Rapid Speed Transportation Initiative

An update on the Midwest Connect Corridor Studies
LOW-PRESSURE TUBE

PASSENGER | CARGO VEHICLE

ELECTRO-MAGNETIC PROPULSION

NEXT GEN MAGNETIC LEVITATION

AUTONOMOUS CONTROL PLATFORM
Global Challenge Winning Route

US | CHICAGO-COLUMBUS-PITTSBURGH
TEAM: MIDWEST CONNECT

Total Length: 785 km  Total Duration: 47 min
Virgin Hyperloop One
Global Challenge Winner

One of 10 corridors selected worldwide to explore the feasibility of implementing Hyperloop technology.
Connecting the Midwest Megaregion
PASSENGER FLOWS
2040, without & with Hyperloop

- 1.9M Hyperloop Passengers

without Hyperloop

with Hyperloop

1.9M Hyperloop Passengers
CARGO FLOWS
2040 by Value, without & with Hyperloop (million $)

12.6 Billion Hyperloop Cargos
Rapid Speed Transportation Initiative (RSTI)

- $2.5 million study of rapid-speed technology options (traditional rail and hyperloop)
- Chicago-Columbus-Pittsburgh corridor
- Two initial phases:
  1. Hyperloop Feasibility Study
  2. Components of Tier 1 EIS *first-of-its-kind*
- Future phase: Complete EIS
- Multiple public & private funding partners
Hyperloop Feasibility Study

• Task 1 – Visioning and Technology Application
• Task 2 – Route Planning
• Task 3 – Transportation Demand and Economic Benefit Analysis
• Task 4 – Regulatory Framework and Implementation Strategy
• Project Management, Stakeholder, and Public Engagement
Components of Tier 1 EIS

- Task 1: Project Management
- Task 2: Preliminary Data Collection
- Task 3: Purpose and Need Statement
- Task 4: Route Alternatives
- Task 5: Service Alternatives
- Task 6: Infrastructure Investments
- Task 7: Public Involvement
Fair Comparison of the Two Technologies

WHY?

• Set up the project to move forward towards IMPLEMENTATION

• Apples-to-Apples: don’t want a “Monorail Solution”
Fair Comparison of the Two Technologies

Items to be Considered:
• Right of Way Costs and Impacts
• Environmental Concerns / Impact Mitigation
• Station Costs and Impacts
• Rolling Stock Costs
• O&M Costs
• Operational equity:
  • How many trains per day? No wait times for Hyperloop?
  • How fast will the steel-wheel high-speed rail be assumed to travel?
RSTI Timeline

- Feasibility Study: 9 months (2018 June - 2019 DEC)
- Corridor EIS: 12 months (2019 Jan - 2019 AUG)

Additional EIS Components

Mid-Ohio Regional Planning Commission
Current Study Funders

- State of Ohio DOT
- City of Columbus
- City of Lima
- City of Dublin
- City of Marysville
- Union County
- MORPC
- ...more to come
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Transportation. Innovation. Economic Development

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