DAY 1: PLENARY SESSION

Intermodal Freight Transportation Report Card Public Agency Perspective

Stephen Van Beek, Office of Intermodalism, U.S. Department of Transportation Kenneth Wykle, Administrator, Federal Highway Administration, U.S. Department of Transportation William Lucas, Deputy to the Commander, Military Traffic Management Command

OVERVIEW

Stephen Van Beek

In terms of the report card on intermodalism, the U.S. Department of Transportation (DOT) takes the Government Performance and Results Act (GPRA) very seriously, and people such as Ken Wykle have been leaders in terms of incorporating the principles of GPRA into U.S. DOT. More than anything else, that is why the U.S. DOT performance and strategic plans were voted the best in government. It is because we have what we call a "culture of quality." We are using this process to reinvent ourselves and are going far beyond what Congress and other people envisioned when they passed the GPRA. We received the highway grade; however, that is not good enough. In June 2000, we will introduce our newest strategic plan that will help move U.S. DOT forward for the next 5 years and beyond whatever administration follows after us.

An intermodal freight transportation report card, done in conjunction with the TRB and the U.S. Department of Defense (DOD), provides a very valuable tool for all of us to ask "How well have we done?" Many believe the U.S. DOT average, on a scale of 1 to 5, should be about 5.0, but we know there are places where we have fallen short and we want people to tell us what those are and how we can improve and do things better for the future. When you are engaged in a quality process, you need to do that. It is my pleasure to share this session with two distinguished public servants, who will offer a U.S. DOT and a DOD perspective.

U.S. DEPARTMENT OF TRANSPORTATION PERSPECTIVE

Kenneth Wykle

Kenneth R. Wykle is the 14th Administrator of the Federal Highway Administration (FHWA) of U.S. DOT. He previously served as Deputy Commander in Chief of the U.S. Transportation Command, which is the military's unified management group for the Army Military Traffic Management Command, the Navy Military Sealift Command, and the Air Force Air Mobility Command. He has taught military logistics doctrine and operations as college president of the U.S. Transportation Center.

The topic of this conference is one of national significance. You might ask "Why?" Certainly, we are entering a new century, just getting started in the 21st century, but really I think we are also seeing a regeneration of interest and a focus on freight and freight movement, certainly within U.S. DOT. As Steve mentioned, we restructured the FHWA, created an operations core business unit, and within that an element to focus strictly on freight and freight movement. It is time to review the government's role in transportation and hopefully from this conference we will get some ideas about what our appropriate role is.

We are halfway through the Transportation Equity Act for the 21st Century (TEA-21) and are starting to prepare for the next reauthorization. One of the key things as we

think about global intermodal freight is to look at it from the standpoint of the supply-chain logistics, from the manufacturer all the way to the consumer. Normally, everything we get or consume moves on some mode of transportation, or it may move on several modes in getting from the manufacturer to the consumer.

I believe the United States has developed the best national transportation system in the world. We have made major investments in our physical infrastructure; however, from the standpoint of FHWA, the Interstate era is over. We have basically completed building the 45,000 mi that are in the Interstate system and now it is time to focus on operating and maintaining the highway piece of the intermodal transportation system.

We must use technology across the entire spectrum of modes to leverage the capabilities that we have and get more capability out of the existing infrastructure. In doing so, we must focus on the customers. What do the customers want? How can we better satisfy their needs? We are concerned about the condition of the infrastructure and how we maintain the infrastructure we have.

As we look at emerging issues, as we think about transportation and commerce today, the emphasis is on speed, time. How long does it take to complete the process? Today, time is the key measurement. There is more and more emphasis on so-called "pull" logistics. You ask for it when you need it. "It" is not in intermediate warehouses and it is not prestocked someplace. You "pull" it as you need it. More and more we see postponement in manufacturing. You wait until the very last minute before you put on selected components so you can be state-of-the-art, state-of-the-practice.

Estimates are that 40 to 45 percent of the items we consume in 2020 will be bought over the Internet. An example comes from the conference in Atlanta earlier this year about a "virtual" company that sells Argentine fishing rods. You order one of the fishing rods in the United States by going to the Internet and clicking onto a company that neither makes nor stocks any of the products they sell. All they do is turn around and pass that request to the manufacturer in Argentina. UPS picks it up and delivers it to your door the next day—a virtual company engaging in commerce that relies on the infrastructure, on the transportation system, to get the items from producer to consumer.

There are many challenges in terms of how we plan and fund this infrastructure—whether there are any capacity constraints and whether there are challenges at the border if the goods are moving internationally. The borders are a major challenge as we move more and more into the North America Free Trade Agreement (NAFTA) and other trade agreements. The U.S. Customs Service, U.S. Department of Agriculture, U.S. Immigration and Naturalization Service, U.S. Drug Enforcement Administration, U.S. Environmental Protection Agency, U.S. DOT—all these

federal agencies are at the border. How do we integrate and coordinate the actions of all these agencies?

If we look at just the highway element, I think superior highways have enabled this nation to achieve sustained growth. As Steve mentioned, \$30 billion in the budget for 2001—that is up 10 percent over just this year. Keep driving those SUVs, consuming that gas, paying taxes into the Highway Trust Fund, trying to increase significantly the dollars going into research and development, doubling the amount of dollars in the borders and corridors program, doubling the number of dollars for community systems preservation programs, and certainly more dollars are going to the states through the normal apportionment process. TEA-21 gave us 40 percent more dollars through 2003, guaranteed over the life of the bill. Steve commented on the U.S. DOT appraisal of the National Highway System intermodal connectors, which comprise fewer than 2,000 mi of a 160,000-mi National Highway System but can be one of the prime bottlenecks to the efficient flow of transportation. An estimated 600 connectors go into our seaports, airports, and rail yards—less than 2 percent of the total system. We can make a major impact if we can improve those connectors in terms of efficiency and effectiveness.

The borders and corridors program contained in TEA-21 provided grant dollars to improve the transportation and trade corridors, primarily those going north and south. In large part because of NAFTA, \$2.0 billion in requests were submitted, for only \$140 million in the program—one of the reasons U.S. DOT has asked for this program funding to be doubled in the 2001 budget. Another challenge for U.S. DOT is that congress likes to earmark the dollars in these programs, making it more and more difficult to develop a coherent national system because of the "patchwork" effect that can result from earmarking. With respect to quality and condition of the infrastructure, it is improving all the time. Less than 8 percent of our national system is in poor condition and we are improving that quality every year. Among the challenges faced are the multijurisdictional approaches and infrastructure and infostructure linkages. How do we link this technology I talked about earlier to the physical infrastructure that we have?

When looking at rail, we have to ask what is the role for government? Rail is certainly a growth area in terms of intermodalism, and a lot of capital—private capital—goes into sustaining and building the rail infrastructure. What can government do? It can encourage and foster innovation ranging from doublestack technology to tagging cars for inventory management. Some of the challenges, most notably service and mergers, are more complex, such as the decline in service and difficulty in making just-in-time deliveries. Reliable, dependable, consistent deliveries are what rail customers want and need. We need coordinated public-private investment and, as

was mentioned earlier, attention to highway-railway grade crossings. Safety is a significant issue. We now have up to 30 trains a day, with as many as 100 cars per train, traveling on tracks that go down the middle of many cities and towns. Delays for people trying to get across the tracks and the probability of crashes and accidents need our attention. There is also the need for good connectors to ensure efficient movement between truckrail and ship-rail.

On the maritime side, U.S. DOT has focused its attention and efforts through the maritime transportation system (MTS) initiative. A report was submitted to congress in September 1999 and two groups were established to coordinate future activities: an interagency committee for the MTS that includes representatives from the many federal agencies with responsibility for some aspect of the MTS and the MTS National Advisory Council, which is composed of private sector and nonfederal representatives. The challenges faced in terms of funding, dredging, infrastructure, equipment and facilities to service megaships, landside access, the environment, and the tradeoffs between speed and productivity and size are significant. Landside access and the ability to handle the volume carried on megaships is among the constraints to improving productivity. The megaships come in and discharge containers, which must be cleared and distributed from the ports—the connectors are a key part of that equation. This is but a sample of the challenges in the marine mode.

With airfreight, overnight delivery is key, particularly for high-value, priority cargo. The aviation system has evolved into a hub-and-spoke concept, and, to be able to work effectively in terms of getting into and out of these hubs, again you need the landside access and the connectors. There is a great application of technology in the airfreight business in terms of tracing and tracking the cargo; however, there are still significant challenges in the future. Fred Smith, Chairman of FedEx, has said "The future of airfreight is on the ground," whether it be delivery in the white trucks with purple and orange markings on them or delivery in the big brown trucks. Connectivity is the key to getting the freight in and out of the airfreight hubs. This service is also affected by the hours of service when airfields and airports are operational as well as environmental issues relating to noise and congestion. These are challenges faced by both the federal government and local communities.

What Are Some of the Future Challenges?

High on the list is leveraging technology, taking advantage of technology to get more capability out of the existing infrastructure and getting full deployment of intermodal transportation systems so that we have a complete link throughout the supply chain. This is especially critical at border crossings and ports of entry, where it is vital to expedite and speed the flow of freight across the borders and through our ports and airports and in the process collect and analyze real-time data. In that regard, I want to share another interesting piece of information offered by the chairman of Cisco Systems. Cisco has the technical capability, at the close of every business day, to balance their books. Many companies do this only on an annual basis and then often have a 3- to 5-month lag time before they can close out their books. If you can leverage technology, you become more competitive and you get an edge over your competition. Real-time data are key.

With respect to infrastructure, early planning in terms of public and private partnerships is critical. Freight has to be a consideration early in the process and when identifying and setting financing options and priorities. Multijurisdictional coordination is essential. Right now, freight planning occurs at the metropolitan planning organization, city, or state level. How do we plan it across state boundaries? If we are going to have these regional and national freight corridors [i.e., the Freight Action Strategy (FAST) for the Seattle-Tacoma corridor in the Pacific Northwest, a major north-south corridor along future I-69], all of which involve more than one state, how do they come together? A coalition has been formed among the states in the delta region to plan and execute construction of the I-69 corridor. More of this type of coordination and preplanning is needed for freight corridors. It is critical that freight concerns be addressed early in the planning process. With respect to institutional development, the focus again is on multistate, regional, and binational intermodal freight coalitions that come together to work the issues and find the best way of getting the infrastructure and the capability needed and to develop tools to evaluate freight improvement options.

What Is the Current State of Readiness?

As noted earlier, many areas still need work, and in other areas real progress has been made. Freight will continue to be a focus across all modes as we move into the 21st century and as companies strive to attain and retain the competitive edge. How can they add value? How can they reduce costs? They can do it through end-to-end management of freight movements and by becoming increasingly intermodal, wringing all the efficiency they can out of the transportation system. We have third-party logisticians; there are even fourth-party logisticians to take care of the entire supply-chain process for the manufacturer. This is where you see the virtual companies. Here is another example from the Atlanta symposium—this one is from Home Depot. In many cases, Home Depot

does not build or provide the items that people want in their homes. Customers come in, they view a Home Depot showroom, they look at the type of cabinets they want for their kitchen, they select the style, the color and so forth, and Home Depot electronically transmits the order directly to the manufacturer. The goods come from an outside supplier and are shipped to an intermediate staging area, where an installer picks them up and then installs them in the customer's home. The only thing Home Depot did was set up and host the showroom and transmit the order.

From a government standpoint, the Intermodal Surface Transportation Efficiency Act (ISTEA) was the foundation for intermodalism. Enacted in 1991, the legislation recognized the importance of intermodalism to the nation's transportation system. It brought reality to what had been an abstract concept to many in the public sector and it provided some insight and direction to what the public sector could and should do to support intermodalism. For the first time, it also provided for innovative financing, recognizing that the federal and federal-state funds were not sufficient for what needed to be done. During the ISTEA era, the public sector went from a grade of D to a C in terms of the readiness of the transportation infrastructure. TEA-21 reinforced ISTEA by continuing to emphasize intermodalism; however, it targeted specific funds for specific systems, such as the borders and corridors program and grants directed at improving and maintaining the Interstates and bridges. TEA-21 also provided 40 percent more dollars for highway infrastructure, and it continued the innovative approach to funding and helped move the public sector a little closer to a grade of B in terms of improving the state of readiness of the intermodal transportation system.

Where Are We Going After TEA-21?

We hope the next reauthorization bill will continue to focus on efficiency and equity and add a focus on effectiveness. How do we improve the effectiveness of the system? A priority should be development of an infostructure that links information technology to the physical infrastructure already in place. Also needed are further innovative financing options. More and more \$1 billion plus projects are now under way or planned. These include the Central Artery Project in Boston, a \$10.8 billion project, the cost of which recently went up to \$13.2 billion and is still rising; the Alameda Corridor at well over \$1.0 billion; the I-15 project in Salt Lake City at over \$1.0 billion; and the replacement of the Wilson Bridge in the Washington, D.C., metropolitan area at over \$1.0 billion. The cost of these infrastructure projects is high and we need to find new and different ways to finance them.

With respect to institutional development, more effort must be made to broaden the perspective beyond the local or state level to a regional, multistate corridor or even nationwide level. This will require more efforts aimed at forging partnerships and alliances between government and business, so that collectively we can maintain and improve the overall system. How do we make the system more intermodal? We squeeze out the inefficiencies; we make it efficient, reliable, dependable, predictable, safe, and consistent day in and day out so that this new economy will continue to thrive and grow.

Will we ever earn a grade of A? We don't know, but that is our goal. We want to be the absolute best we can be. This will require all of us working together to get the maximum productivity out of the nation's transportation system. Thank you.

DEPARTMENT OF DEFENSE PERSPECTIVE

William Lucas

William R. Lucas is Deputy to the Commander of the Military Traffic Management Command (MTMC), the senior civilian with responsibility for all aspects of MTMC's missions and functions. Before assuming his current position, Mr. Lucas served as the Acting Assistant Director of Transportation, Office of the Deputy Chief of Staff for Logistics, Department of the Army, responsible for directing Army transportation policy programs, resource allocation, and strategic planning. He has held a number of previous MTMC assignments, as Special Assistant–Freight Traffic Division, Program Manager for the Defense Freight Railway Interchange Fleet, and Chief of the Freight Automation Office.

It is a pleasure to be here to present the U.S. Department of Defense (DOD) perspective on the progress that has been made in intermodalism since the national commission report back in 1994. As long as there have been armies, generals have had to deal with the friction created by the ability to deploy a force to a field of battle and, once there, to be able to sustain it. Therefore, it is no surprise that advances or shortfalls in the intermodal system and strategic mobility and logistics really shape the foundation of our modern warfare. After all, if you can't get your combat power to your place of business, your odds of winning are nil.

The fundamental need for power projection has forged historically close relationships between the military and the transportation system. In many cases, an Army's power projection requirements have been the driving force behind transportation infrastructure and technological developments. The U.S. military has long recognized that it is only through an optimal combination of transport modes that effective strategic mobility and logistics are possible. Such multimodalism has been an integral part of what we call the defense transportation system (DTS). The DTS comprises not only DOD's own organic transportation assets—aircraft, ships, and rolling stock—but also the vast infrastructure of strategic highways, railroads, and ports both here and abroad. Through the DTS, the military shares much of the transportation system with the private and public sectors. However, the way we use it tends to be a little different. The intermodal transportation system generally functions like a pipeline with a fairly smooth flow. On the other hand, military deployments are massive surge movements, sometimes on short notice, that tend to clog the system.

To illustrate, you may recall that during the Gulf War, it took 6 months for the buildup. Virtually every Navy sealift vessel, as well as a hastily assembled fleet of merchant ships, was needed just to get sufficient combat power in place to begin the war. Since Desert Shield, the mobility enhancements in airlift and sealift that have been procured are based on an established target of trying to get five and one-third divisions to a theater in 75 days. However, the strategic vision of the new Army Chief of Staff is a stretch goal of being able to get one brigade ready to fight in 96 hours, one division in 120 hours, and five divisions in 30 days. This has enormous implications for our future challenges in meeting power projection in (a) what is delivered—it is going to have to be smaller and self-sustainable; and (b) how it is delivered—it is going to require a very fast and agile infrastructure.

We have come a long way from the days of the Cold War when we expected to fight the next war in central Europe, largely with troops and equipment already in place. If we ever needed to rely on a national and international intermodal transportation system it is now, which brings us to the present day and the DOD perspective on how much intermodalism has progressed.

From our perspective, there are really two distinct dimensions to the intermodal freight system: the hard system and the soft system. The hard dimension of the intermodal freight system includes, of course, the physical infrastructure—containers, chassis, tractors, and on and on-in short, the hardware, the real estate, and other tangible aspects of the intermodal system. This hard dimension can also include, and today there is a lot more emphasis on, information systems that have become so indispensable to the efficient movement of freightelectronic data interchange, real-time tracking and visibility systems, and intelligent transportation systems to name just a few. The soft dimension of the intermodal freight system includes the regulations, policies, techniques, and procedures as well as the interpersonal relationships that really make the system work.

Let me first talk about how we in DOD have tried to advance intermodalism in the national transportation system in the past several years from both the hard and the soft perspectives. Then I will address how we see the private and public sectors responding to the challenge.

For many years, we have witnessed the trend in the commercial freight world toward intermodal standardization based on the use of containers. We have also known that a by-product of this trend is that specialized modal equipment traditionally used by DOD during war is giving way to this intermodal equipment. A prime example of this is the fleet of militarily useful rail cars. Many of these flatcars, whose average age is 30 years, are nearing retirement and as they retire they are not being replaced at the same rate. We project that by about the year 2010, if we do nothing, we will have difficulty meeting the mobility challenge.

Similarly, there has been a trend toward deep-well cars and spine cars. When you look at some of our outloading installations, you find that we do not have the material handling equipment available right now to make maximum utilization of that equipment. We are doing a couple of things—one on the organic side. We have acquired about 1,500 flatcars that we have pre-positioned at our early deploying installations, but, more importantly for the longer haul, we have established a joint government—rail industry group to recommend alternative solutions to these problems.

About 10 years ago, DOD began to study the feasibility of using containers in the intermodal freight infrastructure to deploy actual combat units. The study suggested that, given the right mix of containers, flatcars, and container handling equipment and the development of new techniques and procedures, it was possible to move a large amount of oversized equipment from a stateside military installation to an overseas theater of operation and get it there on time. However, it is one thing to show something on paper and quite another to demonstrate it in reality.

Then in 1995, the U.S. Transportation Command (USTRANSCOM), with money from a Joint Chiefs of Staff exercise fund, decided to test the concept of intermodal deployment. Exercise Turbo Intermodal Surge 95 took place between Fort Carson, Colorado, and Oakland, California. Among other things, it showed us that the more intermodally compatible our equipment was, the more easily we could use the intermodal system to augment, not replace, our own strategic lift assets. Our workhorse, the heavy truck called the palletized load system, is capable of carrying a 20-ft International Standards Organization unit.

We have also adopted the use of smaller connectable containers, called Quadcons, four of which can be connected to form a 20-ft container, to facilitate the storage and movement of unit equipment and supplies. The Army has already acquired over 4,500 of these and the Marine Corps has bought some as well. From a units perspective, it facilitates deployment far forward to a tactical area of assembly because you can break the Quadcon down into component pieces and make it a secondary load on the back of a truck. We have also recognized that the 40-ft flatrack is a key piece of equipment that now makes the entire fleet of intermodal rail cars militarily useful.

Turbo Intermodal Surge, as well as later containerized deployment exercises, also pointed out deficiencies in our installations and their ability to conduct efficient rail and intermodal operations. Railheads and loading docks were designed to be mode oriented, as opposed to intermodally oriented. With some funding from the Army Strategic Mobility Program, we have already invested about \$30 million to improve the outloading capability at a number of those installations.

Intermodalism within DOD includes more than just deploying the equipment. Virtually all the ammunition, as well as many other classes of supplies, will be expected to move in containers from depots and warehouses as far forward as possible to the battlefield. The new container roll-on/roll-off pallet, which is an intermodal innovation unique to the Army, will be moved in containers from depots and warehouses directly to where it can be easily offloaded in the tactile area of assembly. So far, about 13,000 of these units have been purchased.

Because most of our supplies are shipped in 20-ft boxes (and that is a doctrinal issue we have), we recognize those boxes are in somewhat short supply, but that is the way the Army is set up for the time being. Because we have to ship them in 20-ft boxes, we are faced with the problem that most container cells on ships are not really reinforced to carry two boxes of that size. So, we have looked at devices like the container link where you can link two 20-footers together to form one 40-ft unit, which can then be disconnected for onward movement into the theater of operations.

As you can see, advancing intermodalism from a DOD perspective means shifting our paradigm. This shift has been most apparent in the soft dimension of the intermodal system. To really build a national intermodal transportation system, we must begin to think intermodally. Many logistics officers in the military are still skeptical about the intermodal system's capability to deliver. A lot of that is based on their Gulf War experiences where we had mountains of containers and nobody was sure what was in them. They have an uncomfortable feeling that their equipment will be disappearing into a temporary black hole as it transits the intermodal system. They will have no direct control during that phase. Therefore, the issues of unit integrity and in-transit visibility become paramount. We need to be able to assure them that their equipment will arrive when it is supposed to where it is supposed to and that it will be in the same condition it was when it left. Confidence is key to the future success of the intermodal system. It has got to start at the top with a commitment by senior leaders to gradually reshape the way DOD thinks about transportation. To quote from the Joint Doctrine: "Efficient and effective use of intermodalism and containerization is critical for mobility and transportation support to single service or joint operations worldwide." This means we are dedicated to establishing the key doctrinal and regulatory changes needed to embrace intermodalism.

Changing doctrine, committing to an intermodal way of thinking is a good start, but the real changes take place where the DOD transports and logisticians interface with their commercial counterparts. The kind of practical experiential learning that has taken place over the past 6 years, with events like the annual turbo intermodal surge exercises, have been critical. Intermodal carriers, like Maersk–SeaLand and APL, have formed teams and pooled resources to provide door-to-door transportation services and deployment exercises, most recently in a major exercise from the United States to Thailand in 1999.

Military transporters have worked side-by-side with their civilian counterparts to solve real-world problems and document the solutions to those problems. We are building a body of knowledge and techniques and procedures that will enable us to refine and improve our ability to deploy intermodally.

The private and public sectors have been extremely supportive. One of the programs is called VISA—the Voluntary Intermodal Sealift Agreement—which you will hear more about later in the conference. One of the moving forces behind this program was then Lieutenant General Ken Wykle when he was the Deputy Commander in Chief at USTRANSCOM. It basically was a combination of elements from the U.S. DOT, DOD, and the U.S. flag carriers to come up with a contingency system that focused not so much on acquiring ship by ship but on acquiring intermodal capacity and playing on the strengths of our intermodal partners.

As I mentioned earlier, the rail industry is working with us to solve problems of emergency access to railcars. Access to seaports is also an ongoing concern. Port infrastructure and processes are designed around a commercial customer base, and DOD needs short access to key strategic ports in wartime, particularly now that we have closed our military ocean terminals in Bayonne, New Jersey, and Oakland, California. Again, we have joint government and industry programs and organizations like the National Port Readiness Network in place to work on these issues.

We understand that the primary concern for commercial intermodal carriers is profitability and growth for their shareholders, and a more efficient and effective intermodal system will certainly contribute to this. We

have also found the U.S. commercial freight industry to be unwavering in their support of the national security.

In completing our intermodal report card, we were asked to reflect on major challenges and opportunities for the next 10 to 20 years and I will discuss a couple of them. As part of the strategic responsiveness vision, we have to accelerate the deployment time line. We will become lighter, smaller, more agile, and more logistically supportable and deployable without sacrificing sustainability and lethality. But, even with a lighter, more deployable force, we are still going to be challenged. We still will challenge the availability of intermodal transportation assets as well as strategic assets. We might easily create serious temporary imbalances in and shortfalls of key intermodal equipment. When you look at numbers like 44,000 TEUs, it seems like a drop in the bucket, but when you start to look inside those numbers and see things like an early surge requirement for 15,000 flatracks and you know there are only 24,000 available commercially and 2,400 are available from the military, that's cutting it pretty close. We are also concerned about the availability of other specialized equipment such as reefers.

What is the solution? It could be the outright purchase of some large number of containers; however, that is not the preferred choice, because we would have not only acquisition costs but also the life cycle costs. We hope to find some innovative solutions working with industry, where perhaps we can help offset some of the expense of purchasing and managing the equipment or have contingency contracts that give us early ready access to equipment or possibly some sort of a lease-back arrangement.

Even if we had enough containers and intermodal assets available, we still have the issue of infrastructure. We have to work on improving the infrastructure of our installations to accommodate full-scale operations, but that is a serious commitment of strategic mobility funds. Therefore, we will also be looking for alternatives to this

capital-intensive approach. This may involve things such as DOD's use of existing commercial intermodal facilities located within convoy range of major deploying installations, an expanded VISA-type program to provide short access to loading tracks, marshaling areas, container-handling equipment, and stevedoring. Not all installations have the same intermodal deployment requirements, so perhaps a combination of infrastructure upgrades and an expanded contingency contract would be able to handle our future containerized unit equipment workload.

The key to meeting these challenges lies in the very nature of intermodalism and what gives it its strength—intermodalism implies connectedness. This strength comes from the shippers, transportation providers, third-party logisticians, and federal, state, and local governments working together to solve transportation problems and creating an efficient and robust intermodal system that benefits everyone. Programs like VISA bring intermodal service providers and DOD planners together to solve strategic mobility problems. Intermodal deployment and logistics exercises, like Turbo Intermodal Surge, bring deployers, military transporters, and civilian experts together to learn from each other's best practices.

In addition, intermodal now extends into the acquisition community in the design of new weapons systems and support equipment. More and more new systems are being designed with intermodal transport in mind. Intermodalism may be a way of thinking about the movement of freight, but for DOD it is also becoming a way of thinking about power projection. The defense community is just beginning to understand, much less exploit, the vast potential of the intermodal system. With your help, we will be able to use it not only to augment our own strategic transportation assets but also to do our part in contributing to the realization of a truly national intermodal transportation system. Thank you.