

Researchers:

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Industry Partners:

Consolidated Edison, Siemens, U.S. DHS Region 2 Office

Dynamic Resiliency Modeling and Planning for Interdependent Critical Infrastructures

Industry-Researcher Presentation

April 10, 2019

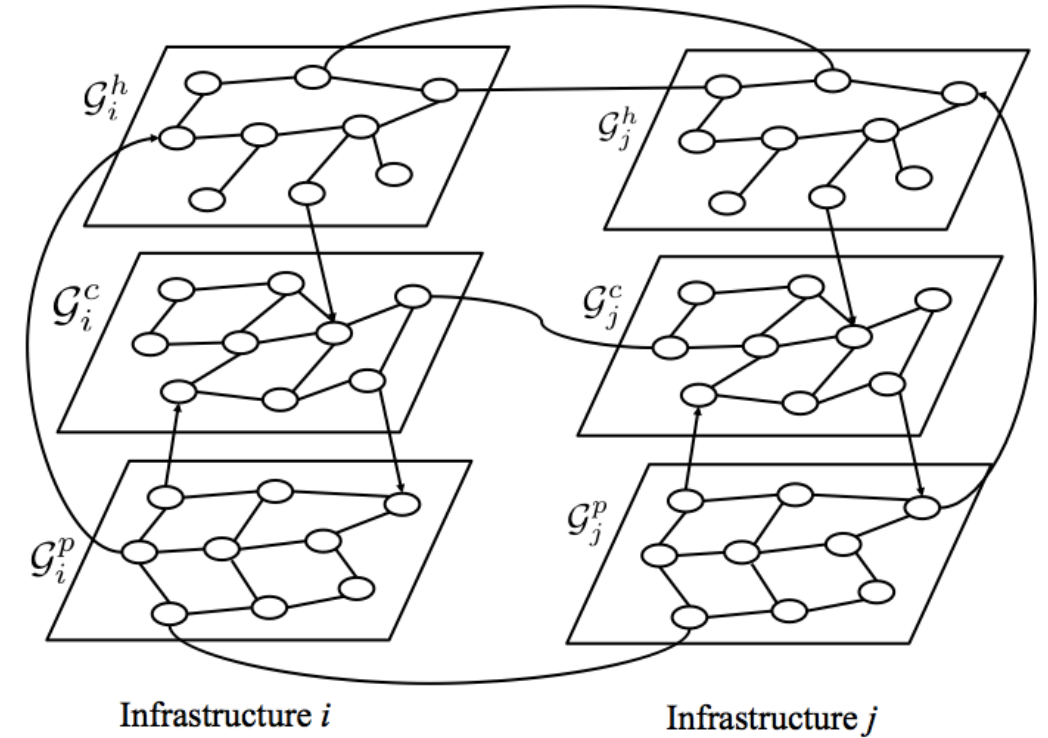
CIRI Symposium

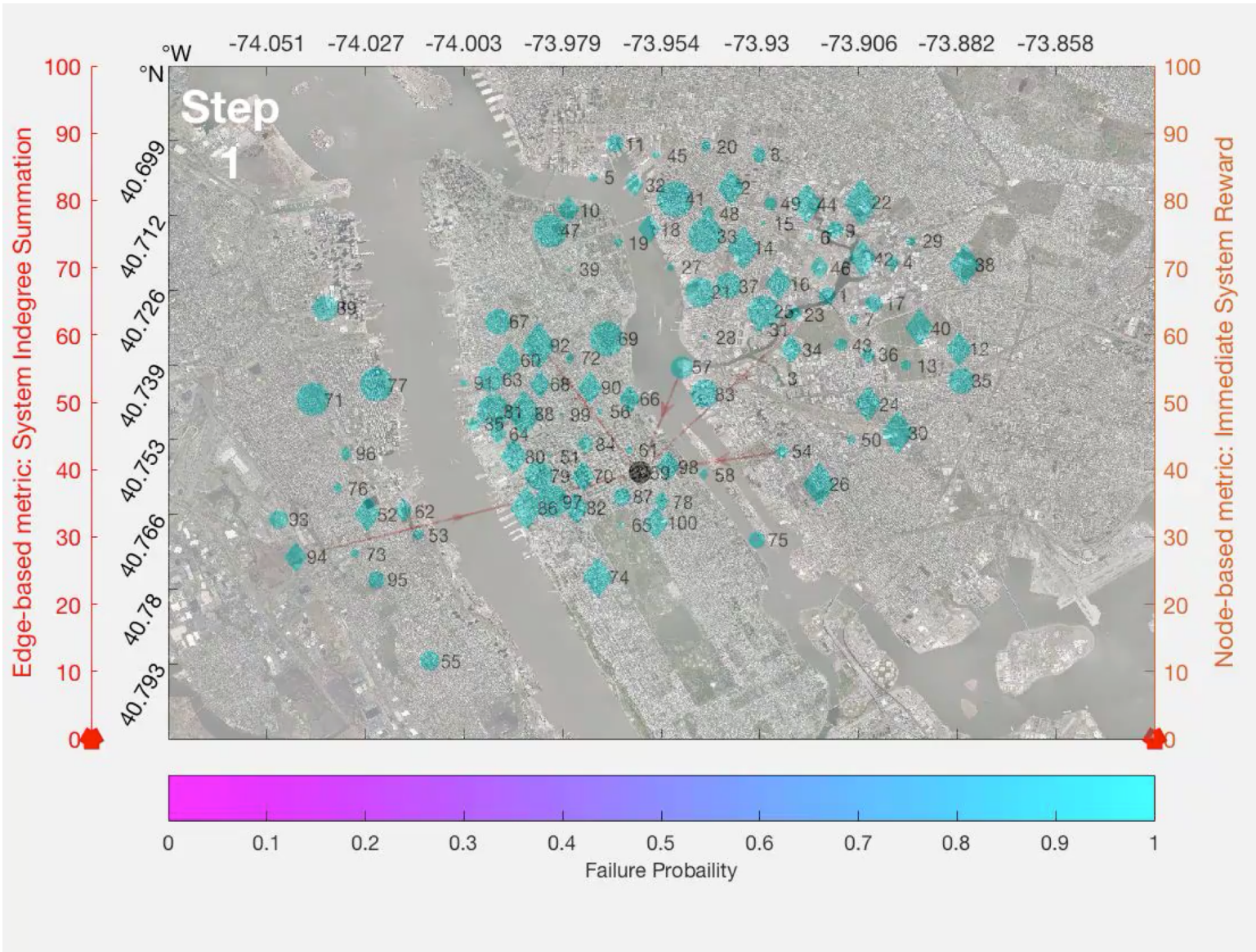
Problem Statement from Industry Perspective

- How to assess the impact of CI interdependencies on resiliency?
- How to understand the impact of human behaviors on resiliency?
- With interdependencies, then what?
- How to measure and improve cyber resiliency of CI?

Outcomes and Solutions

- Network frameworks and risk assessment
- Modeling of human-cyber-physical interactions
- Informed decision-making tools
- Threat modeling and resilience technologies



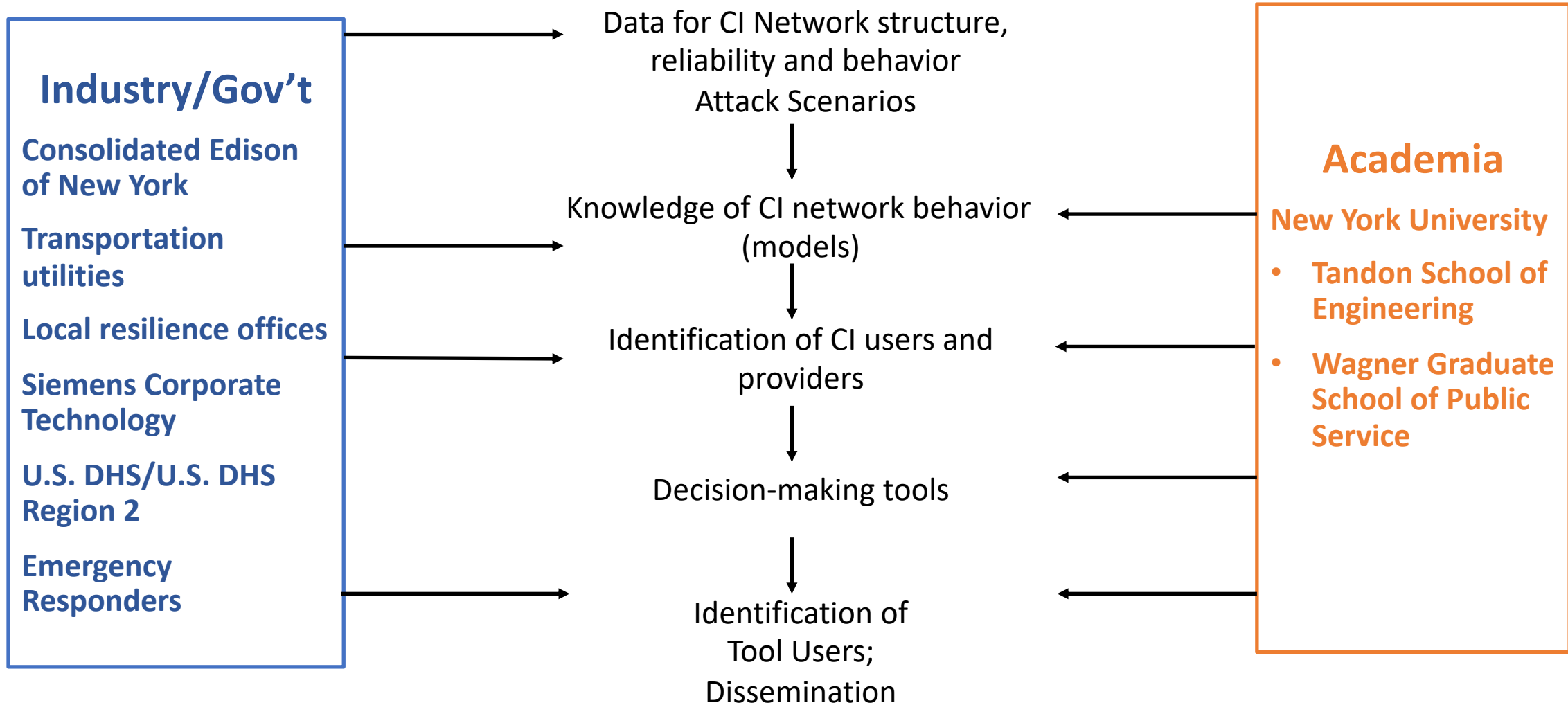




Distinct Features of the Research and its Partnerships

- Integration of human behavior with CI resiliency
- Real-time decision-making capabilities
- Unique multiple partners from three sectors: government, private, and public utility

Industry and Researcher Exchanges and Mutual Benefits



Partnership: What each provides

Industry

- Regulatory constraints
- Decision-making priorities
- Customer behaviors
- Industry need for tools
- Case studies

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- Understanding of important impacts that are outside utility's primary concerns
- Knowledge of network behavior with interdependencies
- Coordination of efforts among industries
- Avoiding duplicate work

Lessons Learned

Industry

- Sharing data is a particular challenge

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- A more flexible time-period to develop a user-friendly decision-making tool
- Finding a suitable platform to collaborate

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