

NYIEC PRESENTATION #5

Title: The City Below: NYC's Evolution in Layers

Discover what lies beneath New York City's streets, and why mapping it matters.

Join to hear directly from two agencies that dig up the streets every day to maintain and install essential infrastructure that improves our city and hear from another city agency tasking with digitizing of underground assets. Richard Jones, Chief Engineer for the New York City Department of Design and Construction (DDC), will discuss the massive subsurface coordination effort required between public and private entities to meet the needs of our growing City while keeping the heat on and New Yorkers connected via high-speed internet.

Steve Carrea is the Director of Capital Program Management at the New York City Department of Environmental Protection. Steve will present the technology and tools developed and being used for planning sewers across the five boroughs. He will discuss the recently completed citywide hydraulic model as a tool, and how the model is being used to analyze criticality, performance, and how we anticipate using the model into the future to make smarter investments in capital infrastructure.

And Adam Barin, Manager of Strategy & Analytics for the Mayor's Office of Operations (Ops) will discuss the 3D Underground initiative to develop a highly secure data sharing platform for the built and natural environment and how it will be used for emergency response and capital planning.

Speaker's Bio:

Richard Jones is the Chief Engineer at the NYC Department of Design and Construction ("DDC"). He supervises the Specifications, Utility Coordination, Grants, and Bid Packaging units, supporting both Infrastructure and Public Buildings projects. He received his BS in Civil Engineering from Worcester Polytechnic Institute and has over 25 years of experience in various heavy civil construction works. He is a licensed Professional Engineer in New York, and an AWS Certified Welding Inspector and Certified Welding Engineer.

Steve Carrea is the Director of Capital Program Management at the NYC Department of Environmental Protection (DEP). He led the development of a ground-breaking effort to complete the City's first citywide hydraulic sewer model, enabling the Bureau of Water and Sewer Operations to identify more efficient and cost-effective drainage solutions. Steve continues to lead the Bureau's modernization efforts through Sewer Atlas, citywide flow monitoring, resilient design, and setting the course toward smart sewers and a digital twin. Prior to DEP, Steve worked at the federal government and gained experience with environmental regulation and policy. Steve received his BS and MS in Chemical Engineering from Manhattan College. He is a licensed Professional Engineer in New York.

Since joining the Mayor's Office of Operations in 2016, Adam Barin has led and supported many important policy initiatives. He played a key role in the City's COVID response, including serving as Chief of the Data Analytics & Reporting Branch of the NYC Vaccine Command Center. Now leading the Analytics unit at Ops, Adam and his colleagues are working to develop 3D

Underground, a highly secure, 3D data sharing platform for the underground built and natural environment.