3rd METRANS National Urban Freight Conference
October 22, 2009 at 3:30 pm

Presented by:
Melissa Hewitt, P.E.
ofKimley-Horn and Associates, Inc.

In Association with:
Jerry R. Wood, P.E., Consultant
Director of Transportation and Engineering
Gateway Cities Council of Governments

Gateway Cities
ITS Integration Plan
for Goods Movement
Lessons Learned
Gateway Cities Council of Governments
What is the GCCOG?
And why is it interested in goods movement?

• Sub-regional agency of southeast Los Angeles County
• Represents:
  – 27 cities
  – Unincorporated portions of Los Angeles County
  – Port of Long Beach
  – 2.2 million residents
Gateway Cities Area Map
Gateway Cities Council of Governments
Goods Movement Issues

• GCCOG area is bordered by the Ports of Long Beach and Los Angeles to the south

• Logistics industry that services the two ports has significant impacts to communities in the GCCOG area
Gateway Cities Council of Governments
Goods Movement Impacts/Needs

• Railroad System
  – Grade separate numerous existing at grade crossings
  – Large areas needed for additional rail yards (plus warehouses/distribution centers)
  – Significant mainline track additions

• Freeways
  – Major freeway improvements (modernize/expansions) for all freeways in the GCCOG area
  – Separate freight corridor is needed (at request of local communities) to separate passenger vehicles and trucks to greatest extent possible

• Environmental
  – Adverse air quality has resulted from port and logistic operations (especially diesel emissions)
  – Improving air quality is number on issue for GCCOG communities.

Efficient goods movement will be critical element
for any landside infrastructure improvements
Transportation Landside Goods Movement
Issues and Needs in GCCOG

- **Freeways**
  - I-5 being widened and further studies being prepared
  - I-710: approved major corridor study in 2005, EIR/EIS underway (to be completed in 2011)
  - Remaining freeways (SR 91, I-405, I-605, and I-105) being analyzed in a feasibility analysis

- **Railroad System**
  - Ports and railroad companies developing projects for additional rail yards
  - Additional track capacity is planned throughout Southern CA
  - Improvements to equipment and operations are planned to reduce emissions
  - Numerous grade separation projects throughout Southern CA are planned, being designed, and/or under way

- **Air Quality**
  - Ports have developed and adopted a Clean Air Action Plan.
  - Railroad companies are making changes to operations and equipment to reduce emissions
  - I-710 EIR/EIS includes an extensive Air Quality/Health Risk Assessment Study (first of its kind in CA)
  - GCCOG is preparing a sub-regional Air Quality Action Plan.

*What is the role of Intelligent Transportation Systems (ITS) in addressing these goods movement issues and needs?*
What is ITS?

The use of technology to improve safety and maximize the productivity and efficiency of the transportation network.

- GCCCOG developed an ITS Strategic Plan for its area that included:
  - Meetings with both public- and private-sector representatives to determine transporting information needs
  - Developing a mission statement

- For the GCCCOG area, ITS is about real-time information exchange:
  - Data gathering
  - Data processing through proven algorithms
  - Solutions
  - Instruction and notification to drivers and others making destination decisions
What is ITS? (continued)

- Understanding that there are a number of ITS projects already under way or planned in the area, the GCCOG
  - Formed a public agency and private sectors ITS working group
  - Proceeded with multiple agencies and prepared an ITS Integration Plan for Goods Movement with input from the ITS working group
Fundamental ITS Objectives for Goods Movement in GCCOG

“The Need for Information”

- Fill infrastructure gaps
- Arterial travel information
- Truck data
- Freight-focused real-time traveler information
- Terminal queues and turn times
- Comprehensive goods movement scheduling system
- Strategy for truck safety and credentialing
Basic Objectives

ITS Integration Plan for Goods Movement

- Creative technology solutions
- Specific data and information needs
- High level concepts
- No fiscal constraints
- No institutional constraints

*Private-industry and public-sector objectives both have to be met to achieve high impact results*
Integration and Policy Task Force
(ITS Working Group)
Ongoing and Future Role

• Coordination for real-time operations strategies
• Liaison with long-term planning activities
• Recognize private sector as a crucial partner
• Management and/or operational oversight of a goods movement TMC’s:
  – Operational strategies
  – Staffing
  – Legal issues
  – Future endeavors
Based on Input from

PRIVATE INDUSTRY

• International Warehouse Logistics Association (IWLA)
• Railroads
• Terminal Operators
  – Via ATMIS interviews
• Web-based GM Services
  – Via ATMIS interviews
• AAA
• CA Trucking Association
• West Coast Corridor Coalition

PUBLIC SECTOR

• California Highway Patrol
• Caltrans
• FHWA
• Federal Maritime Administration
• Gateway Cities Council of Governments
• LA County Department of Public Works
• LA County METRO
• Port of Long Beach
• Port of Los Angeles
• SCAG
Recommended Projects

- Complete Critical Already Programmed Projects
- Short-Term Recommended Projects
- Future Potential Projects
- Support of Future Infrastructure
Integration Plan

New Detectors
- LA County DPW KITS
- City of Long Beach
- City Signal System

New Downstream Arterial Detectors

Gateway Cities Arterial Data Collection, Processing, and Dissemination

Data Sharing (RIITS)

Construction data
- Public
- Private

Air Quality Data

Truck parking

Gateway Cities Arterial Data Collection, Processing, and Dissemination

3rd Party truck service

Terminal Turn Times

Truck Drivers

Truck Dispatch

DATA COLLECTION & PROCESSING

Queue Detection

Reverse 911

Public Scheduling System

Private Scheduling System

Truck Dispatch

Container Tracking

GOODS MOVEMENT TMC

ATMIS

Private ISPs

511

Caltrans

Private 3rd Party truck service

ATIS

LOCATION

Routing

ATTIS

Public

Private
Next Steps for ITS Projects

• Implementation: Plan to develop in more detail
  – Update and define recommended projects (ITS Implementation Plan to be developed in 2010)
  – Integrate Concept of Operations
  – Develop Business Plan for Implementation
  – Business considerations need to continue to be evaluated and factored in
  – Determine:
    – Procurement options
    – Institutional arrangements
    – Program costs (capital and permanent O&M)

• Continue and expand ITS Working Group Meetings
ITS Business Plan for Goods Movement

The Five Parts to Make it Pay-Off

1. Technology Infrastructure
2. Coordinated, Real-Time Operations Information
3. Business Decision/Information Flow
4. Public Decision/Information Flow
5. Policy and Investment Decision-Making

BENEFITS
Lessons Learned

• Public-/private-sector ITS working group was effective and will continue

• Many potential but “discrete” ITS projects that can provide benefits for goods movement in GCCOG
  – Need to be blended together for implementation

• Any ITS implementation plan that does not provide benefits for both public and private sectors will not be successful

• A business plan is a critical element to successfully implement the variety of ITS projects for goods movement

• ITS projects for goods movement involve:
  – Multiple agencies which require coordination
  – Wide and diverse array of businesses which have to be considered.
Conclusion

ITS has the “potential” to address both public and private sectors transportation information needs if successfully implemented and useful for both sectors.
Presented by:
Melissa Hewitt, P.E.

of
Kimley-Horn and Associates, Inc.

and

Jerry R. Wood, P.E., Consultant
Director of Transportation and Engineering
Gateway Cities Council of Governments