16, 2022 ALL TIMES LISTED ARE EASTERN TIME

#### AT A GLANCE

### **Keynote Interview**

Expecting More from Infrastructure Investments

10:00-11:00 am ET

**Jeff Gitterman** Co-host of "The Impact" and "The Great Repricing" on Fintech.tv

**Anthony Kane** President and CEO, Institute for Sustainable Infrastructure



Session 1 Navigating a World of Climate Extremes 11:30 am-12:45 pm ET

<u>Session 2</u> The Complete Carbon Story

1:00-2:15 pm ET

<u>Projects Spotlight</u> Exploring Envision Project Delivery for Enhanced Sustainability Outcomes

2:30-3:30 pm ET

Session 3 Tackling 21st-Century Infrastructure Deserts 4:00–5:15 pm ET

Expo Posters and Networking Session

5:15-6:30 pm ET



# **KEYNOTE INTERVIEW** *Expecting More from Infrastructure Investments*

### 10:00-11:00 am ET

Following opening remarks by ISI Board Chair Michael Mucha, ISI President & CEO Anthony Kane is interviewed by Jeff Gitterman of Fintech.tv. ISI advances sustainable infrastructure using Envision — through education, training, and third-party project verification. ISI's 6,500+ Envision Sustainability Professionals (ENV SPs) and the hundreds of organizations they serve are on the front line of delivering the systems that we all need for a prosperous and healthy future.

Recognizing that humans need water for life; shelter for living, learning, healing, and survival; sanitary services for good health; energy for commerce; mobility for economic growth; and communications networks for trade; it is clear there is a major intersection between the world of ESG/ Sustainability Investing and those that plan for, implement, and operate the infrastructure that communities depend on. But beyond our needs, sustainability is about assuring that the needs of future generations are also anticipated and not compromised by our actions today. The crux of this major intersection is the point at which infrastructure need and capital comes together to do extraordinary work that reaches across generations.



**Anthony Kane** President and CEO, Institute for Sustainable Infrastructure

#### View More





**Jeff Gitterman** Co-Host of *TheImpact* and the *Great Repricing* on Fintech.tv

View More

Michael Mucha Chief Engineer And Director, Madison Metropolitan Sewage District and ISI Chair of the Board (Opening remarks)



# SESSION 1: Navigating a World of Climate Extremes

### 11:30 am-12:45 pm ET

There was a global pandemic to grapple with, but the world didn't stop turning — fires are burning stronger and longer in the arid west, snow and freezing temperatures halted livability in otherwise warm climates, and human-induced climate threats are on the rise. Looking back on three years of unpredictability, what can we expect for the years ahead? The purpose of this session is to provide an overview of the dramatic changes in the infrastructure industry's operating environment and examine emerging responses to these changes. We will also see how failure to respond adequately now, will tie the hands of future generations.



Matthew T. Potter Senior Project Architect, HNTB Corporation

View More



Serge Dupuis Assistant Professor of Civil Engineering, Université de Moncton

View More



Kase Poling Civil Engineering PhD Candidate, Virginia Tech



# SESSION 2: The Complete Carbon Story

## 1:00-2:15 pm ET

What is net embodied carbon and what does it tell us about the holistic sustainability of our infrastructure assets? New research points to the value of decarbonizing projects and creating climate-ready infrastructure systems. This session will define net embodied carbon, present research linking Envision to practical approaches to reducing net embodied carbon and illustrate application through a project example.



Moderator Michelle Christopherson Sustainability Advisor, Climate Change, Sustainability & Resilience,

#### View More

WSP



**Ryan Zizzo** Founder & CEO, Mantle Developments

View More



**Gilles Assier** Director, Container Terminal Construction, Vancouver Fraser Port Authority

View More



**Spiro N. Pollalis** Professor of Design Technology and Management, Emeritus, Harvard Design School; Research Fellow at the Zofnass Program, ISI



# PROJECTS SPOTLIGHT:

## Exploring Envision Project Delivery for Enhanced Sustainability Outcomes

## 2:30-3:30 pm ET

Real-world project examples are the most sought-after resource Envision users rely on for inspiration and lessons learned. In this hour-long session, we'll explore the details of selected Envision projects and use cases. Project team members will describe their strategies for approaching Envision implementation given the unique implications of the project's delivery method. Specific credits will be highlighted to underscore the project team's achievements and efforts toward improving the project's overall sustainability outcomes. Lessons learned will be detailed, and participants will glean practical take-aways with everyday applications. The projects to be discussed include: the Saco River Water Treatment Plant, the Gordie Howe International Bridge, and the Berryessa Transit Center.



**Moderator Kristi Wamstad** Verification Director, ISI

View More



**Grant Hilbers** Vice-President, Engineering, Windsor-Detroit Bridge Authority



Ann Calnan Manager, Environmental Programs, Santa Clara Valley Transportation Authority

View More

#### This session will also feature:

Michael Cummons, Director of Service Delivery, Maine Water; and Rachael Keish, Chief Executive Officer, Keish Environmental.



# PROJECTS SPOTLIGHT:

Exploring Envision Project Delivery for Enhanced Sustainability Outcomes

#### 2:30-3:30 pm ET

# The Gordie Howe International Bridge Project

Awarded Envision Platinum, the Gordie Howe International Bridge project is one of North America's largest bi-national infrastructure projects which will bring muchneeded improvements to the movement of goods and people across the Windsor-Detroit trade corridor. Valued at \$5.7 billion, the project includes delivery of a cable-stayed bridge, two state-of-the-art ports of entry and a connection into the Michigan Interstate system. Key project features and the collaborative approach taken to achieving Envision verification under a complex publicprivate partnership (P3) delivery model will be discussed.

https://sustainableinfrastructure.org/projectawards/gordie-howe-international-bridge/

#### Maine Water's New Saco River Water Drinking Water Resource

The center treats and filters water from the Saco River in Biddeford, Maine so that 40,000 people in the communities of Biddeford, Saco, Old Orchard Beach and Pine Point have a reliable supply of high-quality drinking water that meets all state and federal drinking water standards. The center has the capacity to produce up to 12 million gallons of treated and filtered drinking water per day, which is enough to support the economic development goals of the community and provide a robust flow of water to fire hydrants to support fire protection. The project earned an Envision Silver Award for sustainable infrastructure.

https://sustainableinfrastructure.org/projectawards/saco-river-water-treatment-plant/

#### Santa Clara Valley Transportation Authority's Berryessa Transit Center

The Berryessa Transit Center is a multimodal regional transportation hub located in northeastern San Jose, California. It is situated adjacent to the San Jose Flea Market and Upper Penitencia Creek. The recipient of an Envision Platinum Award from ISI, the project enhances community quality of life in the city by addressing the transportation needs in the congested San Francisco Bay Area, providing much needed connectivity between local transportation systems, and increasing access to service for all - including low-income, youth, elderly, and people with disabilities. The project was completed as part of the first phase of VTA's BART Silicon Valley (BSV) Program which aims to bring regional rail service to nearly 2 million county residents and "ring the Bay" with frequent and reliable rail service.

https://sustainableinfrastructure.org/projectawards/vtas-berryessa-transit-center/



# SESSION 3: Tackling 21st-Century Infrastructure Deserts

#### 4:00-5:15 pm ET

As the pandemic showed, a lack of data infrastructure can exacerbate unequal outcomes, especially as workplaces and schools lean heavily on remotework and remote-learning options. A parallel can be drawn here relevant to long-understood "necessary" services such as reliable electricity, clean water and sanitation services.

Just as there are communities without services to meet the new basic needs of connectivity, many communities are living without services many take for granted. These infrastructure deserts further feed a negative reinforcement cycle where the wealth gap widens.

Where are our infrastructure deserts, and what role will sustainable infrastructure play for near- and long-term improvements in quality of life for these communities?

Presenters in this session will show how data and new tools may be used to identify infrastructure deserts and use this information to inform project planning. Better understanding of our infrastructure deserts can help encourage project designs that favor multiple benefits, including for communities in need that might be adjacent to the project corridor.



Moderator Richard Fernandez Principal Engineer, Aquario Engineering

View More



Anica Landreneau Global Director of Sustainable Design, HOK

View More



**Simon Fowell** Principal Economist, Autocase



# **EXPO:** *Posters and Networking Sessions*

# November 16th from 5:15–6:30 pm ET November 17th from 1:45–3:00 pm ET

New this year, ISI's Academic Committee released a call for abstracts for poster sessions to help answer the critical questions facing the infrastructure industry today. There will be dedicated time to view posters and converse with poster presenters on both days of the conference.

#### Energy Savings via Waste Water Treatment Plant (WWTP) Optimization: Ingersoll, Ontario WWTP

#### **R.V. Anderson Associates Limited**

Harpreet Rai, PhD, P.Eng, BCEE David Simpson Don Ford Jason Kreitzer Michelle Shearing

Ingersoll WWTP has two liquid trains including the 1974 plant with rated capacity of 4,500 m3/d and the 2018 plant with rated capacity of 8,445 m3/d. The current average flow to plant is approximately 7,500 m3/d, which is 58% of the plant's rated capacity of 12,945 m3/d. With the plant operating significantly under capacity, the County retained RVA to evaluate operation optimization options to reduce aeration energy.

#### Continue reading

# Reframing our Thinking Using the Beginners' Mind

**Central San** Justin Waples

Strategic implementation success demands that the process itself be actively managed. Competency in strategy implementation is rare. Implementation of new strategic initiatives within organizations usually fail; and people that are successful in this field are in strong demand. To ensure we rise to the challenges that confront our industry, this skill deficit must be challenged. We need to ensure the success rate of strategy implementation is high as the consequence of implementation failure are more significant than ever before.

Continue reading

#### Expecting More from Disaster Recovery: A Case Study of the 2016 Flood Events in West Virginia

#### Virginia Tech

Kase Poling

Communities have never been in greater need of resilient infrastructure, given both the historical and projected increases in the intensity and frequency of storm events. The recent flooding in Eastern Kentucky and devastation caused by Hurricane Ian across Florida and the Carolinas are but the latest in a long line of examples demonstrating this fact. These severe storm events cause devastation, but they also create the opportunity to construct new, more resilient communities. To better understand how to build more resilient communities, and the current barriers to this process, the post-disaster long-term recovery following the 2016 West Virginia floods was used as the focusing event.

Continue reading



# **EXPO:**

Posters and Networking Sessions

#### Sustainable Rehabilitation of Springbank Reservoirs in London, Ontario

#### R.V. Anderson Associates Limited

Mark Bruder Michael Holstenson Madison Kooting Emily Soscia Reanna Lynn Paul Mikoda Patricia Lupton

Springbank Reservoirs 1 and 3 are located on Reservoir Hill on Commissioners Road in the City of London (the City), Ontario. Built in the late 1960's, the reservoirs provide essential storage capacity for the City. The reservoirs are buried above grade and approximately 100 m long by 100 m wide by 7 m deep. Over the past 30 years, the City has completed various structural rehabilitation and repairs of the reservoirs. In 2019, the City retained R.V. Anderson Associates Limited (RVA) to complete design of the roof membrane replacement and to assess the condition of the reservoirs.

**Continue reading** 

#### Coastal Garden Community

California Polytechnic State University-San Luis Obispo Naoki Weldon Jennifer Wu Gabe Denson Karina Twergo Johnathan Garcia Vy Vu May Thiri Kyaw

The Coastal Garden Community was designed to address the growing homelessness crisis by using Envision values to enhance the environmental, social, and economic benefits of our tiny home community. Our community of 10 – 400 square feet homes aims to give families without housing a place to stay and the ability to get back on their feet through our planned amenities. The 10 tiny house units will be nested behind the community center to minimize traffic impacts and reduce noise pollution. Each home faces another, creating a greater sense of connection between all residents of Coastal Garden Community, and appreciation for the surrounding natural environment.

Continue reading

## November 16th from 5:15–6:30 pm ET November 17th from 1:45–3:00 pm ET

Resilience Water supply, sanitation service provision and hygiene in Awash Basin, Ethiopia: Sustainable Growth and multi-performing infrastructural arrangements for climate change mitigation

Columbia University Graduate School of Architecture, Planning and Preservation (Professor Julia Watson) Eleni Stefania Kalapoda

Water supply, sanitation provision, and hygiene in Addis Ababa, Ethiopia are grossly deficient. The combination of emergent water scarcity due to climate change and the chronic lack of adequate sanitation infrastructure threatens the resiliency of the low-income households and the informal settlements of the Addis Ababa's periphery. Struggling between the perception of the grassroots who identify the access to safe water and urban sanitation as a right, and the government's development agenda that sees Addis Ababa as the center for the country's economic expansion, the city's infrastructure is at high risk when assessed for resilient urban sanitation and water supply provision to its inhabitants.

**Continue Reading** 



# **DAY 2**

THURSDAY, NOVEMBER 17, 2022 ALL TIMES LISTED ARE EASTERN TIME

#### AT A GLANCE

#### Keynote

Climate Science and Envision at NASA **10:00–11:00 am ET** 

Moderator: Melissa Peneycad Managing Director, ISI

**Kelly Busquet** Sustainability Program Manager, NASA

**Dr. Allegra LeGrande** Climate Researcher, NASA



#### Session 4

Leveraging Shifting Administrative Priorities

11:30 am-1:45 pm ET

Panel 1: Policy and Administrative Priorities Panel 2: Equitable Financing and Funding

#### <u>Expo</u>

Posters and Networking Session

1:45-3:00 pm ET

<u>Session 5</u> Lessons from the Airport Sector

3:00-4:15 pm ET

Session 6 Moving Beyond Compliance

4:30-6:00 pm ET

Closing remarks from: Anthony Kane President & CEO of ISI



# **KEYNOTE:** *Climate Science and Envision at NASA*

## 10:00-11:00 am ET

What is NASA's role in helping infrastructure professionals deal with climate change? This keynote presentation will look at how a shifting climate baseline, as shown through simulations, could impact future weather patterns. In the second part of the keynote, adoption of Envision in support of sustainability goals at NASA Goddard Space Flight Center will be explored. The presentation will also showcase use of the framework on the Wallops Flight Facility Causeway Bridge Replacement project.



Moderator Melissa Peneycad Managing Director, Institute for Sustainable Infrastructure

View More



**Allegra LeGrande** Physical Research Scientist, NASA Goddard Institute for Space Studies

#### View More



Kelly Busquets Sustainability Program Manager, NASA Goddard Space Flight Center



# SESSION 4: Leveraging Shifting Administrative Priorities

## 11:30 am-12:45 pm ET

A pair of panels examine new administrative priorities and policies for pandemic recovery, and how the infrastructure community can make the most of new financing and funding opportunities to deliver on that work.

In the U.S., Canada, and abroad, governments have enacted measures that recognize the significance of infrastructure systems as a crucial pillar of community and economic success. But what's different about this new mindset? Panel 1 will introduce policies impacting the infrastructure sector and recommend approaches for revealing the full value of projects.

Extending ideas for realizing the full value of infrastructure assets, Panel 2 discusses how to leverage benefit-to-cost ratios effectively to go further with environmental, social, and governance (ESG) benefits. Examples will introduce the concept of social benefit credits and illustrate how incorporating higher-quality service offerings in projects can assist in seeking fuller financing options.

#### **Panel 1: Policy and Administrative Priorities**



The Honourable Rosa Galvez Senator, Senate of Canada

View More



**Emily Feenstra** Managing Director, Government Relations, ASCE

View More

#### Panel 2: Equitable Financing and Funding



Tate Wimberley Managing Director, Madison Street Capital LLC

View More

#### This panel will also include:

<u>Mike Brown</u>, Senior Advisor, Climate Bonds Initiative, and Bob Beinstein, ESG Market Leader, Americas, AECOM (Moderator).





# November 16th from 5:15–6:30 pm ET November 17th from 1:45–3:00 pm ET

New this year, ISI's Academic Committee released a call for abstracts for poster sessions to help answer the critical questions facing the infrastructure industry today. There will be dedicated time to view posters and converse with poster presenters on both days of the conference.

Click here to view details: Posters and Networking Sessions



# **SESSION 5:** *Lessons from the Airport Sector*

## 3:00-4:15 pm ET

Viewed as micro-communities in and of themselves, airports offer many transferable lessons learned for building and operating more sustainability. Industry experts will share results from the search for new value in airport infrastructure and offer examples of optimal design solutions that do more for the environment and communities — building the "right shade of green."



Moderator Carly Shannon Founder & Principal, Linx Strategies LLC

#### View More



Moderator Kari Hewitt Hewitt Sustainability Strategies LLC

#### View More



Melissa Targett Sustainable Design Program Manager, Port Authority of New York and New Jersey

View More



**Jessica Noon** Sustainability Manager, City of Philadelphia Division of Aviation



**Rikki Scantlan** Environmental Specialist, RS&H



# SESSION 6: Moving Beyond Compliance

## 4:30-6:00 pm ET

With the rare and unexpected becoming more commonplace, infrastructure owners are under pressure to look beyond regulatory compliance and provide more than basic services. They need actionable strategies to increase the service capacity, resilience, and robustness of their assets to support community survival under new and chronic stressors. Adaptable pathway planning will be introduced as a playbook for infrastructure owners to be more responsive and support quicker transitions to align with changing community needs. This culminating conference session will draw on thematic discussions from the two-day event to show how we can reposition our infrastructure to achieve more and become more agile.

With closing remarks from Anthony Kane, President & CEO, ISI



**Moderator** John Williams Chairman and CEO, Impact Infrastructure, Inc.



**Jennifer Ninete** Sustainability Coordinator, HDR

View More



Valentina Ferrer Rivero Transmission Design EIT, HDR

View More



Mathew Mampara Vice President, Director of Innovation, Resilience Solutions Group, Dewberry

#### View More

This session will also feature:

Savina Carluccio Executive Director, International Coalition for Sustainable Infrastructure (ICSI)



**EXPECTING MORE** 

# BIOGRAPHIES





Anthony Kane President and CEO, Institute for Sustainable Infrastructure

www.sustainableinfrastructure.org

LinkedIn: Anthony Kane



As the president & CEO of ISI, Anthony oversees the organization's overall operations and leads the development of the Envision framework for sustainable infrastructure. 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's in architecture, summa cum laude, from Virginia Tech and a master's degree 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.



Matthew T. Potter Senior Project Architect, HNTB Corporation

#### www.hntb.com

LinkedIn: Matthew Potter





Matthew T. Potter is a registered Architect and sustainability professional with over 13 years of professional experience. He has extensive experience in architectural design, planning, and sustainability framework systems, such as Envision, LEED, and WEDG.

Matthew has lectured and participated in panels on the Envision Framework Rating System at the AIA Center for Architecture in New York and the Zofnass Program at Harvard University. He has worked on transportation, public, and master planning projects, many of which have been published internationally. Matthew is the Envision SP Lead on the NYCDDC East Side Coastal Resiliency Project.





Jeff Gitterman

Co-Host of TheImpact and the Great Repricing shows on Fintech.tv

Partner, Gitterman Wealth Management LLC

www.GittermanAsset.com

LinkedIn: Jeff Gitterman



Jeff Gitterman is a widely recognized leader in the climate change, ESG, and sustainable investing fields, and the creator of SMART (Sustainability Metrics Applied to Risk Tolerance)® Investing Solutions, a suite of global climate-aware allocation strategies available to financial advisory firms and individual investors.

With over 30 years of experience as a financial advisor, Jeff began realigning Gitterman Wealth Management, LLC towards sustainable investing in 2015. In 2020, the firm launched the Gitterman Asset Management brand to house its rapidly expanding ESG strategies, thought leadership, and practice management offerings for the financial advisory and institutional markets. Over the past several years, the firm has hosted many ESG and climatefocused events for financial advisors, including conferences at the United Nations Headquarters, the ESG Playbook series of

webinars in partnership with RIA Channel, and most recently, The Great Repricing: Financial Advice in the Age of Climate Change.

Jeff is also a co-host of TheImpact and The Great Repricing shows, which film at the New York Stock Exchange and air on Fintech.tv. Noted as an "ESG expert" by Financial Advisor magazine, he has also been featured in the past in Barron's, Forbes, The Wall Street Journal, and CNN, among many others. He also speaks frequently about ESG and climate-focused investing at conferences throughout the U.S., and in 2018 was named RIA "Thought Leader of the Year" by WealthManagement.com.

Jeff deeply believes that the migration of investor capital towards ESG, Sustainable, and Impact investing is one of, if not the most effective way to help realize the United Nations-supported Sustainable Development Goals (SDGs), and he is committed to helping both investors and other financial professionals navigate this rapidly growing landscape.

He is also the author of Beyond Success: Redefining the Meaning of Prosperity, and an Associate Producer of the feature documentary film Planetary.

Jeff also serves on the Board of Directors for the Child Health Institute of New Jersey at Rutgers Robert Wood Johnson Medical School and dedicates much of his free time to raising funds and awareness for the autism community.





**Ryan Zizzo** Founder & CEO, Mantle Developments

www.mantledev.com

LinkedIn: Ryan Zizzo



Ryan Zizzo is Founder & CEO at Mantle Developments, a consultancy focused on climatesmart infrastructure and buildings, based in Toronto. Mantle helps projects go beyond energy efficiency, incorporating resilience, embodied carbon emissions, and life cycle approaches to make projects future proof and net-zero carbon ready.

Ryan is a recognized leader in helping large organizations and governments transition to a lowcarbon future. He has led several major projects on embodied carbon and life cycle assessment including with the Government of Canada, several provincial Ministries, and the City of Toronto working to reduce their carbon impacts. Ryan has also worked with leading organizations like Evergreen and the YMCA of Greater Toronto, and large real estate developers, property managers, and investment trusts to help quantify and minimize the carbon impacts associated with major construction projects.



**Gilles Assier** Director, Container Terminal Construction, Vancouver Fraser Port Authority

www.portmetrovancouver.com

LinkedIn: Gilles Assier



Gilles Assier holds an Electrical Engineering Degree and a Master's in Management from France. After many years in the High-Tech sector, Gilles joined the Vancouver Fraser Port Authority 15 years ago, delivering programs and projects aimed at increasing supply chain fluidity and throughput capacity while addressing the impact of goods movement on the community and protecting the environment.

Gilles also led the port's Habitat Enhancement Program which focuses on restoring and protecting marine habitat around the region to enable future port growth. As part of his role as director, Container Terminal Construction, Gilles is currently the project director in charge of the \$600 million dollar Centerm container terminal expansion and adjacent road and rail access reconfiguration on the south shore of Burrard Inlet.





**Prof. Spiro N. Pollalis** Professor of Design Technology and Management, Emeritus, Harvard Design School; Research Fellow at the Zofnass Program, Institute for Sustainable Infrastructure

www.gsd.harvard.edu/ person/spiro-pollalis

https://research.gsd. harvard.edu/zofnass

www.pollalis.com

#### LinkedIn: Spiro Pollalis

Spiro N. Pollalis is Professor of Design, Technology and Management, Emeritus, at the Harvard Design School. In 2007-2020, he was the Director of the Zofnass Program for Sustainable Infrastructure at Harvard and, after the Program moved to ISI, he is Research Fellow at the Institute for Sustainable Infrastructure.

Prof. Pollalis is an engineer and planner specializing in sustainability and climate change. He consults governments and international organizations on sustainability and sustainable cities. He has developed the National Urban Assessment for Pakistan for the Asian Development Bank, conducted research on the lifecycle sustainability of projects for the National Research Council of Canada, and on Mapping Aligned Indicators for Sustainable Infrastructure (AISI) against Established ESG Systems, for the World Bank. He is the chief planner for the new sustainable DHA City Karachi on 42,000 acres, under construction. He served as the Chairman and CEO of the public company for the redevelopment of Hellinikon (www.pollalis-hellinikon.com).

Professor Pollalis received his Master's and PhD from MIT. His has an MBA in high technology and an honorary Master's in Architecture from Harvard.



**Kristi Wamstad** Verification Director, ISI

#### www.sustainableinfrastructure.org

LinkedIn: Kristi Wamstad



Kristi Wamstad is the Envision Verification director at ISI. In this role, Kristi maintains the verification process, ensures consistency in project reviews, and provides technical assistance.

Prior to ISI, Kristi was the technical director for USGBC's LEED for Cities and Communities and STAR

Communities, a comprehensive sustainability rating system for jurisdictions. Additional experience includes being sustainability coordinator for the city of Omaha and sustainable solutions program coordinator at HDR. In 2005, Kristi worked with the Oregon Bridge Delivery Partners to develop the Context Sensitive and Sustainable Solutions (CS3) program, a first-of-its-kind framework for applying sustainability to transportation infrastructure.

Kristi holds a master's degree in community and regional planning from the University of Nebraska-Lincoln and bachelors' degrees in biology and environmental science from the University of Colorado-Boulder. She lives in Lincoln, Nebraska, where she enjoys biking, gardening, and spending time with her kids, cats, guinea pigs, and chickens.





Anica Landreneau Global Director of Sustainable Design, HOK

#### www.hok.com

#### Twitter: HOKNetwork

LinkedIn: HOK

YouTube: hoknetwork



Anica leads HOK's global sustainable design practice, serving on the firm's board of directors and design board.

Based in Washington, DC, Anica manages the development and implementation of sustainability strategies on local and worldwide projects, working with clients on regional, campus, portfolio and building scale projects, including existing building stock.

Anica serves locally on the Green and Energy Codes TAG, is on the Mayor's Green Building Advisory Council and co-chairs the Building Energy Performance Standard Task Force. She also serves on the national USGBC LEED Advisory Committee, IECC 2024 Code Development Committee and Consultative Council for the National Institute for Building Sciences. She is a Senior Fellow of the New Buildings Institute and a member of the AIA's 2021 Board Government Advocacy Committee.

Anica previously served on the AIA Blue Ribbon Panel on Codes, coauthoring Disruption, Evolution, and Change: AIA's Vision for the Future of Design and Construction.



**Simon Fowell** Principal Economist, Autocase

www.autocase.com



Simon Fowell is Principal Economist at Autocase. He has nearly a decade to economic, social, and environmental evaluation and planning of major real estate, infrastructure and public projects/ programs. Previously a researcher at the UK's leading environmental economic practice, he has worked on economic analysis and project/policy evaluation across North America.





Allegra LeGrande Physical Research Scientist, NASA Goddard Institute for Space Studies

www.giss.nasa.gov



Dr. LeGrande studies climate change using the sophisticated earth system model at the NASA Goddard Institute for Space Studies in New York. Her focus is in identifying mechanisms that force changes in climates from the distant past to modern satellite studies through future predictions.

Dr. LeGrande studies climate change using the sophisticated earth system model at the NASA Goddard Institute for Space Studies in New York. Her focus is in identifying mechanisms that force changes in climates from the past to modern satellite studies through future predictions. She has focused on abrupt and extreme climate changes during these times including atmospheric river induced extreme precipitation events and stratovolcanic impacts on global climate.



Kelly Busquets Sustainability Program Manager, NASA Goddard Space Flight Center

#### LinkedIn: Kelly Busquets



Kelly grew up in southern California and graduated with a B.S. in Petroleum Engineering and an M.S. in Environmental Engineering from Stanford University. Kelly has worked as an environmental engineer in California, Oregon, Johnston Island, Hawaii, Alaska, Japan, Korea, and Kwajalein Atoll. Kelly was the Engineering Branch Chief for the U.S. Army Space and Missile Defense Command on Kwajalein Atoll before arriving to work for the Environmental Management Division at NASA Wallops Flight Facility, VA in 2015. In 2017, Kelly was appointed the Goddard Space Flight Center Sustainability Program Manager as the Lead Environmental Engineer, where she strives to protect the environment and ensure Goddard can execute its mission without compromising the planet's natural resources so that future generations can meet their needs. Kelly also supports NASA's Diversity Equity Inclusion & Accessibility (DEIA) as the Women's Employee Resource Group & Network representative, Management Operations **Directorate D&I Committee** Lead, she is a D&I facilitator, and secretary for the Asian American, Native Hawaiian, Pacific Islander Employee Resource Group.





Melissa Peneycad Managing Director, Institute for Sustainable Infrastructure

#### www.sustainableinfrastructure.org

LinkedIn: Melissa Peneycad



Melissa Peneycad is ISI's managing director. Melissa oversees ISI's Envision Verification Program and the organization's communications and research functions. She leads Envision efforts in Canada, is the ISI representative on the Envision Review Board, and supports national and international business development efforts.

Prior to joining ISI, her roles have included associate, sustainable development at Stantec Consulting, where she helped establish the firm's integrated sustainable infrastructure practice; national sustainability program manager at Building Owners and Managers Association (BOMA) Canada where she managed the organization's sustainable building certification program; and senior sustainability consultant at TerraChoice Environmental Marketing (now UL).

Melissa holds a Bachelor of Commerce (Honors) (Queen's University), a Master's Degree in environmental studies (York University), and graduate diploma in business and sustainability (York University).



**The Honourable Rosa Galvez** Senator, Senate of Canada

#### www.rosagalvez.ca

www.sencanada.ca

Twitter: <u>@SenRosaGalvez</u> LinkedIn: <u>Rosa Galvez</u> YouTube: Senator Rosa Galvez



Rosa Galvez is an environmental engineer, an independent senator at the Senate of Canada since 2016, and the President of the Parliamentary Network on Climate Change of ParlAmericas, a network of parliamentarians from the Americas. She was a professor at Laval University in Québec for over 25 years and she was Chair of the Civil and Water Engineering department from 2011 to 2017. Her expertise is on water and wastewater treatment, watershed management, sustainable development, municipal and hazardous waste, site remediation, impact assessment and climate risk to infrastructure.

At the Senate, she is a member of the Standing Senate Committee on National Finance and the Senate Standing Committee on Energy, the Environment and Natural Resources which she chaired during the 42nd Parliament. In March 2022, she introduced Bill S-243, the Climate-Aligned Finance Act, legislation to help guide the financial sector in its transition to a net-zero economy.





**Carly Shannon** Founder & Principal, Linx Strategies LLC LEED AP, BD+C, ENV SP, True Advisor

In 2021, Carly Shannon launched Linx Strategies, a strategic advising firm focused on advancing sustainability and climate resilience in the aviation sector. Prior to this. Carly spent over a decade at an AEC firm during which she grew their sustainability and resilience services into a national, industry-leading practice. Carly has led some of the first airport Environmental, Social, and Governance (ESG) reports, advising her clients on the evolving landscape of frameworks and standards; developed sustainability management and master plans, helping to secure funding for these and related projects: prepared emissions inventories and carbon reduction strategies, working with

airports to enter and advance within the Airport Carbon Accreditation program; and conducted reosurcespecific assessments and plans including those focused on renewable energy and materials management. She is a skilled facilitator and conducts frequent and tailored engagement events, which support her work with a range of sustainability rating systems including LEED and Envision. Carly was the Envision administrator for the five initial Envision-verified airfield projects and has since supported a range of airports from General Aviation to large-hubs seeking Envision. In addition to her project work, Carly is Co-Chair of the Transportation Research Board's (TRB) Aviation Climate Change and Sustainability Sub-Committee, a Steering Group member of the Airports Council International North America (ACI-NA) Environmental Affairs Committee, and a member of the ACI-NA Sustainability Integration Advisory Council. Carly has a Bachelor's of Science in Environmental Geoscience and a Master's in Urban and Regional Planning with a Sustainability Concentration.



Kari Hewitt Hewitt Sustainability Strategies LLC

Kari Hewitt has 15 years of experience working in the sustainability field across public, private, institutional, and non-profit sectors. For more than a decade, she has worked as a consultant leading climate action, sustainability, and resiliency plans for communities, airports, transportation agencies, and other entities. She has facilitated public and stakeholder engagement workshops and technical meetings throughout the country and has experience integrating sustainability and resiliency into building and infrastructure design. She believes in centering equity and social justice into all aspects of her work and views her own and others' journeys in

understanding systems of privilege and oppression as critical to our collective action on climate change.

In addition to holding a LEED AP credential, Kari has also been an ENV SP, Envision Verifier, and Trainer since 2013 and served on ISI's Envision Review Board from 2015-2019. She is currently a member of the Board of Directors for New Ecology, Inc, a national nonprofit delivering sustainability solutions at the community level. She holds an M.A. in Urban & Environmental Policy & Planning from Tufts University, where she is also an adjunct instructor, and a B.A. in Sociology from Smith College.





Melissa Targett Sustainable Design Program Manager, Port Authority of New York and New Jersey

As part of the Resilience and Sustainable Design Group in the Engineering Department at The Port Authority of New York & New Jersey, Melissa manages the development and implementation of the Agency's Sustainable Building Guidelines, Sustainable Infrastructure Guidelines and Climate Resilience Design Guidelines. With just over 20 years of experience, Melissa serves as the department's technical resource and works with multi-disciplinary design teams to integrate climate resilience and sustainable design. Current projects include major redevelopments at three (3) of the Agency's Airports – LaGuardia, Newark, and JFK, and replacement of the Port Authority Bus Terminal.



Valentina Ferrer Rivero Transmission Design EIT, HDR



Valentina is a Civil Engineer, Construction Management Professional, and certified EIT.

She has worked on construction/ engineering projects in Venezuela, Argentina, and the US. Over the course of her professional career, she has developed a strong passion for the development of sustainable infrastructures. Her Master's thesis, "Evaluating the Sustainability of Infrastructure Projects During Front-End Planning Phase.", has helped shape how we can understand the impact that our infrastructure has on society and the environment around it. Valentina's work has been published in ASEE, CSCE, and CRC.

She is currently working as a Transmission Design EIT at HDR Inc, where she performs analysis and detailed design tasks on overhead lines. There she actively participates in multiple young professional groups, including sustainability and resiliency.





Jennifer Ninete Sustainability Coordinator, HDR

#### LinkedIn: Jennifer Ninete

FJS

Jennifer Ninete is a Senior Sustainability Consultant with HDR. She is an Envision Sustainability Professional with more than 20 years of industry experience and nine years working with the Envision framework. She has worked on more than 40 Envision projects, is an ISI-approved Trainer and Verifier, and is a member of the Envision Review Board.



Ann Calnan Manager of Environmental Programs, Santa Clara Valley Transportation Authority (VTA)

Ann Calnan has been with the Santa Clara Valley Transportation Authority (VTA) for 21 years and is the Manager of Environmental Programs. Ann oversees environmental clearance and compliance for VTA's Capital Program that includes highway, rail, facilities, and habitat restoration projects. She also manages the agency's Sustainability Program, which achieved APTA Sustainability **Commitment-Gold Level Recognition** in 2016. In addition, Ann administers VTA's Storm Water Permit Compliance Program related to Phase II Small MS4 Program for non-traditional permittees. Ann serves on the Implementation Board of Directors for the Santa Clara Valley Habitat Agency. She has a B.A. in Environmental Studies with an emphasis in Wildlife Conservation and an M.S. in Transportation Management.





Michael Mucha Chief Engineer and Director, Madison Metropolitan Sewerage District Chair of the Board, Institute for Sustainable Infrastructure

Michael is the Chief Engineer and Director for the Madison Metropolitan Sewerage District. He has dedicated his 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 and his master's in public administration from the University of Washington-Seattle. He is a registered professional engineer and Envision Sustainability Professional (ENV SP).

Michael serves on Board's and Committee's at the national level, including the Institute for Sustainable Infrastructure, US Water Alliance and National Association of Clean Water Agencies.



**Emily Feenstra** Chief Policy and External Affairs Officer, ASCE

Emily Feenstra is the Chief Policy and External Affairs Officer at the American Society of Civil Engineers (ASCE). In that role she oversees ASCE's Washington, DC office and leads public affairs and government relations for the Society, including the development of ASCE's Infrastructure Report Card. Previously she served as Deputy Director of the US Water Alliance, where she oversaw a diverse portfolio of projects and led partnerships to advance one water management in America. Emily has also held senior positions at the Intelligent Transportation Society of America and as a consultant for the Washington State Department of Transportation on their largest mega-project, the Alaskan Way Viaduct and Seawall Replacement Program. She holds a bachelor's degree from Duke University and a Master of Public Administration from the University of Washington.





Mathew Mampara Vice President, Dewberry

Mat Mampara, P.E., is a national subject matter expert in the areas of climate risk and resilience. He has extensive experience helping organizations at the national, state, and local levels understand vulnerability to natural hazards, assess risks, and develop/implement strategies to reduce risks. He has served as Principal Investigator for a number of National Academy of Sciences areas of inquiry and worked with a range of Federal agencies to advance the nation's understanding of natural hazard risk including FEMA, USACE, NOAA, and USGS.

At the state and local level, his experience includes supporting the development of New York City's **Climate Resiliency Design Guidelines** and the risk-assessment component of the Commonwealth of Virginia's Coastal Resilience Master Plan, At the national level, Mr. Mampara provided subject matter expertise in supporting the development and conceptualization of FEMA's \$2B Risk MAP program —the largest natural hazard risk analysis program in the world. He has led the successful delivery of natural hazard identification data and products for over 5% of the nation's population and effectively delivered more than \$15 M in climate resilience projects.



Michelle Christopherson Sustainability Advisor, Climate Change, Sustainability & Resilience, WSP

Michelle is WSP Canada's lead for embodied carbon and life cycle assessments within the built environment. Michelle has experience developing embodied carbon strategies for leading public and private clients. She has developed whole building life cycle assessments for residential, institutional and government buildings and infrastructure life cycle assessments in support of various decarbonization initiatives.

Michelle is also an Envision Sustainability Professional (ENV SP) and a Verifier for ISI.





**Richard Fernandez** Principal Engineer, Aquario Engineering

Richard Fernandez is a project manager, sustainability professional, and senior civil engineer. His passion for sustainable infrastructure has guided his decisions and projects throughout his career and his commitment to race and social justice work in equitable contracting has earned him multiple awards with the city of Seattle for outstanding advocacy for women- and minorityowned businesses and a World Class Award in Diversity. Originally from Southern California, he developed a strong interest in water and wastewater infrastructure at a young age and now focuses his time professionally in these areas.

Licensed as a Professional Engineer in Washington State, California, and Arizona, Richard has worked for 14 years on capital projects, including water/wastewater treatment plants and transmission lines, combined sewer overflow reduction, airfield facilities, and land development. Most recently, Richard is serving as a project manager with Seattle Public Utilities, working on multiple contracts of the Ship Canal Water Quality Project and developing sustainability goals for the program.



Serge Dupuis Assistant Professor, Department of Civil Engineering, Faculty of Engineering, Université de Moncton

Serge Dupuis, P.Eng., FEC, MBA, M.Sc. is an assistant professor in the Department of Civil Engineering at the Faculty of Engineering at the Université de Moncton in Moncton, New Brunswick, Canada specializing in climate change adaptation and project management since 2013.

Serge Dupuis has spent most of his 25-plus-year engineering career in designing, constructing, operating and replacing public infrastructure and also managing a city's infrastructure for over 10 years. He has a vast, hands-on, experience in asset management on municipal infrastructure and on climate change adaptation plans for both urban and rural communities. He holds a Bachelor's degree in Civil Engineering and a Master's degree in Business Administration both from the Université de Moncton in addition to a Master's degree of Science in Project Management specializing in Construction and Infrastructure with the University of Liverpool.

Mr. Dupuis is a professional engineer, a Fellow of Engineers Canada and formerly the President of Engineers and Geoscientists New Brunswick.





**Tate Wimberley** Managing Director, Madison Street Capital, LLC

Tate is the Managing Director, Madison Street Capital, LLC. He completed his Master of Business Administration at Universität Pompeu Fabra in Barcelona, Spain. During his MBA studies he completed the summer certificate program at IHEID (The Graduate Institute) in Geneva, Switzerland on the WTO and legal and economic ramifications of global trade. Tate completed an M.S. in Finance from Florida International University with honors. Tate earned his undergraduate degrees from UNC Chapel Hill in International Studies and Philology (Spanish). He was also a graduate of the Carolina Business Institute of the Kenan-Flagler Business School and became fluent in Spanish after completing the Advanced Program in Language and Culture in Sevilla, Spain with UNC. He was a member of Sigma Delta Pi the National Spanish Honors Society. Within the multidisciplinary Global Studies program his focus was on Political Economy and Spain and the Spanish-speaking world. Tate is currently pursuing an additional Master's Degree in International Development from M.I.T.



**Kase Poling** 

Assistant Professor, Department of Civil Engineering, Faculty of Engineering, Université de Moncton

Kase Poling is a civil engineering PhD candidate at Virginia Tech and certified Envision Sustainability Professional (ENV SP). Kase has been awarded numerous fellowships including the Charles E. Via Fellowship, Davenport Leadership Fellowship, and Disaster Resilience and Risk Management Program Fellowship funded by the National Science Foundation. He will complete his doctoral studies in the fall of 2023 and following graduation will begin work as a consultant specializing in resilient infrastructure and climate adaptation.

His research interests lie at the intersection of public policy and resilient infrastructure. His research examines stakeholders' decisionmaking following the 2016 West Virginia floods with respect to organizational relationships, public policy, and people's perceptions of risk. Growing up in southern West Virginia, Kase understands many of the challenges rural communities face in light of increasing frequency and severity of storm events. He hopes to spend his career developing both policy and engineering solutions to these challenges.





Jessica Noon Sustainability Manager, Philadelphia International Airport and Northeast Philadelphia Airport

Jessica Noon is the Sustainability Manager for Philadelphia International Airport and Northeast Philadelphia Airport, and works within the Capital Development Group of the Division of Aviation of the City of Philadelphia. Ms. Noon oversees the sustainability initiatives, which range from energy efficiency, renewable energy and fleet electrification to waste diversion and climate change mitigation, for Philadelphia's airports. Ms. Noon leads efforts to incorporate sustainable design into airport facilities and airfield projects, including the achievement of LEED and Envision certifications. and Philadelphia's pursuit of

Airport Carbon Accreditation for carbon emissions tracking and reduction for both airports.

Prior to working at the airport, Ms. Noon spent 11 years with the City of Philadelphia, leading policy and partnership efforts for the City's innovative green stormwater infrastructure program, and has worked in sustainability planning and environmental policy with the Bronx Borough President for the City of New York; the New Jersey Sustainable State Institute; Sarasota County, Florida; and Dresdner Robin, an engineering and planning firm.

#### Education:

B.A. Environmental Science / Anthropology, New College of Florida Masters in City and Regional Planning, Rutgers University

Licenses / Certifications: American Institute of Certified Planners LEED (Leadership in Energy and Environmental Design) Associated Professional Envision Specialist

#### **Mike Brown**

Senior Advisor, Climate Bonds Initiative (CBI)

Mike recently joined CBI where he supports technical assistance and training activities for green bond issuers. Prior to CBI, Mike had more than 15 years municipal finance experience, including 7 years issuing green bonds, at the San Francisco Public Utilities Commission, a department of the City of San Francisco. Mike served as the manager of green bonds and climate finance initiatives where he issued more than \$6 billion in revenue bonds, including more than \$3 billion in certified green bonds. Mike helped lead San Francisco to many firsts, including receiving Green Bond of the Year awards from Environmental Finance Magazine, developing an industry-leading bond impact report, listing a green municipal bond on the London Stock Exchange, and piloting a climate-aligned capital planning screening tool for green finance. Mike has a Master's in Urban Studies and Planning from MIT.





John Williams Chairman & CEO, Impact Infrastructure, Inc., makers of Autocase Sofware; Four-term Board Chair, ISI

John Williams has forty-three years of experience as an advisor to infrastructure and building development in 20 states. He started his career as a Community Liaison for major infrastructure projects in NYC. In latter years, he served as owners' representative for the development of more than \$5B in successful Public-Private ventures.

In 2007, he initiated a movement aimed at measuring the value of "Green" infrastructure and buildings and their implications for environmental justice communities. In 2012 he founded Impact Infrastructure, the makers of Autocase software for automated economic analysis. Autocase software dramatically reduced the cost and improved the quality of economic assessments on more than \$100B in projects including airports; university campuses; hospitals; power infrastructure: commercial buildings; manufacturing, water, wastewater and stormwater facilities: and mobility investments. Autocase worked with the AIA Large Firm Roundtable to create the Free **Building Environmental Justice Tool** that will be discussed at this conference.

More than 5,000 projects have benefited from Autocase business cases. John served four terms as Board Chair at ISI, he was a Sustainability Accounting Standards Board Subject Matter Expert and currently serves on the Advisory Committee for NYU Sustainable Development Goals Invest NYC at the Stern School of Business. In addition. he served as a Trustee for the New York Foundation for the Arts (NYFA) for twelve years and on the adjunct faculty at Columbia University's School of International and Public Affairs (SIPA) for more than 15 years.



**EXPECTING MORE** 

# **SPONSORS**



# **PLATINUM**

FC

HDR

www.hdrinc.com

LinkedIn: HDR

**Point of Contact:** Ninete, Jennifer

**AECOM** Delivering a better world



**MDR Strategy Group Ltd.** 

#### **AECOM**

https://publications.aecom. com/sustainable-legacies/

**Points of Contact:** Jean Lynch

Justin Mosquera, LSP, LEP, ENV SP

www.mdrstrategy.ca

Twitter: @mdrstrategy

LinkedIn: mdrstrategy

Point of Contact: Allison Wedler



# GOLD



**WSP** 

www.wsp.com

Twitter: <u>@wspusa</u>

LinkedIn: WSPUSA

Points of Contact: Amanda Schweickert PE, LEED AP BD+C, ENV SP

Heather Unger LEED AP BD+C, ENV SP

# arva

#### **R.V. Anderson Associates Limited**

https://rvanderson.com

Twitter: <a>@RVAEng</a>

LinkedIn: r-v-anderson-associates-limited



# **SILVER**

Ethel G. Rubio ENV SP | Assoc. AIA

www.ethelgrubio.com

Twitter: @ethelgrubio

LinkedIn: ethelrubio

Point of contact:

**Ethel Rubio** 





#### Ethel G. Rubio, Assoc. AIA

#### **5engineering**, LLC

www.fiveengineering.com

LinkedIn: <u>5-engineering</u>

Point of contact: Michael Bloom www.rsandh.com

RS&H, Inc.

Twitter: @wearersandh

LinkedIn: rs&h

Point of contact: Rikki Scantlan



# **EXPECTING MORE**

SustainableInfrastructure.org