

DAY 2: CONCURRENT PANEL SESSIONS (PANEL 4A)

Financing Intermodal Development Domestic

Philip Puccia, *Adelphi Capital LLC, Moderator*
Bernard Groseclose, *South Carolina State Ports Authority*
Jennifer Mayer, *Federal Highway Administration*
Peter Beaulieu, *Puget Sound Regional Council*
Jeff Holt, *Goldman Sachs*

PROJECT FINANCING

Bernard Groseclose

Bernard Groseclose is President and Chief Executive Officer of the South Carolina State Port Authority. He is former Director of Planning and Development and was responsible for permitting the final phase of the Wando Welch Terminal. Before joining the Authority in 1985, Groseclose spent 6 years with Rockwell International as a manager of financial analysis in the automotive operations division. He is a member of the Executive Committee of the International Association of Ports and Harbors and of the Board of Directors of the American Association of Port Authorities. He is coauthor of the book Strategic Planning: A Guide to the Port Industry and serves on the Standing Committee on Ports and Channels of the Transportation Research Board. He received his B.A. in economics from Hampton Sydney College in Virginia and an M.B.A. from the College of William and Mary.

I will talk about a project that is under way, providing a status report and focusing on how we will pursue financing for this expansion of our port and creation of a new terminal. All the intermodal aspects are there—the water side, the new rail connections to two mainline railroads, and Interstate highway connections.

South Carolina State Ports Authority is a state agency, kind of a quasi-state agency. We are part of the state gov-

ernment, but we are not part of the appropriations process. We work with our own revenues, generated from services we provide to our customers, mostly the international shipping lines and shippers. With those revenues, we invest in capital. We build terminals and facilities and we are able to provide these services as an operating port.

Charleston is our major facility in the state of South Carolina. We have other smaller breakbulk niche ports in the state, but Charleston is the major facility. We are the fourth largest container terminal in the United States, based on volume of cargo moved, and we are the sixth largest in terms of the dollar value of the cargo. We are predominantly a container port—about 95 percent of our business is containerized; about 5 percent is breakbulk. We also have some cruise ship business.

Charleston's ranking is based on port import-export reporting system data for 1999 in millions of loaded 20-ft equivalent units (TEUs). Charleston had just under 1.2 million TEUs for 1999. The significance here is that Charleston is a small metropolitan area compared with most of the other cities among the top 10 list of ports. We have become a load center for the southeast in this regard. If we focus on the South Atlantic, we have about 27 percent of the market share (again in terms of TEUs) from Virginia down through Miami.

We are an operating port and, as I mentioned earlier, a quasi-state agency. We operate our facilities. We are not a landlord operation, so we employ crane operators, equipment operators, and people to run warehouses. We have our own security forces, maintenance people, and so forth. We operate much like a small business. We do not employ union labor, but we work side by side in many of

the gate operations and so forth with International Longshoremen's Association union members and one gate port authority employs another gate's operating gates and terminal facilities for many of our customers. From a financial standpoint, the significance of this is it gives us a good bit of control of our revenue stream, and it gives us a good bit of control over the productivity and the efficiency of the use of our facilities.

If you look at our history over the last 20 years, since the late 1970s, you see that our tonnage in that time has gone from just over about 4.0 million tons to over 12.0 million tons—a tripling over that 20-year period. Our revenues have quadrupled in that period, from just over \$20 million to \$85 million last year, and we will do around \$100 million in revenues this year.

Around 1997, we undertook a study to look at the feasibility of developing a new terminal in Charleston. We worked together with consultants to look at both the demand curve for Charleston and what kind of growth we could expect in the next 20 years. We also assessed the capacity of existing facilities and looked at improvements that could be made to our existing facilities to increase our capacity. The demand curve, with several years of history up to 1997 and then projections out over the next 20 years, shows a compound annual growth rate of about 5.8 percent per year. What that does in that time period and that 20-year projection is basically again triple the demand or the amount of cargo being handled in Charleston.

We then looked at the capacity of our facilities—the maximum practical capacity of what we would expect to be able to handle given some improvements and use and productivity of existing terminals. This analysis shows that, by the year 2007, we are basically out of space and given the long lead time for developing new container terminals we need to be working on those very quickly to create this new capacity.

Back in the early 1990s, we bought about 1,300 acres of property on what looks like a peninsula in the center of Charleston Harbor. It is called Daniel Island and right now there is not much there. It is basically mud that has been dredged from the channels to the back area at the Wanda Welch Terminal, our largest facility in Charleston that measures about 250 acres of container yard. The Daniel Island site has the potential to create about 650 acres of container yards that would be built in phases over a very long period of time. We are currently in the process of preparing the environmental impact statement on that site.

The build-out would include container yards, berthing space on both sides of the peninsula, the equivalent of about 12,000-ft berths in the ultimate development, and backup infrastructure for transportation corridors and so forth. The site ties in less than 1 mi from an Interstate

highway and interchange. A new rail route would also be built in that same corridor. There are also stormwater and buffer-type areas to separate our development from other development in the area.

The initial development would include about 100 acres of container yard, about 40 acres of backup infrastructure, container freight station warehouses, some storm water treatment, and a connection to the Interstate but no rail initially for that size of a development. It would have the ability to berth two ships at a time.

What we plan to do over time—again looking back to that rate of about 5.8 percent average annual growth compounded over the next 20 years—is build the various phases of the terminal until it is built out. The first phase will be completed in 2007—hopefully a little before so that we have that capacity on-line in advance of the demand reaching that level.

We have an ongoing harbor-deepening project under way today that is being cost-shared between the federal government and the state of South Carolina. There are several major contracts under way today that should be finished by 2004, most of it by 2002. We are in the process of taking some of the fill material from the harbor-deepening project and placing it on Daniel Island to be used for stabilization of the site in preparation of the future terminal phase one area.

We hope our final environmental impact statement will be done later this year. The draft environmental impact statement is out now and under public review. There will be about 7 months of public scrutiny by the time the review period ends in mid-April, and then we have 6 to 9 months of work to do in finalizing the environmental impact statement to address the concerns of the public and to come up with a mitigation plan that can be used to offset the potential impacts.

If all goes well, by July 2001 we hope to have a construction permit to begin the real work. We estimate about 6 years of work to be completed to get just phase one opened. Much of the cost and much of the effort are in very basic infrastructure, because this is former dredge disposal area and it requires a great deal of surcharging and preparation and consolidation of the site before it is ready. This will take about 3 years. Only after that is done can we start to build berths and bring in cranes and construct the wharves and so forth. If a permit is not received until the middle of next year, the proposed time frame is going to bring us in just under the wire to meet our future demand.

Our planning goes back well over 10 years, when we began looking for sites, planning the kind of capacity we would need. We initiated the environmental impact statement process in 1996 and released the draft environmental impact statement in September 1999. We have had a number of public hearings and are in the process

now of reviewing the comments that have been made by the public and various regulatory agencies. We are starting to develop a mitigation plan and, if all goes well, by 2001 we hope to acquire a permit.

The key issue today is how to fund these types of intermodal projects. We met with our board a couple of months ago to lay out some of our options. The philosophy we have had throughout is that our first option is to look within the ports authority from the cash flow that we generate. We generate about \$35 million a year in cash flow. We also have the ability to issue revenue bonds. We have about \$150 million in revenue bonds outstanding, and \$125 million of that was just issued in mid-1998 to fund a capital improvement project over the next couple of years. Certainly, we will also look at some special financing techniques, such as a potential reuse sale or ground lease of one of our older breakbulk terminals, which is in the heart of Charleston and may have some higher and better uses that might spin off some additional positive cash flow.

Another option we have considered and have approached a number of people about is to look to the private sector, to some of the shipping lines that call on the port of Charleston, to some of the international terminal operators who are out there and also to the mainline railroads. They also have a stake in this. Currently, the site would have access only by one of the mainline railroads, so the other is most interested in having that access. As we grow in the port, these private sector people need to be prepared to grow with us and to provide the types of intermodal yards needed in the future.

One of the issues we have become aware of is that typically these terminal operators, the SSAs (Stevedoring Services of America), the P&O Ports, and the HITs (Hutchinson International Terminals) of the world have very little, if any, interest in basic infrastructure. That is a basic cost that we have to overcome and typically that is something of more interest to the state or the federal side of the equation.

On the federal side, there are a number of Transportation Equity Act for the 21st Century (TEA-21) programs that we will look at. We have been very involved with the U.S. Department of Transportation (DOT) and many agencies there, looking at One DOT and some of the possibilities there. Then perhaps there is a possibility of appropriations.

The key is that we put the state last in this. Clearly, the state is a real beneficiary in terms of economic impact from job creation, from the attraction of business and economic development opportunities. Therefore, it has an appeal because of the state's interest in these factors. There are a number of options on the state side: special bonds, general obligation bonds, some dedicated source like a gas tax, and then a one-time source—some of the tobacco settlement money many states have received

recently—and general appropriations. However, South Carolina is not a wealthy or a large state; the population is somewhere between 3.5 and 4.0 million people—this is smaller than most of the metropolitan areas we compete against in terms of major ports in this country.

We try to separate the interest in economic impact and the interest in economic development opportunities, job creation, and so forth from the financial side of things. We have a positive cash flow. We have, as an operating port, been able to maintain that positive cash flow and been able to be self-supporting over the years. But certainly this kind of expansion changes that. We see significant economic impact from the development and this will be an attraction when we talk to the state. This has less appeal to the private sector and other things will have to be developed to attract private money to the equation.

We hope to firm up a financial project over the next couple of years. We are talking to a number of people to determine what opportunities are out there and to try to put together all the pieces—what the ports authority can do, what opportunities are available on the federal and state side, and what part the private sector might play in this. Thank you.

TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION ACT

Jennifer Mayer

Jennifer Mayer is an innovative finance specialist with FHWA's Western Resource Center. She provides technical assistance to state and local government and other project sponsors on federal transportation finance tools such as GARVEE (Grant Application Revenue Vehicle) bonds and the Transportation Infrastructure Finance and Innovation Act. Before joining FHWA, Mayer worked with Apogee Research, advising federal, state, and local clients on financing environmental and transportation infrastructure. She holds degrees in applied mathematics and political science from Brown University.

I am associated with the FHWA Western Resource Center, which is a technical assistance center on project finance, located in San Francisco, but covering the western states and the nation as the need permits. We have a lot of different financing tools, enabled with federal funds. Most people, when we talk about financing tools, are very interested in one particular federal tool known as grants. Unfortunately, we do not specialize in developing those or in coming up with those, but we do try to educate states, local governments, and other proj-

ect sponsors about other options, short of grants, that may be available to assist in financing projects.

Today I am going to talk primarily about the Transportation Infrastructure Finance and Innovation Act (TIFIA). The TIFIA program involves loans, lines of credit, and loan guarantees. The features for these loans are very generous. The maximum term on the loan is 30 years. There are automatic payment deferrals in the first few years of the loan. A missed payment does not mean default. These loans have very generous terms for one primary reason—the TIFIA program was designed to enable mega-projects that have benefits that far out-reach the areas where the projects are being built. We believe there is a federal interest in making these projects happen. I think many of you might agree with this.

The terms of the TIFIA credit assistance are built to work for a project sponsor; however, they are individually negotiated once awards are made. Some terms apply to all three forms of assistance:

- There is a maximum 35 years after substantial completion of the project—and we can haggle about exactly what that means.

- The amount is no more than 33 percent of the total project cost. For example, let's say we are going to give a TIFIA loan to the Golden Gate Bridge, which is doing a seismic retrofit and the total size of that project is \$600 million. They can get a TIFIA loan for \$200 million. The size of the financing on that project might be only \$100 million or other financing. It is the project cost that we look at. You need to look at how the project cost is defined.

- The interest rate is, according to the legislation, set at a rate comparable to treasury securities of a similar maturity. Temporarily, we have decided to use a slugs rate (state and local government securities rate) five basis points above that. It is going to be comparable to a treasury rate. For some borrowers, that is going to be a little higher than the rate they can get on the open market and in some cases substantially higher than they can get on the open market. The advantages to these loans, however, may outweigh any higher interest rate they might pay.

You really need to look at this tool and also the other features such as no prepayment penalty and the payment deferral features to decide whether it would work for you. Another critical feature is that there are fees involved. Last year's application fees were \$5,000, which, as a percentage of most of the loans, is a small amount. There may be fees for ongoing surveillance of these loans and credit products if necessary, but those are negotiated individually with each borrower. There are no fees on the loan guarantee and line of credit unless drawn and they are negotiated in each agreement.

Finally, two of these three tools can probably be used with tax-exempt financing. The reason I insert the word "probably" is because it would be nicer to have the letter from your bond counsel saying that. But our counsels say the loans and the line of credit do not create any federal guarantee that would prohibit use with tax-exempt financing. If you are considering these tools, you can consider them part of a larger package.

Now that I have described the program a little bit, let me go into the background. TEA-21 was enacted and was the source of the TIFIA program in 1998. The precursors to this program are (a) two stand-alone toll road projects that received lines of credit directly from the federal government and (b) the Alameda Corridor port project. Once we saw the success of those projects, we wanted to create a process in which we could evaluate projects uniformly across different modes and across different states. We have created a One DOT organization, including the Office of the Secretary of Transportation, FHWA, FRA, and FTA, to evaluate different projects.

Our goal is to leverage limited federal resources and to stimulate private capital investment in transportation infrastructure. We want to provide credit instead of grants for these projects. We want to make them marketable. The major requirements are that they have to be mega-projects. They have to be \$100 million or greater. There is an exception for intelligent transportation system projects that can be \$30 million. They need some kind of dedicated revenue repayment, although general revenues might be acceptable if approved by the Secretary of Transportation. You need a special waiver for that. You have to follow all applicable federal requirements. That includes the National Environmental Policy Act of 1969. If you are a private project sponsor, you subject yourself to the federal requirements if you accept this loan, along with any applicable state or local approvals, including placement on the State Transportation Improvement Program.

It is a competitive process and the best place to follow that process is on our TIFIA website. Eligible sponsors and projects, pretty much any major surface transportation sponsor, private, public, special authorities—anybody who is building the type of projects we want to support—can get money under this program. The only exception, and this is an important one for this audience, is that a provision in the legislation states that any freight transfer facilities must be publicly owned. That does not imply public operation necessarily, but public ownership is required.

The types of projects that can be supported are very wide-ranging. Anything that can be funded under Title 23, which is all of our categories of highway funding, essentially, or capital projects under Title 49 can be assisted by TIFIA. I do not even want to attempt to define these;

however, if you have a project in mind, I encourage anyone to come talk to the Department of Transportation and find out if it is eligible. Projects that have received assistance include construction of a rental car facility for airport access near Miami and an intermodal connector. Examples of eligible projects are wide-ranging.

I have talked about what the forms of assistance are and what projects are eligible. Now I will talk about the amount of money that is involved. For fiscal year 2000, we have \$1.8 billion of loans, lines of credit, or credit or loan guarantees to give away. The amount, \$1.8 billion, counts for any of these. If we use a loan or a line of credit, it does not matter which, it is going to count the same. For fiscal year 2001, we have \$2.2 billion. Combined over the next two fiscal years, we are going to be awarding \$4.0 billion in loans or other credit assistance.

I want to talk about what happened in the fiscal year 1999 process, because I think it is an amazing story of how quickly this process got implemented and I think we can expect the same for fiscal year 2000. I have heard from a lot of project sponsors who were interested in this program initially saying, "Well, we're interested, but it is a federal loan program, I'm not sure. It is going to take a while." We had an application process with applications due in August and the funding was delivered the end of September 1999. Coincidentally, that is also the legislative deadline for delivering the funding. If you look at this process and the time lines available, the important thing to note is that the rules were developed in an incredibly rapid period of time and the applications were evaluated over a period of a few months. The loan negotiations, in terms of the actual agreement, are taking a little bit longer, but it is a process that is realistic and that can be worked into your financing plans.

Now, let me talk a little bit about the odds. We had very good odds for applicants this last year because it was the start-up year. We received 14 letters of interest. We had 7 applications, 6 of which met the initial criteria for evaluation. Of those, we awarded assistance to 5 projects. That is a pretty good record—83 percent of applications. I cannot promise you that this year, but it indicates there is demand for this.

When we weigh the projects against each other, the criteria we use are mandated by statute. They include national or regional significance as well as some of the things we just heard about from Bernard about economic benefits; for example, creditworthiness, public-private partnerships, the degree to which you are attracting other capital in addition to the federal capital, project acceleration, new technology, budgetary impact, which means the impact on other federal assistance if you can show that it reduces the need from other federal agencies, environmental impact, and other issues. In the next year, we

are going to be weighting these criteria against each other. In this process, we weighted them equally, but that is going to change.

I will briefly summarize the 1999 TIFIA projects. These include (a) a highway project, State Route 125 in southern California; (b) the Miami intermodal center, which is a multimodal center that will improve transportation and access to Miami's airport; (c) the Penn Station redevelopment, which will improve access to Penn Station and the new passenger terminal and a new arrivals area; (d) a loan guarantee for the entire capital program for the Washington Metropolitan Area Transportation Authority; and (e) support to a transit line in Puerto Rico. You can see how diverse these projects are and how diverse the forms of assistance are. There are many different projects eligible under this program and many have received support.

To wrap up, I would like to look ahead to fiscal year 2000. We are looking at a probable application process beginning in late summer and it has to finish by September 30, 2000. That \$1.8 billion we have to give away in fiscal year 2000 has to be given away by September 30, 2000, or it is lost. We are expecting the official application time line to be announced in late summer, but if you have a project that might be of interest, do not wait. Come and talk to one of us. I am available to consult about potential TIFIA projects, as is our headquarters office, and we are eager to hear about the type of projects you are interested in and the type of projects that may benefit from this assistance. Thank you.

FREIGHT ACTION STRATEGY CORRIDOR

Peter Beaulieu

Peter Beaulieu is with the Puget Sound Regional Council in Seattle, Washington, where he works on issues pertaining to water resources, solid waste management, aviation capital investment, and growth management. He has served as a colead staff of the freight action strategy corridor (known as the FAST corridor) with the Washington Department of Transportation Office of Urban Mobility. He has also served as the lead staff for the public-private regional freight mobility roundtable. He is an advisory board member to the University of Washington Global Trade Transportation and Logistics Program and recently authored an article titled "The Central Puget Sound Region and Emerging Regional Freight Mobility." Beaulieu served as a Lieutenant in the United States Navy from 1967 to 1970 and served on the U.S.S. Hornet. He attended the University of Washington, where he received a B.A. in architecture. He has a Ph.D. in urban and regional planning.

There is a real challenge for those of us speaking this afternoon because the luncheon speaker set a high bar, pointing out that there is a very fine line between brilliance and idiocy. It is our task to show we have maintained our position on the correct side of that line. I will focus on four points today.

The first is the notion of a diversified portfolio of partnerships. It occurs to me that what we have in the central Puget Sound region is a cluster of overlapping partnerships, one of which is cost sharing. There is a family of partnerships, all of them are very soft and informal, but there is overlapping membership, which is the key fabric within which certain things can be done and which has injected some resilience into what might otherwise be chaos.

One is the regional freight mobility roundtable. It includes carriers from all the different modes—shipping lines, two railroads, truckers, air express, and all the public sector agencies, including five federal agencies: the Maritime Administration, FHWA, FTA, FRA, and U.S. DOT. Essentially, we have the One DOT that has been broadened to include the private sector and local governments as well as the University of Washington. This is the nucleus and is one of the reasons we were able to construct an environment where other things could start to happen, including intelligent transportation systems work.

There is a special task force working on specific questions relating to noncapital construction solutions. The joint infrastructure committee includes the commissioners of the two competing ports—the port of Seattle and the port of Tacoma. There is an effort to forge agreements between the competing railroads—the Burlington Northern Santa Fe and the Union Pacific—as to how they will operate their tracks in crossover areas that cause difficulty. There is an agreement between both railroads and proposed commuter rail on cost-sharing, a partnership involving over \$300 million of track improvements for this entire corridor. Several of these activities are cosponsored by the roundtable, which is cosponsored by the regional council, the Economic Development Council of Seattle, and King County.

The FAST corridor work is an interagency effort on the public sector side, cosponsored again by the regional council and by the Washington State DOT Office of Urban Mobility. These are a sample of things that have happened, which provide an environment for a cost-sharing proposal that one may or may not classify as “idiocy”—it is extremely complex but also very resilient. This effort includes 15 projects and 15 different sites, each of which is complex in itself, yet all of them are interrelated more or less as a system. Some became necessary because of the track-sharing and might even be located 30 mi (48 km) away. Nonetheless, there are some interactions.

Another of the outcomes influenced by this cost-sharing agreement at the state level was creation of a state freight

program patterned after the regional effort. Another influence on the corridor program is within TEA-21—the \$700 million border program. This regional effort was one of the successful competitors in the first round and will be competing in successive rounds to fund portions of the 15 projects, including grade separation projects and port access projects. We have the audacity to say we will have a cost-sharing program and, although two of the legs on the stool do not exist, we are certain they will emerge over time because we know what the external environment is and basically we have hung together.

Complexity: we have heard some comments about chaos management this afternoon and some recurring comments about institutional design, and I would like to speak to each one of these. Chaos can be your friend (as well as your enemy) if you are agile, have a tight perimeter, and are sufficiently together that you can respond to things. Maybe that is not as good as having a letterhead and power and independent funding, but it is the way we have managed in many respects.

Two of the tragedies that have struck our effort could have been fatal. One is the Endangered Species Act, which has been imposed on the listing of salmon species in the Puget Sound region. It affects every project in western Washington and endangers each of them if there is an impact or a possibility of impact on the salmon species. It is related to larger questions on Columbia River management and even the breaching of dams to maintain the species' viability. This has caused some projects to be slowed down and others possibly to be stopped.

The other is a deeper kind of chaos. People can speak about partnerships but at a much deeper level if there is any mistrust that has crept in, and there is a mistrust toward government, that can land on whatever lightning rod is available. The lightning rod that was available in the state of Washington was the motor vehicle excise tax, which generates \$750 million a year, about two-thirds of that to the Department of Transportation. This was the sole source of the state's share for all 15 of these projects—33 percent of \$470 million, or \$150 million, suddenly dropped right through the floor. The partnership was sufficiently resilient at that point that the attitude was—well, we have about a half-hour or hour; let's figure out what we are going to do about that hole in the budget. What emerged from that, based on having worked together over several years and with a lot of detailed information, was the message that this entire package and the partnership really required only about \$50 million to reach the point where new funding might be available.

With that message, efforts were made to go after available funding sources within the state. Fourteen million dollars was secured from one program and then the Puget Sound Regional Council came along with yet a third crisis that fit in very nicely, and this is where chaos

becomes your friend. We were looking for \$40 or \$50 million total. The Puget Sound Regional Council discovered that, due to I-695 and due to the Endangered Species Act, a lot of federal money in the allocation process at the regional level was blocked and unobligated and subject to being removed to other parts of the state or other parts of the country. Wouldn't it be nice if there was some place within the region to put that money? The FAST corridor group was able to step forward and say, here we are, we are ready and have immediate uses for that money—the result was a nice partnership. All of this happened within about 2 weeks. This just illustrates that sometimes you can sidestep and take advantage of chaos.

With respect to institutional design, we have been talking about public and private as if there are two halves of some kind of dumbbell that needs to be fitted together in some way and also about interagency agreements on the public sector side. I would just like to offer some thoughts on this, specifically the impact of mergers, the “blindsides” issues, the impact of court action. We have 1 project of 15 that went all the way to the Supreme Court. It had to do with reopening a rail line in a community that did not want it to happen.

I would like to offer two final comments. The first is the importance of trust as an intangible. Then, going back to my original point about the diversified portfolio, the idea of layering, not just public and private, but several different layers of things that are connected. That is the kind of institutional design, the institutional architecture approach that is invented along the way. Thank you.

PUBLIC FINANCE

Jeff Holt

Jeff Holt is West Coast Manager for the Municipal Finance Department of Goldman Sachs, overseeing all efforts in the San Francisco and Seattle offices. He covers all transportation and infrastructure clients in the western United States and has structured more than \$20 billion in municipal issues over the past 20 years working in public finance. Holt has recently focused his efforts on building public-private partnerships and recently completed a 6.5-year effort to fund the Alameda Corridor project—a \$2.4 billion joint venture between the port of Los Angeles and Long Beach, the Union Pacific Railroad, and Burlington Northern and Santa Fe Railway. He is part of the financing team for the Seattle-Tacoma Narrows Bridge project in Washington, a public-private partnership between Washington DOT and a private consortium led by Bechtel. He graduated cum laude from the University of Utah with a degree in finance.

I attended the earlier session on international intermodal financing and found it very interesting, particularly the dichotomy it casts with respect to domestic public-private partnerships. I want to preface my comments with some discussion about international versus here (domestic).

Speakers in the international session talked about trying to generate 21 percent returns for their projects. I thought that was interesting in that the life cycle of their financing efforts is anywhere from 10 to 15 years. In this country, we have a different competitive environment between our intermodal facilities and our ports. Port returns on assets in this country are somewhere between 3 and 4 percent. You do not see a lot of private ports being developed in this country. The government involvement that has taken place in some of these maritime and freight handling situations is at a level where municipalities vie for the business, sometimes to their own detriment. As a whole we really do subsidize, if you will, to a point where the returns really cannot be made in the private sector and we do not charge. I think the competition that arose from the Maersk-SeaLand situation on the East Coast showed that municipalities and municipal and state governments bid down that per-lift charge at \$22.00 a lift. Again, it subsidizes back to the shipping industry in many cases, both rail and maritime. You ruin a lot of the economics; however, that is the way it is. That is the way we are. It is not going to change in this country.

When people talk about privatization and the hope for private capital coming in, it is just not going to happen. The only way for private capital to really get returns is to isolate. As Bernard said, there is no interest in infrastructure. It does not pay. You cannot charge somebody for dredging. You can charge for terminal development and terminal space. You can charge for drayage. You can charge for freight handling. You can charge for carriage on the railroads, but you really cannot charge for grade separations. You cannot charge for berth deepening and harbor developments and especially not for greenfield projects. It is very difficult to get someone to compress the soil for you and then have any sort of economics result from that.

Intermodal projects face multiple funding challenges in today's world. The Federal Transit grants dried up. We have this wonderful TIFIA program that Jennifer talked about. It is the absolutely perfect partnership with the federal government for these kinds of projects. There are limited sources of state funding, and local tax increases are difficult to pass, although I understand the entire port of Houston's capital development effort is done on the basis of local general obligation tax bond issues. It is just mind-boggling to me. They have a terrific public relations effort going there and a wonderful partnership with their citizens, who do understand the local economic

benefits to them. All their projects are done not on the back of revenue bonds but local general obligation tax-supported bonds with pay-as-you-go coming off of whatever port operations take place. It is a really "odd duck" situation in this country.

Railroads are strapped for capital funding. Their consolidations have put pressure on them. Wall Street is putting pressure on them to reconsolidate their balance sheets. Of course, seaports have tremendous expansion needs of their own. Doing freight handling and other marginal-type projects is very difficult for them. They are looking out for their own expansion efforts.

Some of the intermodal situations are multiconstituency projects. They have a lot of different benefits and a lot of different stakeholders. I am going to try to separate the intermodal discussion into two different fields. One is the strictly maritime side and container port operations and development and building of new facilities there; the other is the rail access issues, which are obviously much more difficult. Although the public may understand or have some view into the maritime side and what the container business is all about, they have no idea about rail handling issues and the congestion. It is even more out of sight than out of mind and therefore it is more difficult to get any sort of attention or dollars in that context. There are also multiple agendas in terms of transit or freight mobility, air quality, or economic redevelopment. Often these do not really fall within the venue of any particular agency and joint power authorities need to be put together to get these funded and to garner the attention needed on these projects.

I want to say a few words about public-private partnerships, of which the FAST corridor is an interesting example. However, you may recall that of \$300 million-plus total, only \$22 million is coming from the railroads—very little private and lots of public. That is okay, because whatever private money you can get is great. The point is that the railroads do not want to participate in these things any more than they have to, and certainly the shippers do not want to participate. But public-private partnerships can be great in the sense that these multiconstituency projects bring certain benefits to and from different parties. You can parse out risk and you can parse out funding costs.

The benefits of public ownership—low cost of capital, state and local grants, good public policy from both an oversight and control basis, and accountability—are all very good. It should also be noted that eminent domain is critical to some of these projects. The benefits of the private partnership include additional revenues that can be brought to the table, a certain amount of risk transfer and risk taking, faster implementation, and additional resources in terms of ideas and staff help.

Good examples of public-private partnerships include the city of Anaheim and the Walt Disney Corporation;

Washington DOT and the Bechtel Consortium on the Tacoma Narrows Bridge; the Alameda Corridor—a huge effort brought together by thousands of individuals over 15 years, during 6.5 years of which I was involved; and the city of Reno, Nevada.

The Alameda Corridor was one of those multiconstituency efforts that were outside but critical to the ports of Los Angeles and Long Beach. However, it was so big in terms of its funding requirements that it was a daunting prospect to pull together \$1.8 billion originally and up to \$2.4 billion eventually in loans, bonds, and equity contributions from various parties. The capstone to that project was the U.S. DOT loan and what it allowed in terms of leverage. It was a terrific product and a terrific jumping-off point for a great federal program. It was also critical that at the right time the ports stepped up to say they would lead the effort and be the first to put their money on the line.

There was also a situation where there was some inelasticity of demand with respect to a container user fee in the Los Angeles basin. This cannot be replicated everywhere—\$30.00 per 40-ft equivalent unit in the Los Angeles basin is really a drop in the bucket compared with the charges of total throughput per container to, for example, a destination like Chicago from the Pacific Rim, which may run \$1,500. It is also small compared with the local drayage fee, which can run anywhere from \$60.00 to \$120.00 depending on who you ask. Negotiating a user fee and then paying the railroads some cash for their right-of-way was critical to get them involved.

An additional interesting and groundbreaking factor in the Alameda Corridor project is the risk-sharing. The ports made it very clear they would not take risks beyond their initial \$400 million contribution or beyond the 40 percent of the debt service on all bonds and notes and loans. That was the maximum parameter they outlined. The idea was to see if the financial markets would take an inordinate amount of risk. Could a lot of the risk be off-loaded? We found we could sell nonrecourse bonds to the market based essentially on an airport model. Airports have long been able to trade on the ability of their own traffic base, their own origination-destination traffic in a local destination. This was something that was proven in the Alameda Corridor—the amounts of containers coming through the Los Angeles basin are going to be there, and you can count on them. They come and they will continue; therefore we can transfer a lot of the risk to bondholders on the basis of that container traffic being fairly secure. To get that kind of risk transfer and those nonrecourse financings, a number of studies showing on-time and under-budget construction, the capacity of the corridors, and revenue and cargo forecasts had to be done several times.

With respect to the final breakdown of the financing, there are very interesting sets of revenues. At the bottom

is the senior lien debt sold to the capital markets, about half tax-exempt and half taxable, with \$500 million in each sector. At the front end is third lien debt, which comes below the federal loan. It is very difficult to place that kind of debt, but we had a structuring technique that allowed us to pull that off on an insured basis with AAA bonds. The federal loan is the second lien in the structure. In summary, it goes first to the senior lien, then to the federal government, and then to the "bottom bucket" in terms of the loans—that is, the subordinate loans. The remainder is residual payments that are divided between reserve funds, repayment to some of the initial shortfall outlays of the ports, and repayments to the ports for some of their initial contributions.

As a footnote, people have asked: How about the Alameda Corridor? How is it working? Now that we are into it, how are traffic projections? I can say that, as far as I know, it is on time and under budget at this point. We have about \$200 million in contingent money set aside for any potential overruns. We have about \$150 million in capitalized interest that we do not expect to use. That is \$350 million in surplus funds available just in case. The traffic projections are about 5 years ahead of schedule. The actuals that came in for 1999 were somewhere in the 2,400 range in terms of what our projections were. We are way ahead of schedule and the residuals will occur much quicker. The repayment of the federal loan will occur much quicker. Overall, the Alameda Corridor is a terrific showcase of a project. Regarding risk allocations, a large share of the risks were downloaded to other more natural risk holders. By doing this sort of project finance-based effort, we essentially laid off all these risks on the natural counter-party, trying to reduce the ultimate cost.

Let me say a couple of things about the Reno project. This is about a nine grade separation project on Union Pacific's line. It goes through the downtown sector and is important to the local region. There have been a lot of negotiations with Union Pacific, out of which came an estimated \$60 million litigation settlement. The most important thing was that the residents got together and said we really need to fund this. There is no port. There are no other natural sources of money. They raised a 1.8¢ countywide sales tax for the project, and a 1 percent hotel tax on the downtown casino properties. There is a benefit assessment district. There is some TEA-21 money that was passed through, and we have a congressional mandate. We are still going to go through the competitive process, but Congress got involved by naming Reno in the initial legislation for TIFIA. This was a very interesting public-private situation in which the casinos got together and the downtown businesses got together, and they put up a lot of money in terms of assessment districts and additional taxes they would support. This was in addition to the broader community and in addition to

the federal government and the railroads. It has been a great coming together to build this project. They are in the environmental impact statement phase right now and will be out applying for TIFIA and selling bonds later in the year.

In terms of case studies, the port of Seattle's Terminal 18 project is a terminal the port of Seattle wanted to do on a nonrecourse stand-alone basis to see if they could transfer a similar amount of risks to the private sector, as was done in the Alameda Corridor project. It is fairly straightforward, but the risk transfer then relies on the marketing area of the port of Seattle. I cannot really say whether this Alameda Corridor Transportation Authority application, in terms of nonrecourse, is applicable in any other ports around the country. It really depends on the specific port. We represent most of the ports on the West Coast in one way, shape, or form, mostly as senior manager of their underwritings. It is not something where you would, for example in a port, say I am going to compete against myself and toss out a nice terminal facility for the private sector to do over here. Then you could end up essentially taking traffic away from your main business. This really has special application where your expansion efforts are such that they crimp the balance sheet and you have limited resources to get a project done. This may even help. It is slightly higher cost and requires a lot more leverage.

We are in a situation right now in which the municipal markets are willing to take historically high levels of risk—a very favorable financial climate, evidenced in a number of different transportation projects. You can really transfer a lot of risk to the private sector in municipal finance today. Interest rates are relatively low—not as low as a year ago—but when you take those kinds of hurdle rates, 5 to 6 percent, you can do a lot more projects. They talk about these 21 percent returns in the Brazil projects. If we had to generate those kinds of returns, we would not really be building anything in this country. Our hurdle rates, our returns really only have to clear a certain coverage factor on debt service, and debt service is at levels using 5 to 6 percent interest rates. Another big factor is that U.S. DOT wants to be an equity investor in some of these projects and their loans do result in an equity standing for them. Because they are subordinated, they will give you those kinds of flexible terms and because they will take relatively low levels of coverage on their debt, they act as the equity investor. They act as an equity investor at treasury rates, essentially flat to treasuries for 30 years.

Let me briefly summarize a funding plan. First, you want to maximize the grants. These things are very infrastructure dominant and those items just do not pay. Second, try to find a revenue stream and get a revenue stream and find ways to bring new revenue streams on for these projects. Port projects obviously have revenue streams;

grade separation projects do not. Third, minimize the costs of the project. Try to take the scope down to something that can be done within the project.

Maximum leverage is a keynote theme. Layering senior subordinated debt together with a TIFIA component if your project is large enough and if it works is the maximum amount of leverage you can really put together in this country at this time. Maximum leverage means maximum proceeds out of the revenue stream. The lower the interest rate, the more you can capitalize of that revenue stream, including that difficult growth portion—most loans we do in this country are level debt service. You do not get any ramp at all. With a combination of senior subordinated debt, you can maximize the leverage and the revenue stream and get just about all the dollars that are there out into the project. The modeling required is pretty intense in some of these projects.

Let me close with a little commercial. There are plenty of lawyers, bankers, and engineers out there who are willing to bring their expertise to bear. There are all these things that need to be done to bring these multiconstituency projects to bear, to get all the government involvement from all sectors, and to maximize the leverage from the private sector and help negotiate all the agreements that have to be made and pull the finance together.

I think the outreach effort is so important for these projects—to heighten the public's interest, to heighten the awareness of the legislators and the state governments and what not—the public relations effort and the government outreach are critical. The Alameda Corridor had an outstanding group of people who dealt with that and maximized the state and federal government involvement and returned 200 times the cost associated with those individuals. It was a terrific effort on their part. Thank you.