Central Plains Heartland Freight Technology Plan

Emerging Technologies | Freight | Safety | Economic Development

The Central Plains/Heartland region, consisting of Iowa, Kansas, Missouri and Nebraska, and parts of Illinois, is a national hub for agriculture, manufacturing and freight distribution. The advent of new and emerging freight transportation technologies holds great promise to improve the safety, efficiency and economic impact of goods movement to, from, and through this region. Through this pilot, a unique public-private partnership of metropolitan planning organizations and state departments of transportation along with academic, business, and industry leaders in the five Central Plains/Heartland states are developing a multi-jurisdictional, implementable plan to address freight, safety, and economic development through emerging freight technologies.

**Emerging Technologies:** The project assesses the potential impacts of emerging freight technologies, including technologies such as automated and connected vehicles, truck parking management, vehicle electrification, and other applications. A consistent, coordinated approach to the planning, operation, and regulation of new technology helps realize the potential benefits of these new technologies.

**Freight:** The project examines freight connections between regional metropolitan areas and states, in both rural and urban areas.

**Safety:** New and emerging technologies hold promise to improve the safety of goods movement to, from, and through the region.

**Economic Development:** Improved economic performance of regional freight-based industries, as harmonized regional approaches to new state technology regulations lower operating costs for businesses.

**OUTCOMES**

- **Harmonized regional regulatory objectives and strategies** to avoid or minimize the risk of patchwork regulations for new and emerging technologies.

- **Regional data sharing and management recommendations** to public and private sector stakeholders for safe, efficient operation of freight technology systems. Recommendations for coordinated management and operation target the protection of privacy and intellectual property, ensure cybersecurity, and facilitate private and public sector benefits.

**ANTICIPATED BENEFITS**

- **Proactive private and public data sharing**—harmonized planning and policy development for new freight technologies may lead to earlier adoption and faster realization of potential benefits focused on the safety, efficiency, and economic impact of goods movement to, from, and through regional metropolitan areas and states.

- **Replicability** of this approach in other regions minimizes the patchwork of new technology regulations, contributing to a more efficient national freight transportation network.
National Economic Partnerships Program

The Federal Highway Administration’s National Economic Partnerships Program (NEP) provides funding to support the implementation of innovative approaches to multi-jurisdictional coordination and regional planning. The four pilots take place across the nation in "megaregions" that each encompass a collection of urban centers and their surrounding rural areas, connected by existing economic, social, and infrastructure relationships. The projects showcase innovative coordination among stakeholders across these broad, but related geographic areas, and target complex transportation issues. Further, these projects highlight transformational transportation planning approaches that can be shared and replicated nationally.

Megaregion Pilot Study Area Map

Lead Organization and Consortium Members

For more information on the FHWA National Economic Partnerships Program, visit https://www.fhwa.dot.gov/planning/megaregions/

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