GATEWAY CITIES TECHNOLOGY PLAN FOR GOODS MOVEMENT

“Technology Helping Goods Move Efficiently”

TECHNOLOGY APPLICATIONS can transform the freight industry by creating a safer, stronger, and more efficient system for moving people and goods on our highways, railways, waterways and ports. Applications like state-of-the-art communications for vehicles and information sharing can transform how the drayage industry collaborates and operates at the San Pedro Bay Ports on a daily basis. These applications will be critical in the face of growing demand at the Ports and congestion in the region.

The Gateway Cities Technology Plan for Goods Movement study has created a wide ranging program to apply technologies to improve goods movement in the Gateway Cities and the larger Los Angeles County region. This program is comprised of six separate but interrelated projects focusing on traveler information, traffic management infrastructure, and safety/enforcement, as well as private sector drayage and terminal management technologies. The Plan was developed by the Gateway Cities Council of Governments and the Los Angeles County Metropolitan Transportation Authority in partnership with the Ports of Long Beach and Los Angeles, Caltrans, the drayage industry, and many other key stakeholders.

THE GATEWAY CITIES TECHNOLOGY PLAN FOR GOODS MOVEMENT INCLUDES:

- Research on the latest trends and best practices in technology applications for goods movement;
- Detailed descriptions of projects for new and expanded technology applications for Gateway Cities identified by the 2008 ITS Integration Plan for Goods Movement (an earlier phase of this project);
- Exploration of technologies such as zero emission vehicles and connected vehicle technologies that support emerging concepts for I-710 freight corridor;
- A concept of operations and business plan that ensures real-world projects that can be implemented in the near-term as the outcome of the Technology Plan.

FAQ

HOW COULD THIS PROJECT HELP YOU?

• Problem: Truck traffic on freeways costs truck operators time and money.
  • Solution: This project identifies technology applications that can save truck operators time and money by providing them and their dispatchers with the real-time traffic information to avoid congestion hotspots.

  “By providing dispatchers with the real-time traffic information they need to avoid congestion hotspots, truck operators will be more efficient.” - Mike Johnson, Port Logistics Group

• Problem: A lack of accurate real-time information for drayage operations can lead to expensive and wasteful dry-runs and unnecessary Haiti.
  • Solution: This project focuses on how to get drayage truck operators the information they need to improve operations and track drayage equipment.

  “Through load optimization, this project provides information on where loads need to be picked up and dropped off allowing empty - loaded and wasted trips.” - Tiffany Melvin, North American Strategy for Competitiveness

• Problem: Information about delays at port terminals is not always available to truck operators.
  • Solution: This project improves the efficiency of truck movements in and out of the port terminals.

  “With advanced information, everyone can plan their day better and achieve operational efficiencies.” - Mike Johnson, Port Logistics Group - Express Transport

• Problem: Idling trucks and inefficient truck operations pollute the air and negatively impact public health.
  • Solution: This program reduces the empty moves that pollute the air and create unnecessary congestion.

  “We’re looking in the next twenty years or so as a doubling of our volume of cargo, an issue that involves all of our partners.” - J. Christopher Lytle, Port of Long Beach

• Problem: Truck congestion on regional roadways leads to longer travel times, which increases the cost of doing business in the region.
  • Solution: This program includes improvements such as better truck fleet communications and advanced information on real-time traffic information, traffic incidents, weather, hazardous materials, and routing restrictions. These advancements support truck operators making better routing decisions, which makes it easier to avoid heavy traffic and deliver shipments on time.

  “To maintain the region’s economic competitiveness, we need to move cargo efficiently, in a cost-effective way.” - Gill Hicks, Cambridge Systematics

• Problem: How will the growth in truck traffic be accommodated, even with the currently planned I-710 corridor improvements?
  • Solution: The technology that will allow trucks to drive autonomously on a dedicated road is advancing rapidly and demonstrating impressive benefits to safety and efficiency.

  “It is likely that within thirty years this will be a reality, allowing 2 to 3 times the current number of trucks to travel safely, efficiently and emissions-free on an I-710 freight only corridor.” - Jerry Wood, Gateway Cities

HOW COULD THIS PROJECT HELP THE REGION?

- Technology Helping Goods Move Efficiently

PROJECTS

- Freight Transportation Information Systems
- Freight Transfer Information Decimation
- Autonomous Vehicles
- Container Moves Productivity Improvements

For more information or to learn how you can get involved, please contact either:

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The Gateway Cities Technology Plan for Goods Movement is developing several technology applications and operations improvements to move goods safely and efficiently in and out of the region. These projects were identified as part of the ITS Integration Plan for Goods Movement with the support of a Southern California ITS Working Group. With solutions like these in place to address the growing demand for Southern California goods movements, the region will see less congested roadways, cleaner air, and more capacity for economic growth.

Arterial Smart Corridors Project
Arterial corridors critical to freight movement will be identified. Signals will be upgraded/coordinated where appropriate, cameras will be installed to monitor traffic and more timely and accurate information on travel conditions will be provided to the public.

Freeway Smart Corridors Project
Additional traffic sensors, cameras and signs will be added to the Gateway Cities freeway system where needed. Actions will be taken to remove disabled vehicles more quickly.

Autonomous Vehicles Project
The Gateway Cities area will be become a testing ground for new technologies that allow trucks to operate autonomously. Application of this technology to the improved I­710 corridor will help ensure the economic viability of the Ports, reduce congestion on area streets, improve air quality and advance the area as a center for new technology.

Traveler Information and Data Fusion System
Additional data specific to the freight industry will be collected, processed and added to existing traveler information systems. This will help reduce unnecessary trips and improve the economic performance of the industry.

Truck Enforcement Network System
Enforcing weight and safety measures at truck enforcement facilities and through weigh-in-motion technologies will improve safety, reduce impacts on local communities, and save money.

Freight Traveler Information Dissemination
A traveler information sharing program with trucks will improve safety and efficiency.

Container Moves Productivity Improvements
By working together, freight operators, marine terminals, shippers and transportation agencies will use technology to exchange information on traffic and terminal conditions. This will allow more efficient scheduling of freight movements in the region, reducing traffic and truck idling and improving the economic performance of the industry.

Concept of Operations
How do these projects work together?
A Concept of Operations provides specific scenarios that show how these projects work together to benefit both the freight industry and residents of the Gateway Cities area.

Business/Implementation Plan
How do we make these projects happen?
The Business Plan defines the actions to be taken, potential funding sources, stakeholder responsibilities, risks and challenges. A specific set of short-term steps to advance these projects is included.