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Since the advent of the commercial steamship, the development of the national rail system, and later the application of the internal combustion engine to the truck, the break-bulk method of moving freight through both the national and international transportation systems remained virtually unchanged. Modal operators were paramount with a bill of lading required for each segment of the overall movement. Cargo was rarely visible within the system, with delays and losses as an accepted part of the operation.

The development of the ocean container in 1956 and the attendant twenty-year transition period changed the entire concept of moving freight. The container and flat rack were the only pieces of equipment which were common to the entire system. At the same time, the global economics of business changed both the needs and the expectations of customers. During the past ten years the evolution from containerization, to intermodal systems, to distribution and third-party logistics-providers has been customer driven. The prime needs of the customer involve cost, transit time, on time delivery, and the elimination of lost or damaged cargo. In turn, the providers of services must remain profitable.

To meet customer needs, the modern, intermodal freight system must be viewed as a system rather than a collection of modal entities, and as a process rather than a series of interfaces or events. The most significant change was that the flow of accurate and timely information through the system proved just as important as the movement of freight. In the investment of capital for system development, the priorities established to meet customer requirements must be kept in the forefront. Planning and knowledgeable evaluation before spending are important.

The development of an efficient and affordable intermodal system is a very complex undertaking. There are issues involving vehicles and infrastructure, information systems and other issues such as organizations and management, contracting and procurement and incentives for, and barriers to, innovation.

In the near term, priority must be given to the continued development: (1) of affordable, accurate and compatible Automatic Equipment Identification (AEI) systems to reduce error rate and increase dramatically the flow of information into the system; and (2) to the Electronic Data Interchange (EDI) to ensure that the information exchange among the various transportation providers and users is facilitated. The installation of incompatible systems will reduce efficiency and increase costs.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) focused attention on the intermodal performance characteristics of the national transportation system. Intermodalism is now being incorporated into the planning process at the federal, state, and regional levels. Communications among MPOs and freight transportation providers continues to improve.

In examining the intermodal system it becomes apparent that all freight is moved, and information generated and introduced into the system, by modal operators. Therefore, if the intermodal system is to operate efficiently the modal operators must understand the intermodal system of which they are a part, and in the final analysis they must make system decisions rather than modal decisions in both planning and implementation.

In viewing the users of the core intermodal system, we find commercial, military, customs and immigration, and hazardous materials agencies with requirements to meet customer needs or regulatory requirements in moving or controlling freight. The transportation and information providers within the system are the modal operators (ship, rail, truck, air, and various terminal and port operators). The relationship among these various entities is complex and in many cases still in the formative stages of development.

If the envisioned intermodal transportation system is to become an efficient reality, all industry, government and military organizations involved must become partners in the ongoing development of the freight system. If properly done, NEXTEA, the reauthorization of ISTEA, can provide great incentives for partnering and cooperation in research and development and education among these groups.

During the past two to three years, dramatic improvements in communication and cooperation have occurred. Efforts to develop effective partnering relationships are under way. The future looks bright, but to meet system needs NEXTEA is essential if the intermodal dream is to be realized.