Shipping drives world trade, carrying over 80% of global trade across the oceans. Through the pandemic and beyond, we need to redouble our efforts to ensure that maritime transport is sustainable and that our oceans are preserved. This means ensuring, safe, secure, and efficient transport— and reducing shipping’s environmental footprint. Sustainable transport will be at the heart of the global recovery. We must rebuild collaboratively, inclusively, equitably and sustainably, leaving no one behind.”

Kitack Lim
Secretary-General, International Maritime Organization
Global Sustainable Transport Conference, 2021
Research

Our research extends to a wide range of intermodal and maritime-related areas including:

- Maritime transportation
- Port planning, operations, and management
- Large-scale simulation modeling in maritime operations
- Freight, shipping, and port logistics systems
- Information and communications technology
- Urban freight transportation in port cities
- Port environmental management systems
- Dredging and related environmental issues
- Maritime industry economics and innovative financing
- Shipping business and corporate issues
- Maritime and port security
- Tidal marsh health monitoring
- Hydrodynamic and morphological monitoring and modeling of estuaries and beaches
- SAV monitoring
- Shellfish monitoring
- Coastal structure monitoring

MIMP features devotion to maritime infrastructure, operations, and human resources with considerable academic and practical industry-related experience. It is part of an international network of relevant research institutions, which ensures a global perspective in working with cultures and operating practices worldwide, and supports the goal of assisting the industry to solve existing problems while building scientific background through research and experience.

Education

Rutgers currently offers industry-oriented courses on freight transportation, maritime transportation, environmental aspects of maritime transportation, port planning, management, operations, and transportation systems analysis. Rutgers CAIT plans to offer a new certificate in “Maritime Planning, Engineering, and Management” with its industry and academic partners.

Recent Research Projects

Important MIMP research endeavors include:

- Beneficial Use Manual (2020-2021): $156,000
- Goodluck Point (2020-2022): $120,000
- Sedimentation Modeling – Shark River (2020-2022): $200,000
- Dredged Hole 86 Turbidity Monitoring (2021): $94,000
- Empty intermodal container management
- Feasibility of establishing a virtual container yard in the New York/New Jersey region
- Development of a berth allocation planner
- Passaic River cleanup project
- Evacuation and surge capacity modeling of transportation hubs
- Analyses of charging and financing policies for port development

Funding and Support

CAIT is supported by the U.S. Department of Transportation. Since 1998, CAIT has been a University Transportation Center (UTC)—a group of academic research institutions sanctioned and supported by USDOT. It was named one of only five National UTCs in 2013 and selected to lead the Region 2 UTC in 2018.

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