

Post-processing & Economic Analysis of Freight Transportation Using FreightSIM Outputs

MTF Freight Economics Subcommittee

Champion:

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Members:

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April 28th 2016

Outline

1. Motivation
2. Subcommittee Vision
3. Goal for next MTF meeting
4. Specific Objectives
5. Questions - comments

Outline

1. Motivation

2. Subcommittee Vision

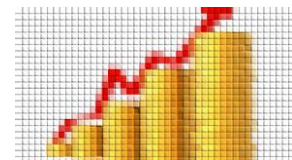
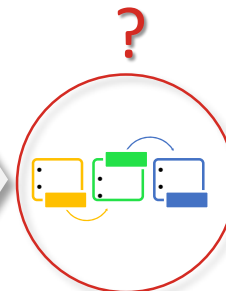
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1. Motivation

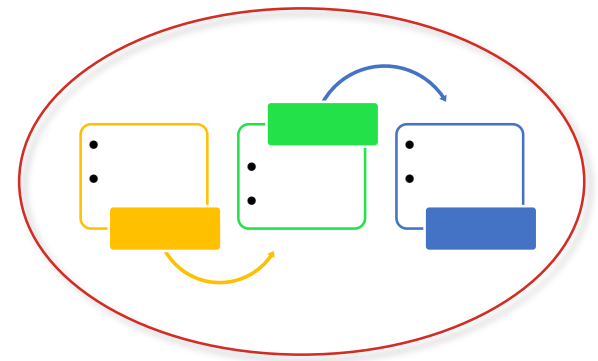
- Freight transportation
 - Important for economic growth
- Freight transportation models
 - Estimate and forecast demand
- How to use freight transportation model outputs to develop economic analysis?



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2. Subcommittee Vision



- Foundations for a Framework
 - Develops economic analysis using FreightSIM outputs
 - Post-processing methods
 - Quantifies economic impacts of freight transportation in FL
 - Evaluates and employs available tools
 - FreightSIM, FreightValU, etc.
 - Highlights additional data and model requirements
 - 4-steps, activity based, agent based models, etc.
 - Addresses economic development questions on freight policy and investments

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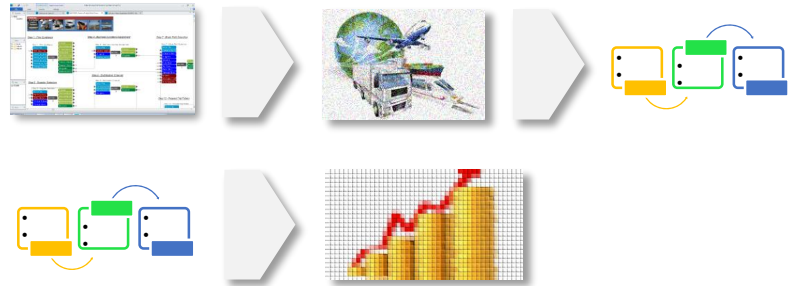
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3. Goal for next MTF meeting

Evaluate feasibility of

+ Post-processing

+ Economic analysis



to measure economic impacts of freight movements

using FreightSIM outputs

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1. Identify economic impacts on systems interesting to FDOT
 - Direct economic impacts
 - Indirect economic impacts
2. Determine methods compatible with FreightSIM
 - Quantification of freight transportation impacts (e.g., cost-benefit analysis, etc.)
 - Development of economic indicators (e.g., ROI indicators, etc.)
3. Determine data requirements and FreightSIM capabilities
4. Evaluate capabilities of additional freight tools
 - Freight modeling structures (4-steps, activity based, agent based models, etc.)
 - Freight economic analysis tools (e.g. FreightValU, etc.)

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