Strategic Mobility 21

Smart and Secure E Corridor Stakeholder Evaluation – Savannah Workshop Report

Prepared for:

Office of Naval Research

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Subject: Deliverable Number 0022, Smart and Secure E Corridor Stakeholder Evaluation – Savannah Workshop Report

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Dear Paul,

In accordance with the requirements of referenced contract, we are pleased to submit this Smart and Secure E Corridor Stakeholder Evaluation – Savannah Workshop Report for your review.

Your comments on this document are welcomed.

Regards,

Dr. John Hwang
Strategic Mobility 21 Principal Investigator

cc: Administrative Contracting Officer (Transmittal Letter only)
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Table of Contents

Table of Figures

Preface

The authors of this report would like to acknowledge Dr. Jerry Wilson, PhD., the Associate Director of Southern Center for Logistics and Intermodal Transportation at Georgia Southern University for his co-sponsorship of the Savannah workshop and the Coastal Georgia Center for its excellent arrangements in hosting the event.

Abstract

Smart and Secure e-Corridor stakeholder evaluation – the Savannah Workshop Report

This Strategic Mobility 21 (SM21) program technical report summarizes the principal findings of a workshop led by the SM21 team to elicit the input of industry stakeholders regarding the needs, opportunities, and implications for applying 'smart' technology to transportation and trade corridors in the United States. Specific interests were heavily-trafficked and rapid mobility corridors which are shared by commercial and military users. The conference, which was held at the Georgia Coastal Center in Savannah, Georgia, on February 18-19, 2009 in collaboration with Georgia Southern University, was intended to assess the needs, requirements, and the benefits in assisting with the strategic planning of a second Joint Deployment Distribution Support Platform (JDDSP) prototype to serve the southeastern United States. This eventually would link up with Southern California Logistics Airport (SCLA) and perhaps other strategic sites, yet to be nominated, to form a national intelligent network of dual use multi-modal freight hubs and integrated logistics centers under common information technology architecture and web services supporting platform.

Purpose and background

The conference was held on February 18 and 19, 2009 in Savannah, Georgia to explore Strategic Mobility in the 21st Century and the investment in 'Intelligent Infrastructure' for 'smart' transportation and trade corridors. The SM21 team collaborated with Georgia Southern University, Center for Logistics and Intermodal Studies, in development of the program and participation of industry, government, and academic invitees.

The southeastern United States was chosen following the lead of the Department of Defense in conducting data collection at Fort Stewart, the Third Infantry Division at Fort Stewart and the Port of Savannah, to capitalize on the advanced state of awareness and potential collaboration among freight stakeholders in that region, and because regional high priority smart and secure trade corridors serve both commercial and military shipments. The resulting growing manifestation of regional freight caused congestion suggested opportunities for the application of SM21 technologies to create 'smart' corridor use cases to establish the viability of a potential JDDSP facility in the region.

Attendees

Attendees included representatives from organizations in rail, over-the-road trucking, dray trucking, port authorities, US Customs and regulatory compliance, technology, academia, Georgia state and Federal governments. Thirty-seven invited attendees participated in the conference; all were either principals or senior executives in their organizations.

Agenda

The conference was organized to explore three domains of goods movement: the physical domain exemplified by such infrastructure as roads, rail, and shipping nodes (e.g. ports and distribution centers); the financial domain including funding and investment mechanisms; and the information domain, including systems, data and technologies. This structure was intended to clarify discussion and issue elicitation, mindful that overlaps exist between them.

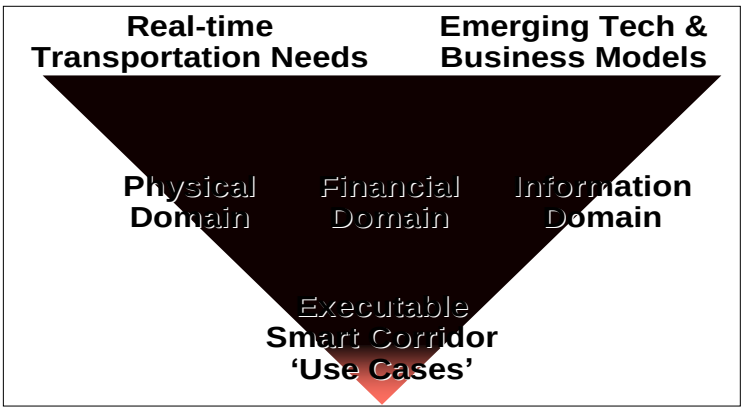

Figure 1 Stakeholder Elicitation Approach

The agenda began with an informational session, to establish a common point-of-reference for recent transportation, technology, and business developments. This was followed by panel discussions – aligned with the three goods movement domains – to expose the principal issues surrounding southeastern US freight corridors and elicit stakeholder input. On the second day, a focus group of selected, key representatives met to set an initial roadmap to clarify and exploit stakeholder insights and recommendations.

Following is a list of the key presentations and accompanying panel discussions on day 1:

The Physical Domain	Presentation	Surface Transportation Infrastructure: *Modeling and Simulation Network Analysis*	Ed Savacool, COL (USA-Ret), Enterprise Management Systems, Inc.
	Presentation	Network scenario feasibility and optimization: *Colton Crossing (CA) Case Study*	Dr. Burkhard Englert, CSULB
	Panel Discussion	Physical components of multi-purpose trade: *Transportation, and Rapid Mobility Corridors*	Moderated by Dr. Larry Mallon, SM21
The Financial Domain	Presentation	Facility Investment: Recent Research Trends and Emerging Issues	Kent Hindes, Cushman Wakefield
	Presentation	Georgia: A Global Business Center	Mr. Bill Dobbs, GA Dept. of Economic Development

	Presentation	Developments in Public Private Partnership financing	Mr. Bob Walsh
	Panel Discussion	Innovative infrastructure financing: *Public Private Partnerships and Institutional Arrangements*	Moderated by Dr. Tom Case, Georgia Southern University,
The Information Domain	Presentation	Trade Compliance: Information challenges and opportunities	Moderated by Mr. Tommy Berry, Point Trade Services LLC
	Presentation	Web services and Networked Computing	Mr. Bill Thane, SAVVIS
	Presentation	Federal Trade Zone Information requirements	Mr. Ralph Maggioni
		Information (data) and compliance for multi-purpose corridors: *Supply Chain Management, Facility Siting, Homeland Security and Trade compliance*	Mr. Tommy Berry, moderator

Day One - Findings and Stakeholder Issues

The principal discussion points and emerging stakeholder issues are summarized here, organized in the domain discussions that revealed them.

Physical domain. For the conference, the physical domain included rail, roads, ports and inland warehouse and distribution sites the assets that enable freight movement, and intermediate transfer sites for cross-docking and transloading. Among rail and truck carriers asset utilization – the efficient and effective application of transportation equipment – is the common, dominant, and pressing theme. Three national trends are adversely impacting asset utilization: 1) the aging and deterioration of the rail and road infrastructure; 2) the increasing volume of goods being shipped and, therefore, the service level demand upon transportation assets and infrastructure; and, 3) shifting demographics of the US population from the North and East to the South and West regions of the country. These combine to stress the trade and transportation corridors in the Southeastern US and lead to inefficient use of surface transportation, infrastructure both public (port and highways) and private (vessels, rail, and warehouse and distribution centers) Additionally:

- While any transportation arc or node in a regional network is a potential source of congestion, those involving dray operations – between a port or rail ramp and a distribution center – are notoriously particularly inefficient with drayage services performed principally by smaller, independent operators in which in transit visibility and the potential for synchronization is often lost.

- Efficient transportation asset and infrastructure utilization, planning and coordination and their implications are regional and national in jurisdiction. Remedies must span political boundaries of states and regions.
- Commercial and military traffic use the commercial distribution lanes and assets. The Military is given priority along congested routes, impacting commercial planning and investment decisions;
- General tax and bond issuance opposition is causing an evolution toward toll charges and user fees for highway revenue generation. This decreases trucker profit margins;
- Time is the most precious shipping resource. Time pressure (capacity utilization) impacts smaller shippers most acutely.

Financial domain. Of primary interest in financial domain were challenges and developments in financing transportation infrastructure projects on the scale of a new, or upgraded regional corridors. What quickly emerged as ***the*** critical industry challenge is the need for stakeholder collaboration to organize projects across local political boundaries and transportation modes. Stakeholders recognize their interdependence, yet lack a clear organizing mechanism to facilitate their mutual cooperation. Doing so, however, necessarily increases the scale and cost of projects, thereby eliminating some of the traditional financing methods as options. Public/Private Partnership Investment (P/PPI) vehicles are a newer financing arrangement that has been applied successfully in selected locations in the US, Canada, and Europe. P/PPI is seen as perhaps the only viable financing mechanism for the types of projects contemplated by this conference. Additionally:

Information domain. The information domain includes the data, information, and knowledge that inform the decisions of transportation stakeholders, as well as the technology systems and infrastructure that provide and manage them. Transportation congestion results from the physical conflict of capacity and volume, and also from the incompleteness and incompatibility of the associated operational information. These deficiencies impact both current operations and transportation planning; overcoming them enables more effective scheduling and sequencing, improved asset utilization and, ultimately, reduced congestion.

Day One of the conference concluded with a tour of the Round House rail museum adjoining the Georgia Coastal Center and a brief reception among Coastal Center officials and the conference participants.

Day Two - Use Case Development

The second day of the conference was limited to selected participants representing the physical, financial, and information domains of trade and transportation. Their objective was to use the findings of Day One to guide the development of high-level use cases as candidates for near-term 'smart' corridor infrastructure investment in the Southeast region. Discussion quickly

centered on one scenario that could yield a second prototype JDDSP in the FY11 timeframe and based at the former Fort Gillem, GA.

Fort Gillem has been directed for closure through the Base Realignment and Closure (BRAC) process, and is scheduled to be fully converted to private/public use by FY11. Fort Gillem would be a strategic and ideally-situated facility to serve both commercial and military transportation flowing through the Atlanta-Savannah region. Proximate to the Port of Savannah and Hartsfield International Airport, the Fort Gillem enclave is adjacent to the Southern Freight Rail Corridor hosts an USA-USAF exchange. A planned Sensitive Compartmented Information Facility (SCIF) located within the enclave would leverage a second Joint Logistics Experimental Training Testbed (JLETT) collocated with a JDDSP to provide the Department of Defense (DoD) with a secure combination fourth party logistics provider (4PL) overseeing a variety of third party logistics (3PL) functions provided by non-asset and asset based contractors, and common and private carriers operating within a DoD level of interoperability, and multi level role based echeloned access and information assurance and physical security.

Task 3.5 Green Freight Corridor Network prototype design and feasibility study

1.0 Introduction

The Green Freight, E Corridor, or Smart and Secure Network prototype design is the virtual equivalent of the physical dedicated intermodal corridor component of the Agile Port System (APS). It links the agile port that is capable of concurrently planning and executing commercial and military port operations with a dual use Inland Multi-modal transfer hub referred to as the Joint Deployment and Distribution Support Platform in DoD vernacular. It is the Enhanced Strategic Corridor building upon and breathing real autonomic capabilities into the Strategic Rail (STRACNET) and Strategic Highway (STRAHNET) Corridors designated by Surface Deployment and Distribution Command Transportation Engineering Analysis (SDDC TEA) US Transportation Command (USTRANSCOM).

In turn, a network of smart secure trade corridors can be designed around gateway ports within a geographic region (e.g. Southern California, Southeast) to link inland hubs within a region and to other hubs in other regions through the Strategic Highway (STRAHNET) and Strategic Rail (STRACNET) Networks designated by USTRANSCOM along with Strategic Seaports and Airports of Embarkation. This massive surface transportation network was largely built upon Federal right of way grants in the case of transcontinental rail and Federal State partnerships financed through road use taxes in the case of the National Defense inspired Highway Trust Fund and more recently Public Private Partnerships in the case of toll roads.

Together this network provides redundancy as a safeguard to natural or man-made disruption and contains basic building blocks in the form of sensors that monitor road and rail use, volume, location and condition of conveyances and freight movement in a rudimentary and fragmented manner.

Most intra and inter city freight, and all military freight and unit moves through this network with varying degrees of efficiency depending upon peak, non-peak, seasonal, nodal and other market driven forces and military necessity. Since Operation Desert Storm, rail unit train as in the case of intermodal, most homogeneous commodity flows move by intercity rail more to maintain unit integrity than as an efficiency matter. The Federal and State civil governments more recently have begun to promote modal diversion from truck to rail as an energy saving, carbon footprint reduction, regional congestion relieving, and air quality mitigation policy encouraged or mandated by regulation or financial incentives. Inter city high speed rail investment incentives, positive train control, customs, agriculture and homeland security regulation likewise create momentum in the direction of smart secure trade corridors.

Governance is distributed on a state by state basis with Federal uniformity of interstate highway and bridge construction standards mandated as a condition of federal investment along with safety regulation purposes limited to vehicular and national speed limits combined with State operator licensing and enforcement of highway safety regulations. Federal rail safety is mandated and self enforced by the major Class one railroads and maintain their own interchange of equipment and movement control regime.

The Strategic Mobility 21 developed the Smart and Secure Trade Corridor concept as a means of extending the body of work including regional modeling and simulation, and transportation management and movement control and monitoring developed around agile terminals and inland hubs for DoD purposes into the civil transportation domain and freight mobility generally as most DoD freight moves through the commercial transportation and distribution system by commercial ocean, rail and truck carriers or over the Federal surface transportation network by road march.

The smallest component of the network concept is an individual trade corridor or a single identifiable distribution lane from the commercial perspective (based upon a collection of routes for individual shipments across modes of sufficient volume to constitute a distribution lane) with a common origin and destination node and link to other lanes within the same corridor. The nearest functional equivalent from the transportation domain is an Intelligent Transportation System (ITS) designed to provide near real time intelligence as routing decision support for individual drivers of privately operated passenger and freight vehicles on the network

A composition of intelligent transportation systems forms a network that can be augmented with additional road and rail sensors and information architecture to form a smart secure corridor network when validated to meet Customs-Trade Partnership Against Terrorism (CTPAT) level 3 Customs standards and combined with multiple overlain foreign trade zones.

In July, 2006 IntelliTrans, an SM21 contractor, in collaboration with Modalgistics, the planning arm of the Norfolk Southern railroad and other regional freight stakeholders, hosted a day long informal workshop at their headquarters in Atlanta on the subject of port development prompted by the emergence of the Port of Savannah as a top five US container port and regional warehousing and distribution trends and related industrial development. The workshop coincided with the Surface Deployment and Distribution Command (SDDC) shift of the SM21 program focus on planning for a Milestone A modeling and simulation and field demonstration of APS from the lone west Strategic Seaport of Tacoma and Fort Lewis I Corps Stryker brigades to Fort Stewart and the Third Infantry Division and the Port of Savannah. The workshop was intended to gain a better understanding of the similarities or differences in logistics, surface transportation conditions, and trade generated growth patterns in the locations and sites of warehouse and distribution facilities along similar trade corridors in Georgia.

The workshop was succeeded by a State Department of Economic Development sponsored helicopter tour of the I -16 and I-75 corridors and a series of visits to sites along the Macon Atlanta corridor centered upon the Norfolk Southern Brosnan Yard, the largest manifest yard in the United States and potential developable industrial parcels in the Warner Robins Air Force Base-Macon vicinity at the invitation of city officials and the railroad who were attendees at the workshop.

Given the obvious similarities in conditions occurring in Georgia and parallels with that of Southern California before and during the ramp up of intermodal container traffic in the1990's- and especially the heavy dependence upon regional long haul container movement by truck, it was apparent that a great opportunity existed to share the Southern California experience and

lessons learned while seeking to identify a likely site for a second JDDSP prototype. A combination of the capabilities existing at the Warner Robins Air Base and Brosnan Yards was initially considered for that purpose. The absence of a Public-private partnership similar to that found at Southern California Logistics Airport between the City of Victorville BRAC Local Redevelopment Authority (LRA) and Stirling International and the complexity of multiple local jurisdictions as distinguished from a regional authority ultimately proved problematic although the same conditions, opportunities and capabilities that originally attracted the SM21 team to the Macon-Warner Robins area still exist.

1.1 Southern California Agile Supply Network (SCASN) Design

Back in California the SM21 team was developing the Southern California Agile Supply Network (SCASN) simulation model, the first of its kind in the nation depicting all major nodes (marine terminals, rail and truck intermodal and warehousing and distribution facilities) and arcs representing major strategic rail corridor (STRACNET) and Highway (STRAHNET) corridors. The model allowed stakeholders for the first time –when populated with archival freight data- to run regional what if scenarios depicting the likely impact of changes in public and private investment in surface transportation infrastructure investment, public regulatory policy, and commercial busy rules and best operating practices upon other stakeholders in terms of regional bottlenecks and operating efficiency. When combined with modified least cost direct path cost algorithms, the model can separate public and private benefits from those same activities in terms of throughput volume and velocity, efficiency in use of transportation infrastructure, energy conservation and carbon footprint reduction, air quality and congestion mitigation among other variables.

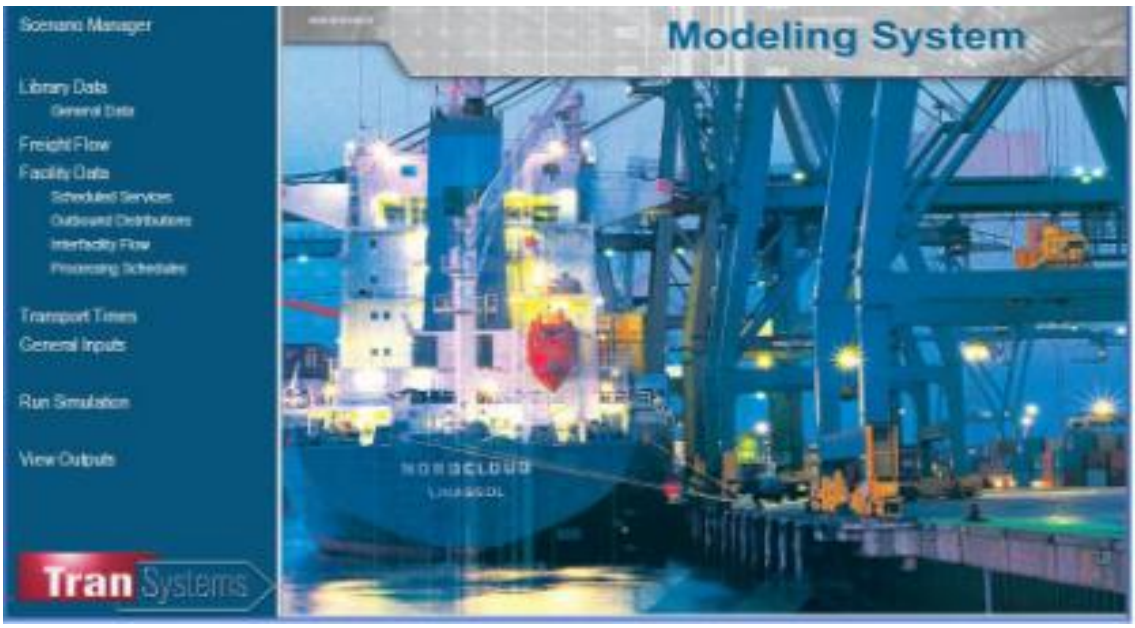

Figure 2 Southern California Agile Supply Network

The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, approved by the voters as Proposition 1B on November 7, 2006, was the catalyst for the SM21 program adopting a virtual rather than a dedicated trade corridor as the linkage between marine terminals and an inland multi-modal transfer hub and integrated logistics center as the principal components of an Agile Port System (APS). An Integrated Logistics Center (ILC) can be defined as the freight hub of a specific area where all the activities relating to transport, logistics and goods distribution are carried out by various third party logistics operators. The SCLA prototype JDDSP site lies along the port to Inland Empire trade corridor and is slated for bond proceeds investment for off site connection with the proposed High Desert Corridor allowing intercity trucks to bypass the Los Angeles Metropolitan area.

Proposition 1B rode a wave of legislative interest in the California State legislature focused on freight mobility as an element of both goods movement and economic development as well as congestion mitigation evidenced by a general public perception of too many trucks on freeways especially segments such as the I-710 between the Port of Long Beach and the Inland Empire of Southern California, and the I-5 between Bakersfield and Sacramento in which instances the composition of vehicular traffic represented by 40 foot containers and 53 foot trailers exceeded 70%. The same phenomenon can be observed in Georgia I-16 between Savannah and Macon and Atlanta originating at the Port of Savannah.

The SCASN Modeling Simulation and Analysis (MSA) platform was briefed to the staff of the California Transportation Commission (CTC) the designated implementing body for the voter approved initiative. The most significant aspect from the SM21 program was that through the California Marine and Intermodal Transportation System Advisory Committee (CALMITSAC) SM21 had input into the draft of the enabling legislation preceding the public vote the criteria for evaluation of eligibility of bond proceeds funding of projects recommended by regional metropolitan planning organization concerning goods movement that are absent from the State Transportation Improvement Plan (STIP). The significance is that freight projects do not normally make the cut when competing with projects that benefit primarily passenger vehicle mobility in head to head competition. These include throughput capacity utilization, velocity, sustainability, reliability, air quality, and energy conservation and congestion mitigation. When the SM21 team later observed stakeholder workshops sponsored by the Georgia State Department of Transportation and conducted by McKinsey & Company, California Proposition 1B was used as a discussion model precisely for that very reason as a potential model for Georgia. The Georgia State Senate later enshrined that perspective and intent in adopting Senate Resolution 295 and naming SM21 the recommended agent for change in collaboration with the State Departments of Transportation, Agriculture and Economic Development as well as the Georgia Ports Authority.

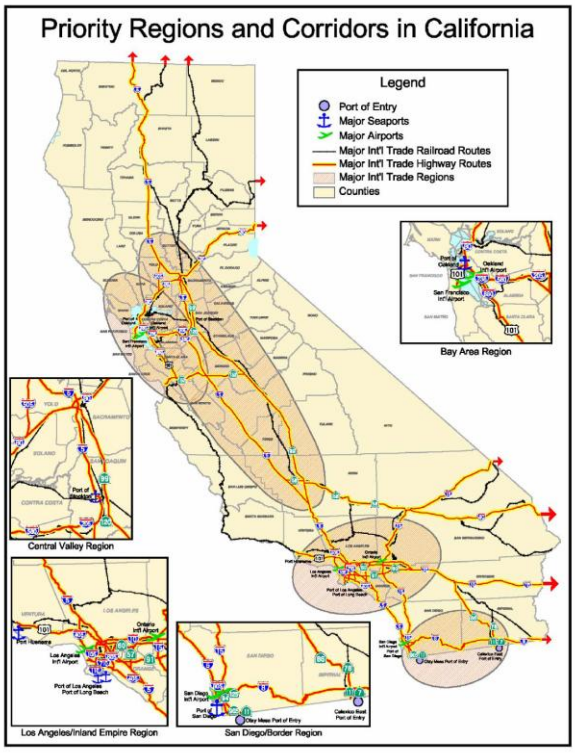

Figure 3 Proposition 1B California Trade Corridors

As a result of CTC support, the SCASN model was validated in collaboration with Riverside County using two years worth of archival Burlington Northern Santa Fe Corporation (BNSF) and Union Pacific rail data independently evaluating the likely spread of public-private benefits associated with alleviating the Colton Crossing at grade crossing of the two calls one railroads thereby increasing the number and frequency of Units Per Order (UPO) unit trains but spreading those movements over peak and on peak hours to mitigate commuter movements and minimize congestion and air quality impacts.

2.0 Strategic Mobility in the 21st Century & Intelligent Infrastructure Investment (I3 Conference In collaboration with GA Southern University)

Conference goals and structure

It was against this backdrop that the SM21 program scheduled its February, 2009 Workshop entitled "Strategic Mobility in the 21st Century & Intelligent Infrastructure Investment (I3 Conference)"in collaboration with GA Southern University held at the splendid setting of the Coastal Georgia Center, Savannah, GA, February 18-19, 2009.

The conference goals were to evaluate real time transportation and distribution requirements for the Southeast region as a basis for testing the hypothesis of whether a network of smart and secure trade corridors built upon military and commercial requirements as in Southern California would be feasible and whether a Southeast Agile Supply Network (SEASN) built on the SCASN template would be a useful tool in this analysis. The first day panels were built to test this hypothesis from three independent perspectives: (1) the physical domain; (2) the financial domain; and (3) the information domain. What was hoped for was that a broad spectrum of stakeholder perspective and input would test this hypothesis and suggest use cases for further proof of concept.

Figure 4 I3 Conference Goals

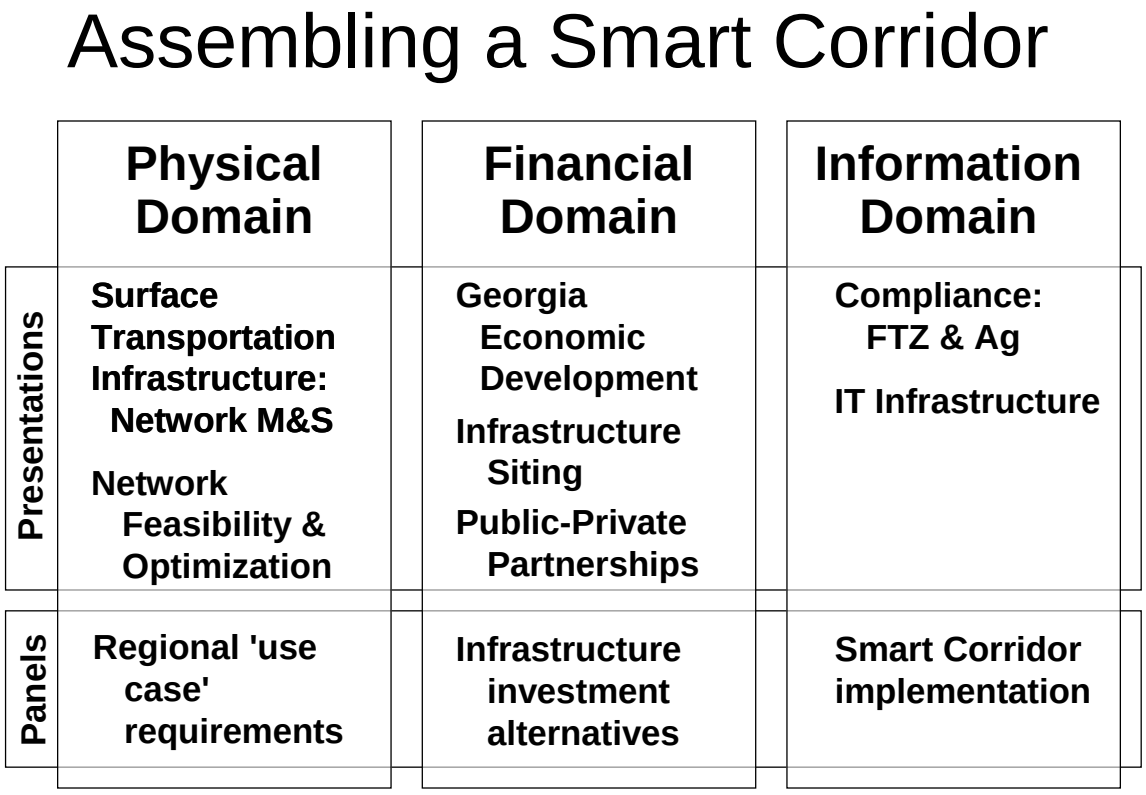

Figure 5 Workshop Panel Presentation Strategy

Conference agenda and format

The first day's agenda was designed both to inform and challenge as well as to elicit the necessary perspective and input to prove this hypothesis. In addition to an SM21 program overview, hands on demonstrations of both the methodology and potential use and value of the SCASN simulation model by webinar from the CSULB campus brought the process to life for the participants and sealed their attention and support of the effort. These presentations naturally lend themselves to a lively discussion with broad participation with sufficient input to begin to discern potential use case requirements that would be persuasive to the various stakeholders.

2.1.1 The first panel theme was multiple perspectives on the potential for freight corridor networks. The panel focused on the physical domain of smart secure trade corridors. These represent the network components of surface transportation infrastructure: nodes arcs ports, highways, rail lines and yards, warehouse and distribution centers. The physical elements provided the physical underpinning for intermodal and multimodal distribution lanes for intercity passenger, military deployment and sustainment, and

commercial freight movement and operations. In the ensuing panel discussion the dual perspective of network bottlenecks as the natural equivalent of priority transportation projects emerged as with the concept of regional congestion phenomenon a natural outgrowth of global trade demand generated economic growth.

Typical of a high growth state (e.g. the port of Savannah is now the 4th largest US container port) transportation planning is often perceived ad hoc and more responsive to developer political pressure versus planned single purpose engineering or multi-purpose which considers all public or public-private financing options. This perspective was later underscored by a post workshop flyover of much of the Macon-Atlanta by helicopter following the hopscotch nature of freeway interchanges and related industrial sites with no rail and poor truck access. Each panelist in turn emphasized the availability of multiple modes of access by road and rail of Smart versus brick and mortar infrastructure value add.

The panel reaffirmed the Southern California experience that warehouse and distribution facilities locate in large part based upon cost of available land, cartage/drayage costs and access to trained skilled workforce. The reaffirmed the need for data for good facility planning, sites and support services. On the later point the panel emphasized the need for port growth driven container storage, a regional truck scheduling and appointment system, information technology tracking and tracing of containers, Less than Truck Load (LTL) consolidation points, cross dock and transload operations, and policies that encourage modal diversion with a goal of 40% of total throughput rail intermodal. They endorsed well planned and integrated inland ports as logistics buffers as in the Agile Port System (APS) connected to marine terminals. They endorsed the application of modeling simulation and on line analytical processing MSA network demand and bottleneck analysis as a necessary adjunct to ongoing transportation planning.

Among the topics discussed were information technology resource utilization and information as a potential additional future revenue source to finance public and private infrastructure. Rail issues focused in the forty per cent market share goal of the ports authority in accommodating port traffic.

Capacity, routing, bottlenecks, changing patterns of transportation and freight flows, and capability and connectivity at the port, growing congestion on the truck routes to Atlanta and beyond provided grist for a lively discussion to get everyone in attendance engaged. Some of the other topics included the need for the greater public community to take an interest in goods movement as they had in California eventually leading to Proposition 1B adoption. There were also concerted calls for the Department of Defense as the nation's largest shipper to influence State transportation investment decisions directly or indirectly. There was discussion concerning the emerging difference between just in time and just in sequence commercial warehouse and supply chain operations and it growing impact upon port operations as at Garden City Savannah for example. There was general recognition of the need for intelligent data collection to support smart and secure trade corridors. On the subject of trucking the growing impact of hours of service limitations on truck drivers and the aging population of the driver pool were cited. The move toward

additional toll roads to finance public infrastructure was recognized as inevitable. Analogous to military terminology the was a general perception of the importance of the Last Mile as smaller trucking companies need information that shipment is available for pickup by a regional web portal or other means. For large and small companies it's all about capacity utilization but with thin margins many cannot afford to buy information. There was a clear impetus for group involvement in State transportation planning through potential coalition building approach.

The highlight was the riveting presentation by Mike Miller of Modalgistics the planning arm of the Norfolk Southern railroad. It graphically illustrated the need for additional rail investment in the Southeast to serve the Northeast and Midwest on the order –and the mirror image of -- of the monumental private investment in the Northeast and Midwest in the nineteenth century.

2.1.2 The second of three panels following the webinar emanating from the California State University (CSU) campus of the SCASN model in operation focused on the financial domain of smart secure trade corridors with the theme being identifying associated costs both public and private, capturing the spread of benefits as in the simulation demonstration, risk and cost shifting. The panel provided use cases in transit related office building sites around nodes as a potential model for warehouse and distribution center clusters, the all importance of capturing value added data, and balancing the multiple investment perspectives of infrastructure provider, user, and investor according to risk profile, Return On Investment (ROI), time horizon and exit strategy. The critical role of information technology in smart infrastructure corridors was repeatedly emphasized in the presentations and ensuing discussions. The application of MSA projects like SCASN to project costs and risks was obvious.

2.1.3

The panel addressed the related topics of economic development, industrial facility sites trends and incentives, and the critical role played by public-private partnerships in this complex endeavor. The stakeholders once again generally got the message and were only too willing to share vignettes of their personal experience and expectations. The highlight was a prepared presentation by St Onge Corporation a national leader in warehouse industrial design and sites a delivered by Kent Hindes of Cushman Wakefield. The perspective was marketing and local opportunities to capture market share. The southeast was depicted beginning with Kia, Mercedes Benz, BMW, Toyota, Nissan and others as the US auto industry of the future. Conversely the "assets' are seen in northern states, while the population is moving south. Education and training future logistics professionals must be part of the message. Insurance and trade tariff impacts on warehouse and distribution centers play a major role in industrial sites decisions as well as cost of land, availability of a trained workforce and transportation connectivity.

The public private partnership presentation was equally stimulating focusing upon return on investment and risk allocation. Local bureaucracies were indentified a particularly

strong hurdles to be overcome in many instances. Examples of many successful deals with both foreign and domestic money sources for bridges, warehouses and other infrastructure were identified and discussed.

2.1.4 The third and final panel developed around the theme of the critical importance of collecting and analyzing freight movement data in location sites, evaluation, and public facility sites. It focused upon information and the pubic requirements of trade compliance –and benefits of foreign trade zones –as enablers of smart secure trade corridors.

The highlights included an overview of State economic development strategy, the potential Role of Foreign Trade Zones in data aggregation for public and private infrastructure planning, the important intersections of country of origin agriculture inspection, and security compliance and regulation and reuse of data in public and private facility planning and services, the need for data collection in land inventory for warehouse and distribution centers, ten plus two required data elements in advance of vessel loading at outbound port extending global supply chains, US CTPAT level 3 benefits of technology validated supply chains insulating shippers against random inspections as the core elements of smart secure trade corridors to shippers. There was consensus on the continuing need for data in supply chain management. There was evident support for long haul rail surface freight synchronization using multi-modal operating system design rail tracking and enhancement tools, synchronization of multiple sources into single shipment, a future regional web portal and a Logistic Relevant Common Operating Picture (LOGCROP).

This series of perspectives rounded out the other presentations and served to validate the underlying hypothesis for all concerned. Company representatives from SAVVIS, Georgia Department of Economic Development, Tommy Berry and Ralph Maggioni representing shippers and foreign trade zones rounded out the day's presentations.

The critical role played by the SM21 program in strategic planning and setting government priorities and expectations on behalf of all stakeholders in detail was highlighted. It was repeated that margins are very thin in the global market. Interdependencies and cost-cutting in one part has ripple effect and impact on others The indispensable impact of foreign trade zones –and the data they generate- in providing the all important lubricant for trade and logistics were highlighted. Automating processes beginning in foreign trade zones result in benefits/savings as well as employment and regional economic impact. There was discussion of merchant processing fees and huge advantages to consolidating entries to reduce fees. The point was reemphasized time and again that data moves freight. Data have value separate and apart from the movement itself. Data capture begins the process of smart infrastructure based upon trade compliance and security. Data is the fount of information by adding context and eventually knowledge the basis of education and training.

Among the participants all transportation modes were represented including the maritime sector represented by Ralph Maggioni, the Norfolk Southern railroad, over the road Landstar and local

dray Collins Industries trucking, third party logistics warehousing and distribution center Spectrum Global Logistics and Penrod, Tommy Berry on Foreign Trade Zones of Point Trade Services, information technology by Col Ed Savacool USA Ret of EMS and Bill Thane of Savvis Technology , State of Georgia by the State Department of Economic Development Bill Dobbs, and the Georgia Ports Authority and Department of Transportation by Page Siplon, Real property relocation by Kent Hindes, national representative of Cushman Wakefield, and Bob Walsh of Loop Capital Markets on public private partnerships, and well as academic representatives from CSU Long Beach and Georgia Southern University.

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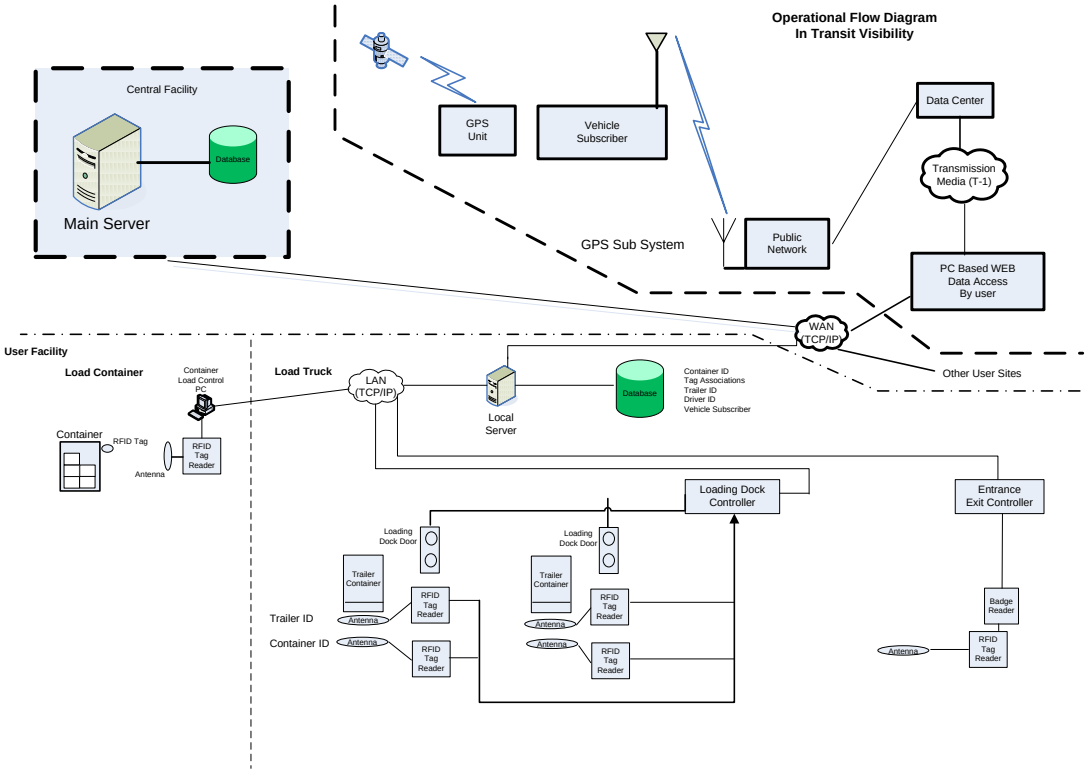

Figure 6 Data captured at strategic seaport - The Beginning of a "Smart Corridor"Secure Trade

As the workshop and stakeholder discussions highlighted and reemphasized emphatically, the concept of a smart secure trade corridor begins with the data, and more precisely data capture. The eventual intent of the SM21 program is to capture trade data at the upstream origin source – the purchase order at the foreign vendor through the ten plus two additional data elements concerning a shipment required to be filed with US Customs under the Container Security Initiative beginning in January 2010 with the penalty for non-compliance denial of permission to load the container on the vessel at the outbound port. The SM21 program intent is to build a web service based upon trade compliance –classification and ten plus two – and to semantically enable the data for reuse to drive the JDDSP from upstream. The intermediate node is the inbound port of entry e.g. the port of Savannah where the SM21 program would with shipper's

permissions like to tap into the electronic data interchange message stream as in the Dole Foods use case in the ports of Los Angeles-Long Beach. This links the shipment with a carrier, vessel, and marine terminal operator. Figure 6 depicts the process of data capture at the marine terminal berth through the truck or rail gate and onto the outbound local dray truck and intermodal rail at the near dock facility as at the Port of Savannah (By comparison the Ports of Los Angeles-Long Beach utilize both on dock and near dock intermodal facilities to form unit trains bound for inland rail facilities in the Midwest and southeast.).

The shipment data would be captured and reconciled at the secure inland freight hub (e.g. Fort Gillem) server with radio-frequency tag data on containers and individual shipments (nested tagging) at the marine terminal in the port complex. The containers would then be associated with a chassis for truck pickup or a in intermodal double stack rail car for unit train movement and tracked to inland destination point a warehouse and distribution facility or an intermediate freight hub for cross-dock or transload to a fifty three foot over the road trailer for the final store door move to a warehouse or distribution facility for stripping and storage in inventory or moved by domestic rail to another inland warehouse facility by another store door move. The addition of a system of associating shipments with containers and eventually conveyances –including the vessel, chassis, rail car and tractor/driver through both the message traffic as a surrogate for the shipment, and the shipment itself through Radio Frequency Identification (RFID) tags, together provide continuous end to end in transit visibility especially the local or regional dray move from port to warehouse. Together this capability achieves simultaneously virtual supply chain integration as between individual shippers and their carrier partners, Customs-Trade Partnership Against Terrorism (CTPAT) level 3 technologically verified supply chain security for all shippers moving in a given verified distribution lane, and an aggregated view of shipments by commodity, sector and origin-destination pairs in a given regional distribution lane e.g. Savannah-Atlanta. In turn, the aggregation of these distribution lanes when superimposed upon the grid of arcs and nodes including the Strategic rail and highway routes comprises the Southeast Agile Supply Network when represented in the time domain discrete reference model.

The distribution lanes become the smart secure trade corridors that comprise the regional network. Figure 7 depicts a typical smart secure green freight corridor. It includes some of the capabilities derived from comprehensive data capture and freight monitoring within the smart corridor including: dynamic load planning and re-planning, truck scheduling and appointment system, freight matching (backhaul), off dock container interchange (virtual container yard), freight security etc.

Components of a Smart Secure Trade Corridor include:

- Wireless communication network Backbone
- Systems integration
- Video displays and monitoring
- Autonomic freight data capture

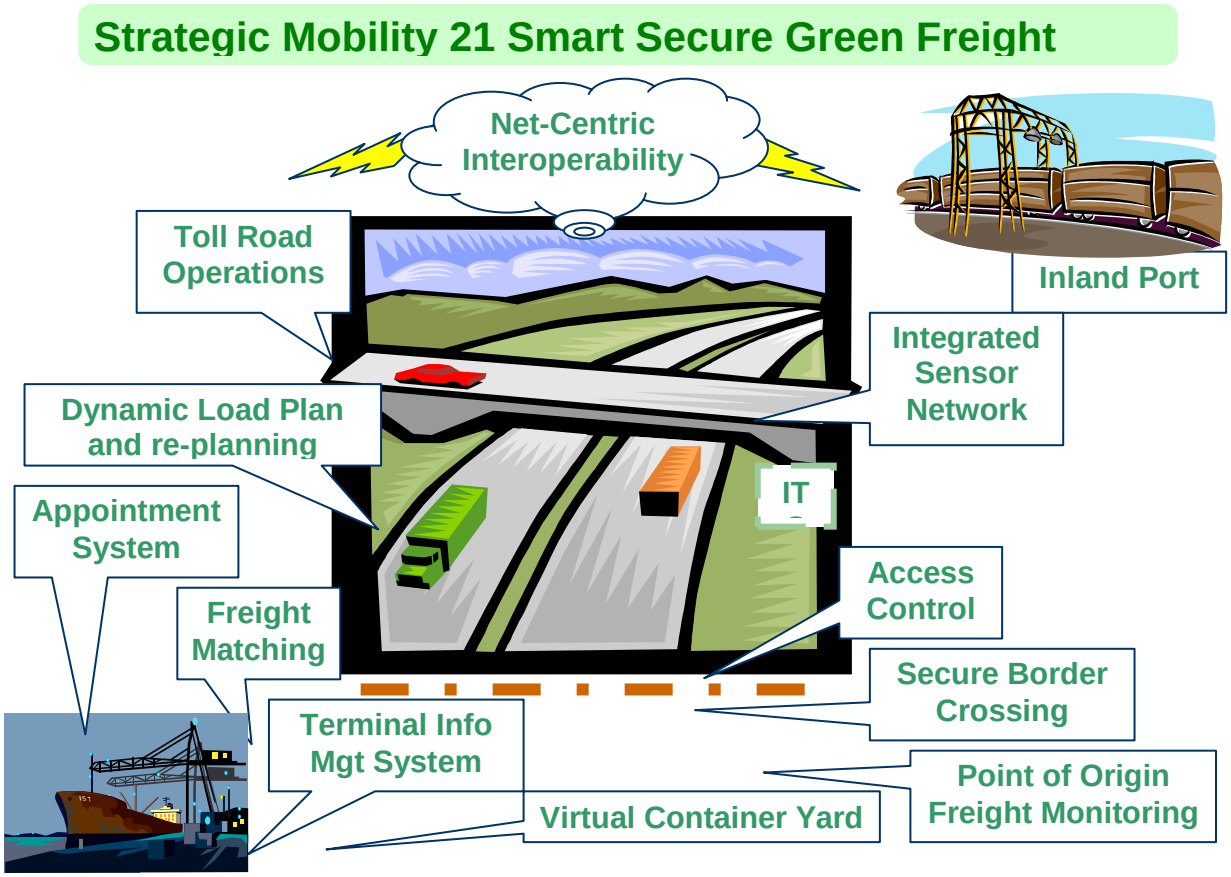

Figure 7 Smart Secure Green Frieght Corridor

The aggregate benefits from incorporating a smart secure trade corridor system into a State transportation plan include:

- *Improvement in Statewide goods movement patterns*
- *Mitigation of transportation impacts on air quality and public health*
- *Reduction in regional congestion in high volume trade corridor areas*
- *Improvement in security and visibility of goods in transit*
- *Creation of public-private-partnership opportunities*
- *Enhancement of infrastructure planning and investment in advance of projected trade volume*
- *Encouragement of commercial best practices and technologies to integrate freight traffic management on critical trade corridors*
- *Promotion of interoperability with other states borders and corridors*
- *Development of a commercial trade corridor model that can be replicated collaboratively with other global trading partners*
- *Establishment of advanced vehicle tracking infrastructure to manage traffic, provide visibility, and improve security*
- *Provision of monitored load and unload facilities*
- *Improved efficiency at marine/intermodal terminal gates and borders*
- *Construction of integrated fiber optic and wireless and communication networks along smart corridor rights of way*
- *Provision of real time sensor data and air quality compliance monitoring to improve safety and reduce pollutants*
- *Provision of truck route planning and load matching to optimize conveyance utilization*

Smart secure trade corridor benefits include:

- *Reduced emissions and validated goods movement impact on environment*
- *Improved freight security with technology and CTPAT verification*
- *Increased cargo velocity and visibility*
- *Decreased regional traffic congestion*
- *Enhanced public safety and security*

3.0 Summary Conclusions and Lessons Learned

Summary Conclusions:

The Savannah workshop identified and discussed core components of the Southeast Agile Supply Network supply chain and "As Is" aggregate logistics business process. Driving this network are transportation modes and the infrastructure(s) which support them; rails, roads and communications. As each component is incrementally improved, so is the overall chain and network. The opposite also holds true. As a component is degraded so is the total output and efficiency of the network. The network is comprised of interdependent military and commercial components. The network must perform to its best during military Rapid Deployment and now retrograde reverse logistics for theater back to Continental United States (CONUS) installations and depots. Removing the conflicts of military and commercial logistics operations is ultimately vital to the reliability and sustainability of the Southeast Agile Supply Network (SEASN) and economy as a whole. The benefits of a robust regional supply chain network inevitably impact the economic well being of the region and the nation as a whole.

Ultimately, the brunt of the burden to accommodate trade driven economic growth inevitably falls on surface transportation infrastructure and all the network components therein. Without an efficient, sustainable, safe, secure, reliable and robust infrastructure prospects for the southeast to capture the benefits of growth for economic recovery and a rapid return to regional economic prosperity are problematic. Planning for the "To Be" regional smart secure trade network must begin now with input from key stakeholders upon which to build a bi-partisan political consensus. To that end, well defined smart and secure surface corridors, and eventually Enhanced Strategic Corridors, by definition, are vital to maintaining the free unfettered flow commerce and worthy of consistent and well placed investment by both the public and private sectors with broad based public support and confidence. The results should be enshrined in the State's Transportation Plan for long term investment.

The Savannah workshop abounded with stakeholder insights and positive lessons learned that can be readily applied to the way strategy ahead for the SM21 program. These include:

- 21st century smart corridors will be built upon concurrent 20th century road-rail network footprint with double/triple high speed rated tracking of southeast trade corridors to serve Midwest and northeast
- Southeast and southwest ports and warehouse/distribution center clusters will serve other regions
- Land, multi-modal accessibility, skilled workforce, energy cost/carbon footprint, and inv/regional congestion mitigation concerns dictate multi-modal corridor strategy and

State Metropolitan Planning Organization (MPO) planning

- Public-private partnerships are preferred development strategy to tap global capital markets for investment

- Trade compliance/security regulation (10 plus 2, CTPAT) are bridge to Smart Secure Trade Corridors

- Data, information, and knowledge obtained and technology will move transportation and logistics from hunting/gathering of freight to trade corridor rationalization (nurturing and husbandry)

- Regional Modeling, Simulation and On line Analytical Processing tools are needed to conduct regional feasibility and optimization, and individual business use studies to support rational planning and investment

- Pilot projects should be designed to prove multi-modal trade corridor concept with high-speed passenger, freight (including Above Ground (AG) products), and military rapid deployment/agile sustainment objectives in mind

- High speed corridors will combine 190 pound continuously welded triple track rail with high/wide and positive train control capability and embedded fiber optic for data transmission

- Federal economic stimulus and Federal Highway System Reauthorization are vehicles for Smart Secure Trade Corridor enabling

- Strategic "super corridors" combining transportation and communications/fiber optic backbones can support a new generation of interactive Right-of-Ways (ROWs). The yields are improved efficiencies, data gathering, security and dispatch management, as well as enhanced revenue streams by accommodating multiple use within a multi tasked corridor.

- Public-private partnerships (P/PPPs) and their derivatives are becoming more popular in large projects with heavy capital requirements. Formerly, public bond issues carried the "weight" of the finance with Return on Investment (ROI) fueled by use taxes and toll ways. Lack of readily available, liquid capital is one consideration. Balancing finance against ROI new starts and maintenance is a sure way to project prioritization based on revenue potential and appropriateness. A relationship seated in finance models considering public/private capital, public need/project priority, new starts v. maintenance, deferred maintenance v. safety and ultimately rate of return on investment are the key components in advancing infrastructure finance as well as PPIs.

- Proper capture, collection, accessing, storage and use of data yields real time and future benefits. Efficiencies, management, modal interaction, security and enhanced dispatch are only a few of the areas impacted by robust data collection and usage. The concept of

combined transportation and communications 'super corridors' as well as a global maritime tracking grid are keys to the future of enhanced transportation across all modes.

- Foreign Trade Zones (FTZs) are the data underpinning in the import/export arena. Profitability hinges on trade rates, currency exchange rates, customs compliance, country of origin and product accountability. FTZ clearly defines tax/duty advantages which directly impact import/export viability in the global marketplace.

- Warehouses and distribution centers are a vital link in the global supply chain. Location, infrastructure, access to modal variety define the quality and success of the warehouse distribution center investment.

- The port of Savannah and its counterparts are the gateway to the Southeast agile Supply Chain network. An inefficient, insecure port is the worst case scenario. Increasingly, shippers are taking control of their sea to land integration exposure to control costs, efficiencies, safety, security and the like. Modal interaction is also key to the viability of a Port operation. Without question, contingent planning needs to be in place for any incident requiring military and civilian interaction either on a day to day basis or within a crisis situation.

4.0 The Way Ahead and Next Steps

4.1 Georgia Senate Resolution 295

Independent of the Savannah workshop, the Georgia State Senate unanimously adopted Georgia Senate Resolution 295 "Requesting the implementation of a Strategic Deployment-Distribution Corridor Network by the Georgia Ports Authority and the Georgia Departments of Transportation, Economic Development, and Agriculture with assistance from the Georgia Congressional delegation; and for other purposes."

The legislative body expressly noted that "the Strategic Mobility 21 program funded by the U.S. Department of Defense, in collaboration with Georgia Southern University and other academic institutions, is facilitating the study and implementation of a network of rapid deployment-distribution corridors with the development of a Southeast Regional Agile Supply Network Model.".

The State Senate memorialized that "the members of this body request collaboration between the Georgia Ports Authority and the Georgia Departments of Transportation, Economic Development, and Agriculture in the development and implementation of Strategic Deployment-Distribution Corridors.". Specifically, they requested that in order to "further the ongoing efforts of Strategic Mobility 21, the Georgia Ports Authority and the Georgia Department of Transportation are encouraged to designate a network of Strategic Deployment-Distribution Corridors, incorporate this network in its state transportation plan, and seek assistance for implementing this network through federal funding.

Incorporation in the State Transportation Plan is nothing short of the ultimate endorsement of the SM21 proposed Southeast smart and secure trade corridor network. Hortatory language sets the vision. Implementation will take planning, collaboration, time and resources to execute

4.2 Stakeholder Workshop Participant Recommendations

Other recommendations specifically endorsed by the workshop stakeholder participants must be given equal weight given their broad depth and perspective. These include:

- The Southeast Agile Supply Network (SEASN) Model should be completed, populated (rail, road data), and exercised/validated using military rapid deployment and dual use business case scenarios

- The Model should be submitted to United States Joint Force Command (USJFCOM) and US Transportaion Command (USTRANSCOM) for accreditation as potential end to end joint logistics adaptive planning and education and training Modeling, Simulation and Analysis (MSA) capability for incorporation in Joint Force Trainer Toolkit

- The Model should be validated by State transportation and port planning agencies and Metropolitan Planning Organizations (MPOs) for evaluating candidate projects for public investment

- The Model can serve as analytical trade study support for State economic development strategy attracting business investment

- The Model should be used for feasibility and optimization planning of Public Private Partnership (PPP) pilot projects

- Smart secure trade corridors should receive funding recognition including related priority project funding in 2009 Federal Highway Bill reauthorization

4.3 Fort Gillem Base Realignment and Closure and smart secure Network potential operations center

When the Savannah workshop was held the potential for dual sue of Fort Gillem as a potential smart secure trade corridor network operations center was hardly on the collective radar screen for the SM21 team and program. Since then it has begun to complement Fort Stewart and the port of Savannah as the other node anchoring the network concept as Southern California Logistics Airport (SCLA) first linked up with the ports of Los Angeles Long Beach to link the trade corridor from port to border accommodating the lion's share of waste coast freight over the decade of the 1990's.

It is indeed an understatement that the Savannah workshop provided a needed catalyst for forces already under way. It is a testimony to the stakeholder participants that so much interest and momentum has been generated in so little time. In the end it was their workshop. The SM21 program only provided the needed spark from which great things may come.

Figure 8 Fort Gillem Reuse Plan

As a direct result of the Savannah workshop, the Norfolk Southern railroad at SM21 request and invitation revisited the Fort Gillem site as a potential central intermodal facility for routing of rail freight by unit train from the port of Savannah through Macon to serve the Midwest and transcontinental traffic through Birmingham Alabama and Meridien MS to the west coast by high speed rail for military, commercial and passenger market segments. The SMN 21 program has now emerged as the fourth party logistics partner for that facility to partially close in 2011 along with the class one railroad and the City of Forest Park, the Local Reuse Authority for the US Army for that facility. Fort Gillem represents in every aspect an ideal candidate for a southeast regional prototype for a Joint Deployment Distribution Support Platform, the dual use military and commercial combination inland freight hub and integrated logistics center envisioned as the signature leave behind for the SM21 program. Best of all the retention by the US Army of a Secure Compartmentalized Information Facility (SCIF), and potential interoperability with Hartsfield-Jackson International Airport in synchronizing high value air freight movement in bond under a common Foreign Trade Zone (FTZ) holds the promise of a world class logistics complex including global logistics education and training in collaboration with local authorities.

Acronyms

3PL	Third Party Logistics
4PL	Fourth Party Logistics
AG	Above Ground
APS	Agile Port System
BNSF	Burlington Northern Santa Fe Corporation (railroad)
BRAC	Base Realignment and Closure
CALMITSAC	California Marine & Intermodal Transportation System Advisory Committee
CONUS	Continental United States
CSU	California State University
CSULB	California State University Long Beach
CTC	California Transportaion Commission
CTPAT	Customs-Trade Partnership Against Terrorism
DoD	Department of Defense
FTZ	Foreign-Trade Zone
GPS	Global Positioning System
ILC	Integrated Logistics Center
IT	Information Technology
ITS	Intelligent Transportation System
JDDSP	Joint Deployment Distribution Support Platform
JLETT	Joint Logistics Experimental Training Testbed
LAN	Local Area Network
LOGCROP	Logistics Common Relevant Opertional Picture
LRA	Local Redevelopment Authority
LTL	Less Than Trailer Load
MPO	Metropolitan Planning Organization
MSA	Modeling, Simunlation, and Analysis
PPP	Public Private Partnership
P/PPI	Public/Private Partnership Investment
RFID	Radio Frequency Identification
ROI	Return On Investment
ROW	Right-Of-Way
SCASN	Southern California Agile Supply Network
SCIF	Sensitive Compartmented Information Facility
SCLA	Southern California Logistics Airport
SDDC	Surface Deployment and Distribution Command
SEASN	South East Agile Supply Network
SM21	Strategic Mobility 21
STIP	State Transportaion Improvement Plan
STRACNET	Strategic Rail Corridor Network
STRAHNET	Strategic Highway Corridor Network
TEA	Transportation Engineering Analysis
UPO	Units Per Order

USA	United States Army
USAF	United States Air Force
USJFCOM	United States Joint Force Command
USTRANSCOM	US Transportation Command
WAN	Wireless Area Network

Appendix A

I 3 Pre-conference Survey

1. What is your primary field of knowledge and experience?
   a. International trade
   b. Transportation
   c. Logistics
   d. Information technology
   e. Finance or real estate

   (include a comment block if they want to give more info)

2. What type of organization do you represent?
   a. Federal agency
   b. State agency
   c. County or Municipal agency
   d. Non-profit organization
   e. For profit company

   (include a comment block if they want to give more info)

3. What are your primary reasons for attending this workshop? (choose up to three)

   a. To learn about emerging logistics, transportation, and information technology concepts and capabilities
   b. To have a voice in the public policy discussion on freight mobility and infrastructure planning and financing
   c. To improve my efforts to capture international trade and logistics business opportunities
   d. To expand and/or strengthen my network of transportation and logistics professionals
   e. To learn more about specific public-private investment opportunities
   f. To inform on-going academic or public policy research
   g. To communicate informally with public and private decision makers

   (include a comment block if they want to give more info)

4. Outcomes you expect for this workshop (again, choose up to three):

   a. A strategy for capturing future trade-generated economic growth and impact on regional transportation and congestion
   b. A method for sharing commercial or industrial best operating practices
   c. Formation of community of interest to share information, collaborate, and communicate
   d. A plan for pursuing public-private investment opportunities or projects
   e. A decision process to guide pursuit of expansion opportunities
   f. Initiate academic research project

g. Formulation of public policy recommendations
h. Elicit industry input on public policy decisions

(include a comment block if they want to give more info)

Post conference survey

i. Did you attend Feb 18 _____ and /or Feb 19 _____ sessions?

j. Did you learn about new logistics distribution or transportation concepts or capabilities, or infrastructure financing techniques?

k. Can you use any the knowledge gained in your agency, entity, business or profession?

l. Did you download and read any of the pre-briefing materials? _____

5. If so were they relevant and helpful for the discussions that followed? _____
6. If not, what would you like to have seen _____

7. (5) Was there adequate time allotted to treatment and discussion of topics of your interest? If not, what would you do differently? _____

8. (6) Were the educational topics and briefings on day one useful or enlightening?

9. (7) Would you like to see other similar topics covered in a future seminar/workshops? If so, which topics:

10. (8) What did you think of the conference facility overall?
11. Inadequate_____ If so, why _____
12. Adequate_____
13. Good _____
14. Outstanding _____

15. (9) What did you think of the food and refreshment service(s)?
16. Inadequate_____ If so, why _____
17. Adequate_____
18. Good _____
19. Outstanding _____

20. (10) What did you think of the Day Two facilitators?
21. Inadequate_____ If so, why _____
22. Adequate_____
23. Good _____
24. Outstanding _____

25. (11) Would you attend a future workshop/seminar by the co-sponsors?

26. Suggested Topics: (1) _____ (2) _____ (3) _____

27. (12) Are you interested in joining a community of interest network to continue discussion of topics discussed or other relevant topics and/or advance public policy recommendations reflected in the workshop discussion?

28. (13) Would you recommend to a friend or associate to attend a future workshop or join a community of interest network?

Appendix B

I3 Conference Agenda Savannah GA Final

Day 1

Our purpose on Day 1 will be to learn about on-going developments in intelligent infrastructure, and establish a common awareness of the physical, investment, and information perspectives of smart corridors.

8:00-8:30 AM Welcome Dr Larry Mallon SM21, Dr Jerry Wilson GA Southern
Ben McCulloch Facilitator

8:30-9:00 AM Green Freight Corridor Concept Dr Larry Mallon Multi-purpose corridor straw man: Freight, passenger, military

The Physical Domain	Presentation	Surface Transportation Infrastructure: *Modeling and Simulation Network Analysis*	Ed Savacool, COL (USA-Ret), Enterprise Management Systems, Inc.
	Presentation	Network scenario feasibility and optimization: *Colton Crossing (CA) Case Study*	Dr. Burkhard Englert, CSULB
	Panel Discussion	Physical components of multi-purpose trade: *Transportation, and Rapid Mobility Corridors*	Moderated by Dr. Larry Mallon, SM21
The Financial Domain	Presentation	Facility Investment: Recent Research Trends and Emerging Issues	Kent Hindes, Cushman Wakefield
	Presentation	Georgia: A Global Business Center	Mr. Bill Dobbs, GA Dept. of Economic Development
	Presentation	Developments in Public Private Partnership financing	Mr. Bob Walsh Loop Capital
	Panel Discussion	Innovative infrastructure financing: *Public Private Partnerships and Institutional Arrangements*	Moderated by Dr. Tom Case, Georgia Southern University,
The Information Domain	Presentation	Trade Compliance: Information challenges and opportunities	Moderated by Mr. Tommy Berry, Point Trade Services LLC
	Presentation	Web services and Networked	Mr. Bill Thane, SAVVIS

	Computing	
Presentation	Federal Trade Zone Information requirements	Mr. Ralph Maggioni
	Information (data) and compliance for multi-purpose corridors: *Supply Chain Management, Facility Siting, Homeland Security and Trade compliance*	Mr. Tommy Berry, moderator

Time	**Topic**	**Details**	**Speaker**
8:00-8:10A	Welcome		• Dr. Larry Mallon, SM21 • Dr. Jerry Wilson, Georgia Southern University
8:10-8:30A	Introduction		• Dr. Larry Mallon, SM21 • Dr. Jerry Wilson, Georgia Southern University
9:00-9:45 A	Presentation # 1	Surface Transportation Infrastructure: *Modeling and Simulation Network Analysis*	Col Edwin M. Savacool, USA (Ret)
9:45-10:00A	Break		
10:00-11:30A	Panel #1	Surface transportation infrastructure requirements as Physical components of multi-purpose corridors: *Transportation, and Rapid Mobility Corridors*	• Norfolk Southern Railroad • Landstar Trucking • Edwin M Savacool
11:30-12:30P	Presentation # 2 (WebCast)	Network scenario feasibility and optimization: *Colton Crossing (CA) Case Study*	Dr. Burkhard Englert, California State University Long Beach (CSULB)
12:30-1:30P	Lunch		
1:30-2:30P	Panel #2	Innovative infrastructure financing: *Public Private Partnerships and Institutional Arrangements*	• Bob Walsh, Loop Capital • Bill Thane, SAVVIS data • Dr. Larry Mallon • Dr. Tom Case, Georgia Southern University
2:30-	Break		

Time	Topic	Details	Speaker
2:45P			
2:45-4:15P	Panel #3	Information (data) and compliance for multi-purpose corridors: *Supply Chain Management, Facility Siting, Homeland Security and Trade compliance*	• Bill Dobbs, GA Department of Economic Development (Invited) • Bill Barbee, Penrod • Kent Hindes, Cushman Wakefield • Tommy Berry, Point Trade Services • Ralph Maggioni, FTZ • Dr. Jerry Wilson, GA Southern University
4:15-4:30P	Day 2 preview	Recap Day 1 and outline the Day 2 workplan	Ben McCulloch
5:30-7:00P	Hosted Reception	Central of Georgia Railroad Roundhouse	

Appendix C

Georgia Senate Resolution 295

09 LC 94 0622

Senate Resolution 295

By: Senators Stoner of the 6th, Mullis of the 53rd, Jackson of the 2nd and Staton of the 18th

ADOPTED SENATE

A RESOLUTION

Requesting the implementation of a Strategic Deployment-Distribution Corridor Network by the Georgia Ports Authority and the Georgia Departments of Transportation, Economic Development, and Agriculture with assistance from the Georgia Congressional delegation; and for other purposes.

WHEREAS, the State of Georgia is home to a complex joint logistics network of defense facilities critical to expeditionary warfare and global force projection and includes Fort Stewart, the largest Department of Defense complex east of the Mississippi River and home to the Third Infantry Division and Hunter Army Air Field; Warner Robins Air Force Base, home to United State Air Force strategic mobility aircraft; Fort Benning's power projection support platform; Fort MacPherson, home to U.S. Forces Command; USMC Logistics Command Albany; Moody Air Force Base; and the strategic seaports of Savannah and Brunswick; and

WHEREAS, the Port of Savannah is the fourth largest and fastest growing container port in the United States with the ability to accommodate both commercial and military cargo; and

WHEREAS, the ports of Savannah and Brunswick are linked to other strategic seaports by distributions corridors which are composed of interstate highways to Macon and Atlanta, the Heartland Rail Corridor to Chicago and the Midwest, and rail and interstate highways to the Southwest and Southern California; and

WHEREAS, national intercity high speed rail corridors would enhance rapid mobility, intercity passenger movement, and freight mobility while alleviating regional congestion, improving air quality, reducing energy consumption and carbon emissions, and improving the movement of goods; and

WHEREAS, the establishment of a state-wide rail corridor in Georgia would attract warehouse and distribution facilities to Georgia, increasing jobs in transportation, distribution, and manufacturing; and

WHEREAS, the addition of intelligent transportation systems and related information technology can further enhance current road and rail corridors in terms of improving capacity and efficiency while decreasing congestion and can potentially generate additional revenue sources to finance infrastructure improvements; and

09 LC 94 0622

WHEREAS, by expanding international, trade-driven economic development, Georgia counties situated along strategic deployment-distribution corridors will thrive from economic stimulus, and the need for additional trained workers will increase the enrollment in Georgia's institutions of secondary education and higher learning; and

WHEREAS, the Strategic Mobility 21 program funded by the U.S. Department of Defense, in collaboration with Georgia Southern University and other academic institutions, is facilitating the study and implementation of a network of rapid deployment-distribution corridors with the development of a Southeast Regional Agile Supply Network Model.

NOW, THEREFORE, BE IT RESOLVED BY THE SENATE that the members of this body request collaboration between the Georgia Ports Authority and the Georgia Departments of Transportation, Economic Development, and Agriculture in the development and implementation of Strategic Deployment-Distribution Corridors.

BE IT FURTHER RESOLVED that, to further the ongoing efforts of Strategic Mobility 21, the Georgia Ports Authority and the Georgia Department of Transportation are encouraged to designate a network of Strategic Deployment-Distribution Corridors, incorporate this network in its state transportation plan, and seek assistance for implementing this network through federal funding.

BE IT FURTHER RESOLVED that the Georgia Department of Economic Development and the Department of Agriculture are also encouraged to include the network of Strategic Deployment-Distribution Corridors in their promotional materials for the State of Georgia.

BE IT FURTHER RESOLVED that the Georgia Congressional delegation is requested to work to identify and designate Georgia transportation projects part of the Strategic Deployment-Distribution Corridors as candidates for federal funds.

BE IT FURTHER RESOLVED that the Secretary of the Senate is authorized and directed to transmit an appropriate copy of this resolution to the Georgia Ports Authority, the Georgia Departments of Transportation, Economic Development, and Agriculture, and members of the Georgia Congressional delegation.