

2024 INTEGRATED INFRASTRUCTURE CONFERENCE

DAY 1 HIGHLIGHTS

09:45 AM **PLAN BETTER, DIG ONCE, ACHIEVE MORE: A COLLABORATIVE APPROACH MODERNIZING OUR INFRASTRUCTURE SYSTEMS**

Abstract:

Our nation's aging infrastructure faces immense challenges, but within these lies an opportunity for a transformation change in how we deliver future systems in all asset classes of transportation, drinking water, storm water, wastewater, energy, and broadband. This panel session explores the MIC's MiDIG planning tool and the "dig once" concept – a strategic approach to infrastructure replacement that maximizes efficiency and minimizes disruption.

This panel will explore:

- The pressing need to address our deteriorating infrastructure systems.
- The benefits of "dig once" – coordinating the replacement of multiple infrastructure components (water, sewer, fiber optic cables, etc.) during a single excavation.
- The growing threats posed by climate change and how a holistic approach to infrastructure renewal can build resilience.
- The Michigan Infrastructure Council's (MIC) innovative Project Portal (MIDIG) – a statewide platform for communication and collaboration on infrastructure projects in the right of way.

Infrastructure asset class focus: All (Transportation, Energy, Storm water, Wastewater, Drinking water, Broadband)

10:35 AM **EMPOWERING JUSTICE40 COMMUNITIES: BUILDING A BRIGHTER FUTURE WITH INFRASTRUCTURE REVITALIZATION AND TARGETED POLICY**

Abstract:

The Justice40 Initiative commits significant resources to address environmental and infrastructure inequities in disadvantaged communities. However, these communities often face an uphill battle in accessing crucial funds for infrastructure revitalization. By addressing the resource scarcity and technical expertise gap, we can empower Justice40 communities to compete for funding, secure low-cost capital, and embark on strategic infrastructure revitalization.

This session will examine:

- **Essential Tools and Resources:** Equip residents and community leaders with needs assessments, project planning guides, and grant-writing assistance to effectively articulate their infrastructure priorities to state and federal officials.
- **Technical Expertise:** Connect communities with engineering and financial professionals to ensure project feasibility and cost-effectiveness.
- **Low-Cost Capital Access:** Explore innovative financing mechanisms, including low-interest loans and public-private partnerships, to make infrastructure projects financially sustainable.



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01:00 PM **SMARTER RATES, STRONGER INFRASTRUCTURE: DEVELOPING RATES FOR EQUITABLE AND EFFICIENT INFRASTRUCTURE SERVICES**

Abstract:

Regardless of class of infrastructure (transportation, energy, water, broadband), sound asset management calls for making the right investment at the right times to ensure reliable services over time. Key to accomplishing this is having sustainable adequate funding. In the case of many asset classes this is dependent on having rates set at a level to generate needed revenues. During this session we will learn how an electric and water utility establish rates they charge for these important services.

- Among the items that will be addressed include:
- How rates consider operational, maintenance and capital costs
- How both fixed and variable costs are considered
- How conservation and efficiency are encouraged in rate structure and how this impacts the system
- If and how the rate structure addresses low income utility customers who are unable to pay their bills
- What challenges do they face in setting rates
- What opportunities does technology play now and in the future

01:00 PM **STORMWATER AND CLIMATE CHANGE: BUILDING RESILIENT STRATEGIES**

Abstract:

Michigan has experienced several federal disaster declarations due to extreme rain events causing billions in damage to public and private property and infrastructure. Strategies to ensure infrastructure resiliency are a high priority across infrastructure sectors. Successful stormwater management requires an integrated approach across all infrastructure sectors and partners to solve localized and widespread flooding challenges effectively. This session will highlight various initiatives to coordinate stormwater management and resilient strategies consistent across infrastructure sectors that consider best practices from FHWA, EPA, and other regulatory agencies.



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DAY 1 HIGHLIGHTS

01:00 PM FROM REACTIVE TO PROACTIVE: PUBLIC-PRIVATE PARTNERSHIPS FOR SMARTER INFRASTRUCTURE MANAGEMENT

Abstract:

Our nation's infrastructure faces growing demands across all asset classes, with traditional management methods needing support to keep pace. This panel explores the exciting convergence of private sector innovation and research and development advancements that are revolutionizing infrastructure asset management. Join us for a dynamic discussion on how public-private collaboration is fostering a new era of intelligent infrastructure management, empowering communities to build a more resilient and sustainable future.

This Panel will Explore:

- **Cloud-powered Accessibility:** Learn how cloud technology and broadband expansion is improving access to sophisticated infrastructure data. Decision-makers at all levels, from major cities to rural communities, can now leverage powerful analytics previously reserved for large budgets.
- **Sensor Revolution:** We'll delve into the latest advancements in sensor networks and data collection tools, enabling real-time monitoring and condition assessment of assets. This empowers data-driven decision making, shifting focus from reactive repairs to proactive interventions.
- **Machine Learning and AI for Smarter Infrastructure:** Explore how AI and machine learning are transforming predictive analytics. By analyzing vast datasets from sensors and historical records, these technologies unlock previously unimaginable insights for forecasting asset health and optimizing maintenance strategies.
- **Empowering Sustainable Communities:** This panel will demonstrate how these advancements bridge the gap between historical engineering knowledge and contemporary decision-making. By putting centuries of engineering experience into the hands of all stakeholders, communities can make informed choices that pave the way for a more sustainable future.



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DAY 1 HIGHLIGHTS

02:00 PM **CHARTING MICHIGAN'S CLEAN ENERGY COURSE: COLLABORATIVE PLANNING FOR A RELIABLE FUTURE**

Abstract:

Michigan's ambitious clean energy goals necessitate a coordinated and comprehensive approach to long-range energy planning. This presentation examines the critical role of collaboration among diverse stakeholders in ensuring a smooth transition to a clean energy future without compromising system reliability and resilience. Michigan can strategically navigate its clean energy transition by fostering a collaborative planning environment. This presentation will showcase effective planning processes and highlight the importance of unified efforts to secure a reliable and sustainable energy future for all Michiganders.

This panel will explore:

- The Mid-Continent Independent Service Operator (MISO) role in facilitating one of the world's largest energy markets and overseeing largest transmission build-out in its history, aimed at helping states meet carbon reduction goals and satisfy growing electricity demand.
- How ITC, the States largest transmission owner, is working with MISO and the investor-owned utilities to deliver clean energy throughout Michigan.
- How Consumers Energy is planning the distribution grid of the future right here in Grand Rapids with Circuit West.

02:00 PM **BUILDING HUMAN CAPITAL: TARGETED WORKFORCE DEVELOPMENT**

Abstract:

The success of our state and communities hinges on a skilled and engaged workforce, particularly in the crucial infrastructure sector. This session explores innovative approaches to attracting and retaining talent within our state. We'll explore how targeted workforce development programs bridge the gap between job seekers and high-demand infrastructure positions.

This session will explore:

- **Moving Beyond Traditional Recruitment:** Discover new strategies for reaching diverse talent pools and building strong pipelines for infrastructure roles.
- **Skills for Today and Tomorrow:** Explore how targeted training programs equip individuals with the technical and soft skills required for success in the evolving infrastructure landscape.
- **Building a Connected Workforce:** Learn how partnerships between education, industry, and government agencies are creating a seamless pathway for citizens to access infrastructure careers.



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DAY 1 HIGHLIGHTS

03:00 PM MI HEALTHY CLIMATE: THE ROAD TO CARBON NEUTRALITY BY 2050 AND THE PRIORITY CLIMATE ACTION PLAN

Abstract:

Michigan's recently released Priorities Climate Action Plan (PCAP) charts a course for achieving carbon neutrality by 2050. We'll explore how various transportation, energy, and water infrastructure projects and programs drive significant reductions in greenhouse gas emissions. This session will showcase successful initiatives at the state and regional levels, offering valuable insights and inspiration for communities across the state. Hear firsthand from representatives leading the charge in climate action across Michigan.

03:00 PM NAVIGATING THE FUTURE OF ASSETS: HOW EMERGING TECHNOLOGIES ARE TRANSFORMING MANAGEMENT STRATEGIES

Abstract:

Public infrastructure owners have struggled with resource constraints and fragmented data for decades, hindering efficient management. This session explores the convergence of emerging technologies and evolving business models revolutionizing statewide infrastructure management. It will showcase real-world examples of how agencies are leveraging these technologies and innovative business models to transform infrastructure management.

03:00 PM WHERE ARE WE NOW? UPDATES ON ASSET MANAGEMENT PLANS AND WHAT IS NEXT

Abstract:

In this session, we will provide an update on the status of asset management plans considering recent legislative changes, focusing on Public Act 325 of 2018 and its implications for road agencies. We will discuss the progress made since the act's implementation in 2020, examine which agencies have submitted asset management plans, and explore the additional requirements set to come into effect by October 1, 2024, and 2025. Join us to gain insights into the current landscape of asset management planning and prepare for upcoming compliance deadlines.



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DAY 1 HIGHLIGHTS

04:00 PM CITY OF THE FUTURE: REIMAGINING UTILITY INFRASTRUCTURE FOR CLOSED-LOOP SUSTAINABILITY

Abstract:

This presentation, in collaboration with Vicinity Energy, explores the City of Grand Rapids' innovative approach to infrastructure management. We will examine how the city is evaluating its interconnected systems—district energy, water, solar, refuse management, and water treatment/biodigestion—through the lens of a closed-loop model. This framework fosters sustainability by enabling each infrastructure line to contribute to others' environmental efficiency. The discussion will delve into the specific strategies Grand Rapids is considering and the potential benefits of this closed-loop approach for urban environments.

04:00 PM WHAT IS ELIGIBLE FOR REIMBURSEMENT THROUGH TAMC?

Abstract:

During this session, attendees will learn about TAMC's Regional Unified Work Program and what transportation asset management activities are eligible for reimbursement through the TAMC. If you work at an MPO or RPA, this is a great session for you! This may also be of interest to local agencies that perform asset management-related activities and want a good understanding of the role of your regional planning organization in Transportation Asset Management.

04:00 PM STATE OF THE STATE: A DATA-DRIVEN LOOK AT ASSET MANAGEMENT IN MICHIGAN

Abstract:

Fragmented data collection across state agencies creates a critical blind spot for infrastructure management in Michigan across all asset classes. Inconsistent formats, siloed systems, and limited accessibility hinder informed decision-making, impacting project prioritization, resource allocation, and, ultimately, the overall health of our infrastructure. The Michigan Infrastructure Council (MIC) proposes a paradigm shift: a statewide infrastructure dashboard. This comprehensive data ecosystem will empower stakeholders at all levels to understand the current state of our infrastructure, discuss needs, and measure progress as we work to overcome the current crisis.

This session will explore into:

- The preliminary data sets targeted for inclusion in the dashboard.
- The role of the Department of Technology, Management, and Budget (DTMB) as the central data storage agency for the MIC, Water Asset Management Council (WAMC), and Transportation Asset Management Council (TAMC).
- The importance of this work for local units of government as they work to address infrastructure issues locally while maintaining compliance with the state.



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2024 INTEGRATED INFRASTRUCTURE CONFERENCE

DAY 2 HIGHLIGHTS

09:00 AM **FOUNDATION FOR THE FUTURE: A STATEWIDE CULTURE OF ASSET MANAGEMENT**

Abstract:

Our state's infrastructure and public assets are vital for the well-being of our communities. However, reactive maintenance and short-term solutions often lead to costly repairs and service disruptions. This panel explores the concept of building a statewide culture of asset management across asset classes (transportation, energy, storm water, waste water, drinking water, and broadband)– a cross-asset proactive approach that optimizes the lifecycle of our assets, maximizes their return on investment, and ensures long-term sustainability.

The panel will discuss:

- The challenges of reactive asset management and the benefits of a proactive approach.
- Key components of a successful statewide asset management program.
- The vision and development of the MIC AM Champions program.
- Strategies for building awareness and buy-in from stakeholders across all levels.
- Examples of successful implementations from Communities and Departments.

11:00 AM **NEXGEN HIGHWAYS: REIMAGINING HIGHWAYS AS INFRASTRUCTURE CORRIDORS**

The Federal Highway Administration's (FHWA) 2021 guidance, "State DOTs Leveraging Alternative Uses of the Highway ROW Guidance," marks a turning point in infrastructure development and our nation's pursuit of a greener, more connected future. The guidance encourages collaboration between FHWA and State DOTs to keep their Utility Accommodation Policies (UAPs) updated and to develop practices that further the development of clean energy and broadband projects in the highway right-of-way (ROW). By reimagining our ROW as a multi-use corridor, we can unlock a wave of innovation that tackles both broadband access disparities and the pressing need for clean energy solutions across our state.

We will examine:

- The growing need for clean energy infrastructure, broadband access, and electric vehicle charging stations.
- The FHWA's innovative guidance allowing states to integrate projects within ROWs.
- The current policy landscape and potential barriers hindering project implementation.
- The development of enabling policies to streamline permitting processes and encourage public-private partnerships.



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