



THE TIOGA GROUP



INLAND PORT CONCEPTS

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Current Definition

- Ports have always been more than simply locations where ships were loaded and unloaded
 - Seaports attract warehousing, processing facilities, and ancillary services
 - The “inland port” concept refers to the idea that some port facilities could be duplicated or complemented at inland locations
 - promoting economic development and logistics integration inland
 - reducing the demands on scarce space at the seaport
- Tioga has recently completed a review of a large number of Inland Port Projects and found the following categorization of Inland Port Concepts to be helpful to understand the set of widely diverse activities being conducted under the label, “Inland Port.”

Inland Port Concepts

- Inland Ports
 - Satellite Marine Terminals
 - Multi-modal Logistics Parks
 - Rail Intermodal Parks
 - Logistics Airport Parks
 - Trade Processing Centers
- Related Concepts
 - Networks and Corridors
 - Economic Development Initiatives
 - Agile Ports

Satellite Marine Terminal

- The *Satellite Marine Terminal*



LOCAL TRUCKING



INLAND PORT



RAIL SHUTTLE



SEAPORT

Potential of Other Inland Port Models

- The *Trade Processing Center, Logistics Airport, Networks and Corridors, and Economic Development* models are focused on encouraging economic development rather than reducing VMT or congestion.
- The *Logistics Airport* model is already the focus of the SBIA, SCLA, and March Global Port initiatives.
- *Rail Intermodal Parks* have been less successful than Multi-modal Logistics Parks.
- These Inland Port models do not promote the primary transportation goals of this project, but may support regional or sub-regional goals for targeted economic development.

Summary Inland Port Purposes and Benefits

An inland port following one or more of the models established elsewhere could serve the following purposes in the SCAG Region.

- **Freight Traffic Congestion Reduction.** By diverting port-related truck trips to rail, development of an inland port could reduce the net truck VMT required to transport future cargo volumes.
- **Emissions Reduction.** By diverting port-related truck trips to rail, development of an inland port could also reduce the net emissions (especially diesel particulate matter) associated with future freight flows.
- **Influencing Economic Development.** By encouraging efficient patterns of logistics-related business development, the presence of an inland port could assist in achieving long-term land use policy goals for inland areas.
- **Increasing Port Capacity.** By reducing the dwell time of those import and export containers it handles, an inland port can increase the effective throughput capability of port facilities.

Truck VMT and Emissions Reduction Issues

- Rail capacity
- Location and site
- Bobtail, empty chassis, and container depot trips
- Port rail operations and infrastructure requirements
- Institutional issues
- Market appeal and potential
- Truck VMT and truck/rail tradeoffs
- Inland port/railroad relationship

Logistics Development Issues

- Inland port functions and features
- Appropriate development mechanism
- Realistic market assessment
- Potential locations
- Development “champion”
- Competition with existing initiatives



“Inland Port” Case Studies

Satellite Marine Terminals

- Virginia Inland Port
- Metroport, New Zealand

Multimodal Logistics Parks

- Alliance, Texas
- Port of Huntsville, Alabama
- Rickenbacker/Columbus Inland Ports
- Logport, Duisburg Germany

Logistics Airports

- Europort Vatry (France)
- San Bernardino International
- Kelly USA/Port of San Antonio, TX
- Southern California Logistics Airport (Victorville)
- March Global Port
- Global TransPark

Shuttle Services

- Albany, NY Barge Service
- Worcester-Keary Rail Shuttle

Rail Intermodal Parks

- Joliet Arsenal (JADA)
- Global III, Rochelle, IL
- Port of Quincy, WA
- CILC, Shafter, CA
- Neomodal, Stark Co., Ohio
- Detroit Intermodal Freight Terminal
- Port of Montana

Networks and Corridors

- PANYNJ Port Inland Distribution Network
- Heartland Corridor
- North American Inland Ports Network

Trade Processing Centers

- Richards-Gebaur
- Port of Battle Creek
- Kingman, AZ ITPC
- Greater Yuma Port Authority

Economic Development Initiatives

- KC SmartPort

Port Capacity and Land Use Issues

- Potential terminal dwell times by movement type
- On-dock and near-dock loading options
- Agile port operational options
- Port/rail system throughput
- Candidate ancillary inland functions
- Institutional issues
- Potential locations

