IMAGINED DASHBOARD

Inter Modal Analytics for Logistics Network Efficiency

Northwestern University's IMAGINED project involves developing sophisticated network optimization and simulation methods embedded in an online, open-source platform to support the roll out of freight transportation infrastructure investments, including transloading hubs and energy infrastructure, vehicles, and equipment, as well as the implementation of advanced logistics strategies to improve operations.

PLATFORMS TO SUPPORT FREIGHT TRANSPORTATION

The dashboard integrates multiple functionalities and models in one place. It allows various stakeholders and agents in the freight operations field to test scenarios of interest. This tool provides a comprehensive view of decision-making across areas such as infrastructure deployment, fleet management, and routing strategies, enabling users to make informed choices for streamlining their logistics operations.

INTERMODAL FACILITY ALLOCATION



Determine location of multimodal transfer facilities and prepare for network disruptions

FLEET AND TECHNOLOGY MANAGEMENT





Manage fleet conversion and energy infrastructure deployment on networks

FACILITY SIMULATION



Simulate efficiency impacts of using new technologies at freight transfer facilities

LOGISTICS ROUTING





Optimize, compare, and evaluate logistics routing options at shipper and national level

Summary

- Development of multiple models and dashboards
- Guide decision-making for different stakeholders
- Include tools to support infrastructure, fleet management, hub-level operations, and routing decisions

Contact us

Do you have questions, concerns, or suggestions? We want to hear from you.

Email: tcinfo@northwestern.edu Phone: 847.491.2194



Visit transportation.northwestern.edu for more information on IMAGINED.

This work is funded under the INTERMODAL grant by the Advanced Research Projects Agency - Energy (ARPA-E) of the U.S. Department of Energy under Award Number DE-ARODO1817. The views and opinions of the authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.





