Overview

- GA Centers of Innovation Program
- How (and why) the Puzzle Fits Together
- Sample Current Collaborations
Overview

- **GA Centers of Innovation Program**
- How (and why) the Puzzle Fits Together
- Sample Current Collaborations
Georgia Centers of Innovation

- Aerospace
  - Macon/Warner Robins

- Maritime Logistics
  - Savannah

- Manufacturing Automation
  - Gainesville

- Life Sciences
  - Augusta

- Information Technology
  - Columbus

- Agriculture Technologies
  - Tifton

Innovating Secure, Efficient Supply Chains
Overview

- GA Centers of Innovation Program
- **How (and why) the Puzzle Fits Together**
- Sample Current Collaborations
HOW the Puzzle Fits Together

Problem Holders & Problem Solvers

OR...

Innovating Secure, Efficient Supply Chains
WHY the Puzzle Fits Together

(in logistics)

Complexity & Fragmentation

OR ...

Georgia Maritime Logistics Innovation Center
Innovating Secure, Efficient Supply Chains
Oversight layer

FTC
CBP
IMO
WCO

Transaction layer

Customer
Import/Export bank
Retailer
Consolidator
Foreign supplier

Logistics layer

Customer's vehicle
Truck carrier
Rail carrier
U.S. port
Ocean carrier
Foreign port

---

FTC = Federal Trade Commission; CBP = U.S. Customs and Border Protection; USCG = U.S. Coast Guard; IMO = International Maritime Organization; WCO = World Customs Organization; NVOCC = Non-vessel Operating Common Carrier
Georgia’s Logistics “Ecosystem”

Total: 5,287

(no “users” included)
FTC = Federal Trade Commission; CBP = U.S. Customs and Border Protection; USCG = U.S. Coast Guard; IMO = International Maritime Organization; WCO = World Customs Organization; NVOCC = Non-vessel Operating Common Carrier
Overview

- GA Center of Innovation Program
- How (and why) the Puzzle Fits Together
- Sample Current Collaborations
Current Collaborations and Focus

MLIC categorizes the general areas of greatest impact into:

- **Security Integration**
  - Efficient/Enhanced
- **Information Sharing**
  - Consolidation/Integration
- **Asset Visibility**
  - Location/Monitoring
- **Operational Process Improvement**
  - Visualization/Simulation
Key Drivers

1. VOLUME
1. VELOCITY
1. VISIBILITY
Sample Current Collaborations

- **ATAMS**
  - (Automated Terminal Asset Management System)

- **Savannah River Domain Awareness**
  - (Radar, Vision System, Wide Area Surveillance)

- **SAVI Networks**
  - (Container Security / e-Seals)

- **SRSA**
  - (Savannah River Security Alliance)
Sample Current Collaborations

- **ATAMS**
  - (Automated Terminal Asset Management System)

- **Savannah River Domain Awareness**
  - (Radar, Vision System, Wide Area Surveillance)

- **SAVI Networks**
  - (Container Security / e-Seals)

- **SRSA**
  - (Savannah River Security Alliance)
The way it is now... a quick run through
Singapore Does It...

CLEARED IN 25 SECONDS!

Innovating Secure, Efficient Supply Chains
Sample Current Collaborations

Automated Terminal Asset Management System

- OCR at truck gates, rail and cranes
- RFID for all OTR vehicles
- WIFI covering entire 1,400 acres
- Position detection system for containers
Sample Current Collaborations

- **ATAMS**
  - (Automated Terminal Asset Management System)

- **Savannah River Domain Awareness**
  - (Radar, Vision System, Wide Area Surveillance)

- **SAVI Networks**
  - (Container Security / e-Seals)

- **SRSA**
  - (Savannah River Security Alliance)
Hitches In Project Hawkeye

A Coast Guard initiative to enhance security at the Port of Miami has not been as effective as planned. The system of radars and cameras was installed to identify and track ships in the harbor and nearby waters from a command station.

A look at the difficulties with some of the major components:

<table>
<thead>
<tr>
<th>Maritime radars</th>
<th>Long-range cameras</th>
<th>Analysis software</th>
<th>Automated identification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GOAL</strong></td>
<td>Back up the radars, allowing officials to watch smaller boats one to five miles offshore.</td>
<td>Collect data from the radars and the cameras to identify vessels that might present a threat.</td>
<td>Global Positioning System units and radio devices required on large ships transmit information like a ship’s identity and location.</td>
</tr>
<tr>
<td><strong>CHALLENGE</strong></td>
<td>Cover just a sliver of the harbor and coasts and are not powerful enough to track small boats reliably.</td>
<td>Has not been installed in Miami, so very little of what the cameras are filming or the radar is tracking is ever used or even watched.</td>
<td>A ship owner can turn off the system or enter wrong information to mislead the authorities.</td>
</tr>
</tbody>
</table>

A computer display is used to track ships.
Current Collaborations and Focus

- **ATAMS**
  (Automated Terminal Asset Management System)

- **Savannah River Domain Awareness**
  (Radar, Vision System, Wide Area Surveillance)

- **SAVI Networks**
  (Container Security / e-Seals)

- **SRSA**
  (Savannah River Security Alliance)
- HSARPA Grants (two of them…)
- DHS Grants (9 of them…)
- Many companies with MANY ideas
Sample Current Collaborations

- **ATAMS**
  - (Automated Terminal Asset Management System)

- **Savannah River Domain Awareness**
  - (Radar, Vision System, Wide Area Surveillance)

- **SAVI Networks**
  - (Container Security / e-Seals)

- **SRSA**
  - (Savannah River Security Alliance)
Sample Current Collaborations

SAVANNAH RIVER SECURITY ALLIANCE

Innovating Secure, Efficient Supply Chains
Sample Current Collaborations

<table>
<thead>
<tr>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic Wood Industries</td>
</tr>
<tr>
<td>Citgo Asphalt Refinery</td>
</tr>
<tr>
<td>Colonial Terminals, Inc.</td>
</tr>
<tr>
<td>Conoco Phillips</td>
</tr>
<tr>
<td>East Coast Terminal</td>
</tr>
<tr>
<td>Georgia Pacific Gypsum</td>
</tr>
<tr>
<td>Georgia Power Plant Kraft</td>
</tr>
<tr>
<td>Georgia Power Plant McIntosh</td>
</tr>
<tr>
<td>Georgia Ports Authority</td>
</tr>
<tr>
<td>Global Ship Systems, LLC</td>
</tr>
<tr>
<td>Imperial Sugar Refinery</td>
</tr>
<tr>
<td>National Gypsum</td>
</tr>
<tr>
<td>Newport Terminal Georgia</td>
</tr>
<tr>
<td>PCS Phosphates</td>
</tr>
<tr>
<td>River St. River Boat Company</td>
</tr>
<tr>
<td>Savannah Intl. Terminal</td>
</tr>
<tr>
<td>Savannah Steel (GA Recyclers)</td>
</tr>
<tr>
<td>Southern LNG</td>
</tr>
<tr>
<td>Southern States Phosphates</td>
</tr>
<tr>
<td>Valero-Savh Refined Products Terminal</td>
</tr>
<tr>
<td>Vopak</td>
</tr>
</tbody>
</table>

26 Marine Terminals and Facilities

* Many Advisory Members

* MOU’s & NDA’s
Sample Current Collaborations

- Voice Interoperability
- Information Sharing & Data Collaboration
- Savannah River Intrusion Network
Questions?

Thank you!

PAGE SIPLON
page.siplon@gatech.edu
(912) 966 - 7867
www.maritimeinnovation.org