IHS Transearch Freight Movement Data
*Driving Data to Decision Making*

Presented to:
Florida Model Task Force Meeting

Presented by:
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The Source *for Critical Information and Insight*
IHS serves businesses and all levels of governments in over 180 countries.

Florida clients include:
- Department of Revenue
- Legislature
- Executive Office of the Governor
- Florida Department of Transportation
- Several Ports and MPO’s

IHS gives clients access to cross-disciplinary content and expertise to offer more complete, integrated information and solutions for each part of the value chain.

Market focus:
- Energy & Power
- Design & Supply Chain
- Defense Risk & Security
- HS & Sustainability
- Country & Industry Forecasting
- Commodities Pricing and Forecasting
IHS Transearch Freight Movement Data
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• Safety and Security
• Regulatory/Land-Use Planning
• Travel Demand Modeling

Q&A
About Transearch -

The Transearch Service is Based on Client Engagement and Custom Data Fusion
Transearch: Visualizing Freight Analytics

Where does freight go now? Where will freight go in the future?

CENTRAL FLORIDA LTL HUB
Density of Through Routes & Markets
<table>
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<th>Origin State FIPS</th>
<th>Origin State</th>
<th>Origin BEA</th>
<th>Origin County</th>
<th>Destination State FIPS</th>
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Transearch Database Features

Time Period: Base year and forecast databases

- 2010 annualized freight traffic plus forecast databases through 2040.
- State specific economic/employment/industry data and information integrated into the base year and forecast process

Shipment Metrics

- Short tons (2,000 lbs.)
- $ value
- trips/truckloads
- rail carloads/containers

Geographic Coverage

- Internal market: Florida counties, ports-to-county origination/destination
- External market: All other U.S. BEAs and GA and AL counties along the border
Transearch Database Features

**Commodity Detail**
- 4-digit Standard Transportation Commodity Codes (STCC)

**International Freight Identifiers**
- Identification of import, export, domestic, and NAFTA activity

**Statewide/Regional Freight Generators: Freight Finder**
- Identification of Freight Activity by Business Establishments

**Multi-mode Identification**
- Rail (O/D’s and routing) Intermodal & Carload using STB Private Waybill Sample
- Waterborne
- Air
Transearch Processing Overview

Each mode uses distinct sources and processing

Local data will be used at many points in the processing

STB WAYBILL

COE

FAA

U.S. PRODUCTION

U.S. Imports

TRUCK PRELIM MFG

TRUCK GOODS

PROCESS

PROCESS

PROCESS

RR DATA

Local data will be used at many points in the processing

Each mode uses distinct sources and processing
Transearch Custom Engagement Process

1: Review Alternatives and Establish Specifications
- Understand clients needs
- Discuss available options and customizations
- Finalize specifications

2: Collect Client & Internal Data
Data for input /benchmarking
* Truck counts
* Industry Data
* Surveys
* Port data
* Fleet and Rail data
* IHS industry expert input
* FDOT and MPO Inputs

3: Output and Review
- Preliminary dataset and provide samples to client for review
- Adjust if appropriate
- Final database delivery
- On-going client review and adjustments as needed

4: Training, Support and Applied Research
- Provide training
- On-going support
- Retainer services for project applications

Turning Freight Data into Market Insight
Transearch Forecast Process

IHS County Production Forecasts

IHS County Consumption Forecasts

IHS National Production Forecasts

IHS National Consumption Forecasts

Preliminary County Forecast Flows

National Constraints

Transearch Forecast

State and Local Economic Forecasts Option

The top-down, bottom-up approach insures consistency and enhances accuracy
## Expanded Trucking Coverage

<table>
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<th>Included Traffic</th>
<th>Pct</th>
<th>Excluded Traffic</th>
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<td>Domestic Waterway Drayage</td>
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<td>Inland International</td>
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<td>Rail Carload Transfers</td>
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<tr>
<td>Agriculture</td>
<td></td>
<td>Fish/Logging</td>
<td></td>
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<tr>
<td>Coal, Ores, Minerals</td>
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<td>Municipal Waste</td>
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<tr>
<td>Air Drayage - Domestic</td>
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<td>Small Packages OTR</td>
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<tr>
<td>Rail/Highway Intermodal</td>
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<td>Military</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Household Goods</td>
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<tr>
<td></td>
<td></td>
<td>Service Vehicles</td>
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<tr>
<td></td>
<td></td>
<td>Local Retailer &amp; USPS</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Air Drayage - International</td>
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| Share of Truck Traffic                  | 66% | Share of Truck Traffic                  | 33% |

State and local surveys, fleet and other data collection will expand coverage.
Freight Finder Identifies Freight Generators

Freight Finder identifies freight generating/consuming facilities, linking TRANSEARCH data to actual shippers and receivers

- SIC Code
- Employment
- Annual Sales
- TRANSEARCH
- Volumes
- Outbound & Inbound Tonnage
Transearch Applications -

Applying Transearch to Florida’s Statewide Freight Programs -

• Mobility, Capacity and Reliability
• Safety and Security
• Regulatory/Land-Use Planning
• Travel Demand Modeling
Capacity & Mobility Assessment  
**Infrastructure Analysis to Support Key Sectors and Companies**

**Need:** A Chamber of Commerce needed an assessment and analysis of its region’s infrastructure capacity and supply chain efficiencies. The need was to compare current conditions against future needs and develop a regional freight enhancement program. The focus was to develop public-private partnerships to prioritize and fund improvements.

**Solution:** A capacity assessment of multimodal freight linkages, infrastructure and activity centers was conducted integrating surveys, interviews, *Transearch*, and *Freight Finder*. Transearch forecasts of freight flows demonstrated future needs, and Freight Finder identified facilities, their supply chains, and aided in prioritizing 14 structure needs.
Capacity & Mobility Assessment
Evaluate Lane Density

*Interstate Import Destinations by Truck from Florida Ports*

Top ten markets account for 50% of interstate volume

- Ports
  - Jacksonville, FL
  - Miami, FL
  - Tampa, FL

2009 Data
Capacity & Mobility Assessment
Quantify the Linkage of Trade & Freight

Commodity Composition of FL Port’s Truck Traffic

<table>
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<tr>
<th>Commodity</th>
<th>Jacksonville</th>
<th>Miami</th>
<th>Tampa</th>
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<tr>
<td>Ores &amp; Minerals</td>
<td>31.6%</td>
<td>1.6%</td>
<td>43.2%</td>
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<td>Chemicals &amp; Petroleum</td>
<td>23.2%</td>
<td>29.9%</td>
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<td>Agriculture &amp; Food</td>
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<td>Intermodal Drayage</td>
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<td>Building Materials</td>
<td>1.7%</td>
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<td>Transportation Equipment</td>
<td>7.7%</td>
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<tr>
<td>Other</td>
<td>4.6%</td>
<td>15.3%</td>
<td>1.3%</td>
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2009 Data
Safety & Security
Risk, Redundancy and Mitigation Planning with Hazmat Commodity Flows

Optional Transearch Hazmat commodity flow data and visual tool for emergency management when evaluating safety and security risk, identifying needed transportation redundancy and mitigation programs, and incident response.

Hazmat Flow Database Features -
Transearch is its core.

Database and Maps Illustrate -
- Points of origin/destination of hazardous goods
- Specific traffic routes that hazardous goods are flowing (highway and rail) through states, BEA’s, MSA’s and counties.
- Modes by which hazardous goods are moving

County EMA Summary Hazmat Flow Map
**Land-Use**

**Inland Intermodal Port Market Opportunity Analysis**

**Need:** An inland port authority was given the opportunity to build a multimodal facility with funding and land contributed by a Class I, if the authority proved its viability and gained additional funds from the State. The client needed a fact based and highly credible business opportunity and infrastructure analysis to present to all stakeholders.

**Solution:** *Transearch* determined regional freight volumes by mode & route, and quantified the potential to divert freight to the proposed site. *Freight Finder* identified key industries to attract, and the *IHS Transportation Economic Impact Model* evaluated the economic impact of the facility on the State.
Many clients opt for more detailed market definitions.

Transportation Analysis Zones

- Production Factors
- Consumption Factors

Assess & Select Data
Correlation Adjustments

Origin Assignment
Destination Assignment
Sub-County Transearch

County Transearch
Questions

Thank you!

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