

# Public Works Financing

Published monthly since 1988

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Reprinted from January 1994

Volume 115

## Case Study:

### Virginia's Dulles Greenway

### First U.S. Private Startup Toll Road is Financed

### and Under Construction

by William G. Reinhardt, PWF editor

**January 1994**—The 14-mile Dulles Greenway project could have died a hundred deaths during its seven, godawful years of development. As Virginia's Lieutenant Governor told the 500 celebrants at the Sept. 29 groundbreaking ceremony: "This project has been pronounced dead more often than Elvis has been seen alive."

For all the speeches that day, the northern Virginia toll road was, in fact, still dead. Negotiations were grinding on in New York over the price for the final piece of the right-of-way. The three sponsors were also negotiating the remaining claims from the long list of current and former Dulles participants, each of whom was maneuvering to be last in line at the pay window.

As a result, the bank financing didn't close until the following afternoon. And the actual funding of the long-term debt and equity didn't occur until Nov. 4. That came after a tense 30-day wait to see if there would be challenges to the land-use permit extension granted by Loudoun County.

Essentially, Dulles and other user-fee supported infrastructure financings are debt securitizations, where investors are seeking the right to earn a stream of income. The value

of the underlying asset, the quality of the revenues and the creditworthiness of the sponsors are paramount concerns—much like a real estate deal—as decisions are made on how much to discount cash flows available for debt service.

In that context, the Dulles story finally made sense last summer and the \$338-million project was financed and put under construction on Sept. 30, 1993.

Work was mostly shut down by January's snow and ice storms. Before that, crews had cleared the entire right of way, completed 20% of the earthwork and finished over a third of the utility relocations as of Jan. 14. Overall, 14% of the construction is done and the project is on schedule.

Communication with the 26 landowners between Leesburg, Va., and Dulles Airport has been well coordinated. Despite over 70 major excavation blasts, only 14 calls came in on the contractor's complaint hotline during the first 103 days. That's mostly because of the detailed contracting work done with each of the affected landowners by the developer team that escrowed the deeds and easements in 1992, says a spokesman for open-shop contractor Brown & Root Inc., which holds a \$145.2-million fixed-price contract to complete the road in 30 months.

The Houston-based contractor also has \$5.3 million in cash equity invested now and has committed about \$10.7 million more to support unfunded standby equity reserves.

'Tis the Season

That the Dulles extension got funded and put under construction as a taxable, privately sponsored startup toll road is viewed by many as a minor miracle. From the land assembly, to the environmental permitting, to the comprehensive agreement with the state on the design, construction and operational details, to the toll and rate of return regulation, to the coordination among the five jurisdictions that had veto power over land-use-any one could have stopped the deal before it got to the financing stage.

That they didn't is a testament to the unity of purpose of the public and private sponsors behind Dulles. Successive governors and local political leaders have been strong supporters of the off-budget financing offered by the private developers. State transportation needs far outstrip available funds. Surplus revenues from the existing Dulles toll road from the airport to the capitol beltway are tied up by the legislature in Richmond. And rural Loudoun County is being strangled by congestion as traffic grows each year.

The healthy upside potential for investors and the fact that traffic forecasts done in 1991 had been proven correct during the long wait for financing helped a lot. Then there was luck.

That came last summer in the form of very attractive interest rates, moderating construction prices, high traffic growth in the corridor and the rumbling of a real estate boom as the business cycle started to shift gears in the Washington metropolitan region.

## The Gods Must be Crazy

By all accounts, a modern highway to carry local traffic and through trips from points west of Leesburg, Va., to Dulles Airport, Tysons Corner and beyond is needed. The only east-west alternative, Route 7, is a heavily developed commercial route with over a dozen traffic lights and growing congestion.

The existing 10-year-old Dulles toll road shoots out traffic like a fire hose at its final toll booth next to Dulles Airport. It carries over 80,000 trips per day in some segments. Capturing a portion of that traffic with the private extension would be enough to guarantee that everyone got paid. And the new road starts at the final toll booth of the existing road.

The missing ingredient ever since the private toll road was first brought to market in 1990 by Goldman, Sachs & Co. was financing.

At that time, few lenders in the taxable markets were willing or able to assess project risks for a purely private toll road with no state credit support. Lenders who did take the time to understand the traffic studies were intrigued. But they found plenty of other reasons not to be a leader in a first-of-a-kind, real-estate driven infrastructure project during a recession. A key issue for some was the instability of the sponsors group during the difficult development period.

Despite those problems, more than \$68 million had been committed or spent trying to develop and finance Dulles since 1986. That is slightly more than half of the total project equity commitment. Almost \$7 million of it went for legal fees alone, mainly to help develop three very different capital structures as the markets; changed over time.

For all that effort, it was still mahem at the end. "There has to be a better way," said a shell-shocked Michael Crane, who represented his mother, Magalen Bryant, in the final push to closure last year.

Mrs. Bryant wound up with almost \$34 million of her family money invested as cash equity and preferred partnership shares left in at the close of financing. With a firm commitment from her partner, Italian toll road operator Autostrade, to stay the course, Mrs. Bryant assumed most of the \$17-million increase in project costs during 1993. Another \$46 million of her capital is tied up for as long as 15 years to back what the banks call liquidity facilities, two standby lines of credit.

## Venture Risk

Working through various investment entities since 1988, Mrs. Bryant had written checks for \$24 million to pay for the project development effort. At least that much was at risk last summer when Crane and his financial advisor, Timothy Sutherland, issued an ultimatum to the lenders for a September close.

In a bold move, Crane backed up his deadline by inviting every politician and t.v. station between Richmond and Washington, D.C. to attend a Sept. 29 groundbreaking. The

invitations went out less than five weeks before the big event.

The threat of a very public failure on Dulles may have gained the equity sponsors some leverage. It definitely got the lenders to focus on the huge task ahead of them in closing the highly structured deal. Agreement had not been reached on most of the financing details by the start of last August. Two of the lenders, John Hancock Insurance Co. and Deutsche Bank, had only recently come aboard. And Brown & Root was still not comfortable in its role as a long-term equity player in the owners group.

### The Ultimatum

Driving everyone was a do-or-die ultimatum from Loudoun's political leaders. The rural county of about 90,000 people was desperate for something to jump-start the real estate market. New development had largely died during the recession, stranding many who had bought land along the Dulles right-of-way during the speculative peak. Some developers had gone under; others were tottering on the brink of bankruptcy, further threatening regional banks.

The board of supervisors finally put its foot down last July, when it grudgingly agreed to extend its special exception zoning approval of the Dulles alignment for 90 days, until Sept. 30. If nothing happened after that, the county threatened to withdraw its support and pursue an earlier request for state funds to expand the competing State Route 7 from Dulles Airport to Leesburg.

After three years of false promises on the Dulles financing, no one believed the local politicians would let another construction season pass without taking some strong action. The drop-dead date for mobilizing construction was late September. After that, capitalized interest and higher direct costs would outstrip any gains possible from a late start.

Clearly, the pressure was on last fall for what all believed was the last chance for a financial close on Dulles.

### The Financing

That happened on Sept. 30 when \$138.8 million in sponsor equity and \$280 million in very-long-term institutional debt was committed for a four-lane toll road with nine interchanges to meet near-term travel needs in Loudoun and Fairfax counties. Another \$67.5 million in future debt commitments were made to build the final two interchanges sought by local developers and the county.

The institutional lenders were led by CIGNA Investments, Prudential and John Hancock. Together, the 10-member group took all of the term debt, and \$202 million of construction-period financing on the same terms as the banks.

The strong institutional participation resulted in the bank group—Barclays, NationsBank and Deutsche Bank—getting a full takeout for their 30-month loan to cover \$57 million of the construction-period costs. The banks also agreed to issue a letter-of-credit for a \$40-

million standby revolver which is collateralized by the sponsors.

Six series of 29 and 32.5-year notes totalling \$253.75 million were funded in November. Of that, \$60 million was paid out to cover closing costs and outstanding obligations, and to repay a \$36.7 million bridge loan made by the banks for acquiring right-of-way and construction mobilization. The rest was escrowed for use during construction.

The notes have a mix of amortization schedules aimed at reducing the cash flow requirement during the 42-month ramp-up period when toll revenues are not expected to cover operations.

The weighted average interest on the term debt during operations is 10.18%, which is competitive with other long-term project financed facilities in the cogeneration and utility pipeline markets.

#### Equity Clinched It

Using the financing base-case traffic and revenue projections by URS Consultants, the internal rate of return on Dulles is 18%, according to Crane. Given the high venture risk on Dulles, "that's not an overwhelming number," he says, "but you don't have to believe in the base case either."

The equity put in by the general and limited partners in Toll Road Investors Partnership II L.P. (TRIP II) comprises cash and commitments in these four pieces:

\$40 million in cash paid in at the closing;

15-year bank letters-of-credit collateralizing a \$40-million supported revolver backed by the sponsors;

\$40 million in standby equity backed by letters of credit from the sponsors; and

\$18.8 million in preferred partnership interests taken by Mrs. Bryant, Autostrade and Goldman, Sachs & Co.

The PPIs consist of \$16.8 million in sponsor development costs that were not reimbursed at the closing, and a \$2-million payment to Goldman Sachs for its financing efforts from 1990 to 1992. The PPIs may be converted into subordinated deferred interest notes at some point. In all cases, however, the preferred shareholders will be paid from equity earnings, not from project assets.

#### Targeted Standby Equity

Equity solved the Dulles financing problem, but principally because \$80 million of the total is in the form of two unfunded standby facilities backed by the general and limited partners.

The standby funds are specifically targeted to address construction overruns, operating shortfalls and, in certain circumstances, debt service.

Neither pool of capital is likely to be substantially drawn down if the base case traffic projections prove to be correct. However, both will earn 7.5% a year for the sponsors as long as the fully collateralized credit lines are tied up. Those earnings will not be paid out in cash. Rather, they will accrue in a reinvested earnings account and be paid out of profits later.

The bank fees for the letter of credit for the revolver will be paid from project cash flows. And only standby funds that actually get spent will be counted in the regulated rate-of-return calculations, taking pressure off toll rates.

Initially, the liquidity facilities take the place of debt service and other reserves. They will remain in place for as long as 15 years, or until project revenues are strong enough to meet senior debt coverage targets and to fund a debt service reserve. More stringent conditions are attached to the standby equity commitment, which will be drawn down for most purposes only after the supported revolver is exhausted. Standby equity may be called to support debt service shortfalls before the revolver is exhausted.

Calls on the equity reserves are expected during the 30-month construction period and for about three and a half years after startup when the base-case revenues are not expected to cover costs. The rampup period was originally projected to extend for seven years after construction but the realization of traffic projections during the long wait for financing have reduced the number of lean years.

The project's attributes combined with a financial structure designed to mitigate revenue rampup risk resulted in an investment-grade rating from Fitch Investors Service and an NAIC-2 rating for the long-term notes.

#### Public Benefits

The Dulles extension is not on the state's current six-year plan and it wasn't likely to get funded in any previous plan, so Virginia is getting a needed highway much sooner than it would have otherwise. Along with delivering enhanced mobility, the private owners will create hundreds of jobs, and their road will induce substantial development in the corridor, all of it according to the county's master plan.

Other benefits are likely to become more apparent as time passes. Among them:

The private capital and talent invested in Loudoun County's infrastructure allows government funds and executive talent to be used in addressing other pressing needs.

\$1.3 billion in federal and state income taxes (37.96% rate) are expected to be paid during the 42.5-year private operating period.

Local property taxes are estimated at \$103 million.

The Metropolitan Washington Airports Authority will be paid \$20.2 million in land rental fees.

Operation and maintenance costs of \$1.2 billion will be paid from toll revenues or by equity sponsors, not the government.

A \$75-million repaving reserve will be funded from toll collections.

#### No Public Risk

There is no credible financial risk to the state, says Richard J. Williams, the SCC's Director of Economics and Finance, who has followed Dulles from the start. Default provisions were carefully negotiated by Virginia assistant attorney general James Hayes to avoid any obligation to lenders. All of its development and oversight costs will be reimbursed. The state's only possible cost would be to maintain the completed road if the private owners went bankrupt and the tolls didn't cover operations, says Williams.

With so much equity in the Dulles capital structure, there is little possibility of default. For political reasons, the TRIP II partners agreed to forego real estate investments along the alignment, so there is no additional risk exposure. Their sole concern is with the success of the toll road.

The banks are in next. They are quickly taken out by large institutional lenders with substantial reputations to protect. "Firms like CIGNA, Prudential and John Hancock do not let projects like this fail publicly," says Sutherland, President of C.C. Pace Resources. "If something goes wrong, there is going to be so much pressure to fix it that it will get fixed fast and right."

The next step, he says, will be to develop an aggressive marketing plan for Dulles. The state is expected to select a turnkey vendor soon to install an electronic toll and traffic management system on the existing toll road.

Once that choice has been made, the private operators will move into high gear to make sure their customers get what they want—fast, efficient, safe transportation at a reasonable price. n

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#### Equity Assumptions (1/94, p.3)

Pre-Construction Developer Financing	\$68,280,673
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Expenses Through 9/28/93, Comprised of:

Cash Expenditures	49,480,673
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Preferred Partnership Interests	18,800,000
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Composition of Equity Financing

Cash Invested at Closing      \$40,000,000

Shenandoah    22,933,333

Autostrade    11,733,333

Brown & Root 5,333,333

Revolver Guarantees

Shenandoah    22,933,333

Autostrade    11,733,333

Brown & Root 5,333,333

Stand-by Equity Commitments

Shenandoah    22,933,333

Autostrade    11,733,333

Brown & Root 5,333,333

Composition of Preferred Equity/Sub. DINs    \$18,800,000

Shenandoah    10,815,175

Autostrade    5,984,825

Goldman, Sachs      2,000,000

Source: TRIP II, L.P.

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Capital Structure (1/94, p.4)

Sources and Uses of Funds: Permanent Period

Sources: (a)    US\$ (Millions)

32.5-Year Permanent Loan, Series A-1 \$63,000

32.5-Year Permanent Loan, Series A-2 57,000



32.5-Year Permanent Loan, Series A-3	60,000
32.5-Deferred Interest Loan, Series B ©	13,400
29-Year Deferred Constr. Interest Loan, Series C-1 ©	25,500
29-Year Deferred Constr. Interest Loan, Series C-2 ©	55,000
	\$279,400
Preferred Partnership Interests (d)	\$24,400
Support Fee (e)	14,900
Equity (b)	40,000
Total	\$359,700
Uses: US\$ (Millions)	
Total Construction and Financing Costs (f)	\$299,200
Accrued Interest During Construction	20,200
Preferred Partnership Interest (d)	25,400
Support Fee (e)	14,900
Total	\$359,700

(a) Does not include Revolving Credit Facility in the amount of US\$40 million, which would be drawn upon for debt service as needed.

(b) Does not include Standby Equity in the amount of US\$40 million, which would be drawn upon for debt service as needed.

© Includes accrued interest during construction.

(d) Includes accrued return during construction.

(e) Includes accrued fees during construction.

(f) Net of preferred partnership interests of US\$18.8 million.

Source: TRIP II, L.P.

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Construction Period Cash Usage (1/94, p.7)

Pre-Construction Development Costs \$68,280,673

Construction-Related Costs

Construction draw 141,140,000

Road improvement #1 4,395,996

TRIP II construction management 4,000,000

Utility relocation 6,640,000

Utility allowance 250,000

Quality assurance 3,300,000

Engineering design/contingency 745,000

VDOT inspection and design review 1,000,000

Material testing and inspection 1,046,997

Lender project management 250,000

Patton, Harris & Rust surveyors 250,000

Wetlands acquisition 1,895,000

Wetlands mitigation 1,900,000

Wetlands monitoring 125,000

Wetlands maintenance 75,000

Land acquisition 15,435,000

Real estate taxes during construction 250,000

Wrap-up insurance & associated L/C costs 5,401,298

Performance bond L/C costs 31,250

Insurance and other bond expenses 0

Bond & insurance escrow earnings (294,531)

Sub-Total Construction-Related Costs \$187,836,010

Other Project Development Costs

TRIP II administration	3,900,000
MWAA rent	800,000
Rollback taxes	400,000
Ancillary toll equipment	1,200,000
O&M consulting	990,000
Sub-Total Other Development Costs	\$7,290,000

Financing Related Costs

Interest on construction loan	4,834,709
Total cash interest payments on notes	49,441,975
Interest earnings	(13,673,499)
Commitment fees on bank facilities	696,756
Commitment fees on cost overrun facility	93,750
Agency fee	300,000
Goldman, Sachs fee	0
L/T financing fees	475,000
C.C. Pace fee	2,000,000
Bank & other fees	4,035,400
Settlement, closing & misc.costs	941,176
Other costs & fees	0
Sub-Total Finanicng Costs	\$49,145,267

Total Quarterly Draw Requirement 312,551,949

Uses of Additional Notes 5,463,286

Cost Overruns 0

Grand Total Draw Requirement        \$318,015,235

Source: TRIP II, L.P.

## **Lessons Learned: A State Perspective (1/94, p.9)**

by James W. Atwell, Assistant Commissioner for Finance, Virginia Department of Transportation

For states that might be considering privatizing highway projects, here are some things we discovered that will help:

It is imperative that the executive and legislative branches of government give their whole-hearted support to the project. While this sounds obvious, since new legislation probably is necessary in all of the states as it was in Virginia, it is important that this backing continues after the legislation is passed.

When the enabling legislation is being drafted, make sure the default provisions are very specific. Not only is this in the best interest of the state, it is a major concern of investors and lenders. And bear in mind that it is important to be sensitive to the concerns of the investors and lenders as early in the process as possible.

Keep the Attorney General's office fully involved in every step of the process. This will help resolve legal issues as they arise. Keeping the state's legal officials involved might even result in questions being anticipated, allowing them to be resolved before they become problems.

This same type of close working relationship should be maintained with the regulatory authority (in Virginia, it is the State Corporation Commission) responsible for setting the toll rates and the rate of return for investors.

Follow the federal guidelines even if there are no plans to use federal funds. This will keep open your option to use federal ISTEA funds on the project at a later date.

Keep the local governments and their citizens fully informed and involved in every step of the process. Clear and concise communications are vital. More problems can arise because of misunderstanding and lack of communications than any other facet of the operation.

Finally, be flexible in your dealings with all the parties involved. Remember you are dealing with a new concept and it requires flexibility, patience, common sense and reason.

The Dulles Greenway is scheduled to be opened to traffic in two years. When it happens, all of the people involved will look back at the long trip between the first plans and the final pavement. And they will likely agree that, while the trip has been long and not without

conflicts, frustrations and problems, it was a journey well worth taking. n

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CIGNA: Steady and Strong (1/94, p.9)

“Everyone in this infrastructure development industry needs to tip their hat to CIGNA,” says Timothy Sutherland, President of C.C. Pace Resources, Fairfax, Va., which helped to arrange the Dulles financing. “When the waters around Dulles got very trubulent and a lot of the Apostles wanted to get out of the boat, CIGNA stood firmly and patiently.”

In addition to private power, CIGNA Investments had made a specialty of highly structured, lower-investment-grade deals, many of them with Goldman, Sach’s private placement group. CIGNA got interested during Goldman’s first meeting with institutional lenders in may, 1991, and circled on \$128 million in 32.5-year notes about a year later.

Like Prudential, John Hancock, Teachers and other institutional lenders who eventually joined them, CIGNA “saw a huge unmet need and a real opportunity for a niche to develop,” says Larry Drake, who heads CIGNA’s infrastructure group.

Their cogeneration business was slowing, spreads were narrowing and competition was increasing for high-yield domestic credits. the Sithe power project had recently closed in the largely unregulated 144a private placement market, putting the pressure on the project finance groups at CIGNA and others.

Drake, whose daughter attended college in Washington, D.C., was familiar with traffic congestio in the area. Based on Vollmer’s traffic studies and a detailed explanation of development patterns in the Dulles corridor by Arthur Andersen & Co., “We couldn’t see any reason why the project couldn’t happen,” says Drake.

CIGNA has maintained strong ties to Peter Kiewit Sons Co., the original Dulles contractor and a partner with Bechtel Group in United Infrastructure Corp. CIGNA also is close to Florida-based Greiner Engineering which is teamed with The Perot Group in the National Transportation Authority, an international infrastructure project developer. NTA is pursuing a number of international projects as well as public-private deals in California, Texas, Florida, Georgia, Washington and Minnesota. n

Public Private Partnerships Score a Hole in One on the Dulles Greenway (1/94, p.10)

By Marie Fioramonti, Prudential Power Funding Associates

The basic framework of the Dulles public-private partnership had been developed two years ago through the creative efforts of Virginia’s Secretary of Transportation, the Virginia Department of Transportation (VDOT), the State Corporation Commission (SCC), and TRIP II. The financial structure was the final and most complex element to fall into place.

The two most significant issues which had to be addressed before closing the financing were revenue uncertainty and long-term operating risk. For, unlike a cogeneration or waste-to-energy facility, the Dulles Greenway has no guaranteed or contractual sources of revenue. Deriving all of its revenue from tolls paid by individual motorists, and offering only a service—and a decidedly nontransferable one at that—the risk of significant cash-flow fluctuations is substantial.

#### Cash Flow Conundrum

A financial structure comprised of very long-term debt and a unique equity support arrangement was devised to address the potential for revenue variability.

After much negotiation, a very long debt term—an average of 30 years—along with a back-weighted amortization schedule, were approved. Such a unique approach accomplishes two vital goals: 1) it minimizes the debt-service burden during the ramp-up period; and, 2) it creates a lower debt service burden in any given year, and thus, provides a comfortable cashflow cushion throughout the life of the deal.

An ancillary benefit of a term debt structure that included only very long-term debt was the elimination of potential intercreditor issues that could have arisen between medium (10-14 year) and longer-term lenders.

#### Unfunded Equity

On the equity side, provisions were also made to alleviate concerns regarding revenue variability and uncertainty, while preserving attractive equity returns. The required amount of funded equity was kept relatively low, but the project's owners pledged additional support through two complimentary mechanisms.

The first, a revolving credit facility, ensures cash would be available during the ramp-up period and in the event of an emergency, and reduces the risk of a long-term debt default due to a temporary cash-flow variation. Although the facility is backed not by the credit of the Dulles Greenway project itself, but by the credit of the equity partners, it is anticipated to be repaid out of project cash flows. Partners would be called on to repay the \$40-million facility from their own balance sheets only in the event of a sustained problem.

A second cushion, in the form of standby equity commitments, would be available in the event of a longer-term, systematic revenue shortfall or other problem. This \$40-million equity cushion is also backed by letters of credit backed by the individual partners.

These contingent support arrangements assure both institutional investors and governmental authorities of the equity partners' willingness and commitment to effectively construct and then maintain and operate the road throughout the term of the franchise. This is done without requiring a burdensome level of highcost, funded equity which might never be needed.

#### Operating Risks

With revenue variability thus addressed, long-term operating risks presented the remaining challenge to the financing. Here, the interests of all parties were much more closely aligned from the start. Clearly, a safe, well maintained, professionally run toll road is in the interest of state transportation officials and Virginia citizens. It's also in the best interests of TRIP II, which seeks a return on its investment through user tolls. It's the key concern of the institutional investors, who have placed their faith in a healthy operating life for the Dulles Greenway of at least 30 years.

Working with VDOT and the SCC, the equity partners devised operating, general maintenance, repaving, and major capital spending plans to assure safe, efficient operation during the road's life. These plans include a cooperative toll collection arrangement under which TRIP II will assist VDOT in collecting tolls on the existing Dulles Toll Road. This vote of confidence from the public sector, combined with the vast operating experience of Autostrade, its guarantees of actual toll collection using automated and manned collection methods, and its state-of-the-art maintenance techniques, gave the long-term lenders confidence that operating contingencies could be properly addressed.

Construction and ongoing liability risks are minimized through physical design of the road and cooperation with VDOT, but ultimately are covered through private insurance.

Government, private equity, institutional investors and banks have formed a lasting, mutually beneficial partnership to create new transportation capacity and an economic stimulus to the region, benefiting taxpayers without subjecting them to risk or cost.

To motorists driving from the existing public Dulles Toll Road to the private Dulles Greenway, the connection will be as seamless as the establishment of the public-private partnership that made this road possible. n

## **Operating Period Assumptions (1/94, p.10)**

Annual revenues escalation after 2010	3.50%
Annual O&M escalation	5.00%
Annual real property tax escalation	3.00%
O&M profit margin	
% of O&M expense	12.50%
Maximum % of O&M expense	14.50%
Minimum % of O&M expense	9.00%

Annual TRIP II administrative costs (1992 \$) \$577,000

Annual liability insurance (1992 \$) \$764,762

Annual repaving reserve requirement (1991 \$) \$574,333

Pre-widening total repaving cost (1991 \$) \$3,265,360

Annual police contingency (1993 \$) \$656,392

Interest rate earned on escrow during construction 3.75%

Interest rate earned on cash management 3.75%

Interest rate earned on repaving reserve 3.75%

L/C fee allowance during operations 1.00%

Source: TRIP II, L.P.

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Institutional Financing (1/94, p.11)

Series A-1 Notes (US\$ thousands) 63,000

Term (Years) 32.5

Weighted Average Life (Years) 24.7

Amortization:

Interest Only 5

Fully Amortizing 27.5

Treasury Rate (%) 7.83%

Interest Rate:

Paid During Construction 10.69% (q)

During Operations 10.69% (q)

Series A-2 Notes (US\$ thousands) 57,000



Term (Years) 32.5

Weighted Average Life (Years) 24.7

Amortization:

Interest Only 5

Fully Amortizing 27.5

Treasury Rate (%) 7.83%

Interest Rate:

Paid During Construction 10.69% (q)

During Operations 10.69% (q)

Series A-3 Notes (US\$ thousands) 60,000

Term (Years) 32.5

Weighted Average Life (Years) 24.7

Amortization:

Interest Only 5

Fully Amortizing 27.5

Treasury Rate (25 Year) 6.13%

Interest Rate:

Paid During Construction 10.24% (q)

During Operations 9.84% (q)

Series B Notes (US\$ thousands) 10,000

Term (Years) 32.5

Weighted Average Life (Years) 28.6

Amortization:

Accrual Period 15

Interest Only 7.5

Fully Amortizing 10

Treasury Rate (%) 7.83%

Interest Rate:

Accrued During Construction 12.08% (sa)

During Operations to Year 15 11.08% (sa)

During Operations Afterwards 10.93% (q)

Series C-1 Notes (US\$ thousands) 20,000

Term (Years) 29

Weighted Average Life (Years) 22

Amortization:

Interest Only 4

Fully Amortizing 25

Treasury Rate (21.9 Year) 5.78%

Interest Rate:

Paid During Construction 0.00% (q)

Accrued During Construction 9.83% (q)

During Operations 9.43% (q)

Series C-2 Notes (US\$ thousands) 43,752

Term (Years) 29

Weighted Average Life (Years) 22

Amortization:

Interest Only 4

Fully Amortizing 25

Treasury Rate (21.9 Year) 5.78%

Interest Rate:

Paid During Construction 0.40% (q)

Accrued During Construction 9.60% (q)

During Operations 9.60% (q)

(q) quarterly rate

(sa) semi-annual rate

Source: TRIP II, L.P.

## **The Devil is in the Reserve Accounts (1/94, p.12)**

The following is a verbatim description from TRCV's filing with State Corporation Commission of the various reserve accounts:

(i) Required Debt Service Reserve Account: From and after the date in the operating period when this account must be funded, the amount required shall be determined at any given date to be 75% of the annual debt service requirements if the debt service coverage ratio for the proceeding 12 months was less than 1.25 and 50% of annual requirements if the debt service coverage ratio had been 1.25 or greater for the prior 12 months. After the conditions specified in the financing documents for releasing the Standard Equity L/C have been met, the required amount to be maintained in this account shall be, generally, 50% of the maximum pro forma senior debt service for any future 12-month period.

(ii) Working Capital Reserve Account: An amount equal to the next six months of budgeted operating expenses (exclusive of capital expenditures, funding of reserves and contingencies) is to be held in this account.

(iii) Maintenance Reserve Account: The amount of this account is determined as the greater of such amount as may be required from time to time by VDOT and the amount then required by the lenders in consultation with their independent engineer. This account is designed to provide a funded reserve for extraordinary maintenance items such as major bridge painting, equipment replacement and other expenses, but excluding repaving (which is addressed by a separate reserve account) that do not recur annually, and as a result, would not be included in the normal operating budget.

(iv) Route 606 Interconnection Reserve Account: The amount of this account is projected to be approximately US\$4,891,000 In 1996 and is included in the project budget

and funded from project financing as work to be completed near the end of the construction period. This construction schedule is, however, dependent, among other things, on the State of Virginia completing certain expansions of Route 606 during the construction period. If TRIP II has not completed by the conversion date the construction work for which these funds were budgeted, an amount equal to US\$4,891,000 less all amounts already spent by TRIP II for such construction work by the conversion date will be held in this reserve account pending completion of such work.

(v) **Unrestricted Bonus Escrow Account:** This account will contain, subject to certain conditions, that portion of the contractor's bonus which is equal to an amount up to the excess (a) of 50% of the actual reduction in the TRIP II construction period interest costs which occurs as a result of the contractor reaching substantial completion earlier than originally projected over (b) the sum of the investment income projected to be earned on the balance held in the escrow accounts relating to the institutional notes from the actual date of the substantial completion to the originally estimated date of substantial completion, plus the portion of any interest savings described above applied toward the payment of other construction-related costs.

(vi) **Regulatory Reserve Account:** This account will contain the greater of such amount as may be required from time to time by VDOT and the amount required by the lenders for such purpose in consultation with their independent engineer. It represents a reserve for any payments required in order to comply with any requirements of law which are applicable to the construction or operation of the project.

(vii) **Repaving Reserve Account:** This account will contain the greater of such amount as may be required from time to time by VDOT and the amount required by the lenders for such purpose in consultation with their independent engineer. It constitutes a reserve for the payment of future costs of repaving.

(viii) **Additional Escrow Accounts:** In addition to the funded reserve accounts described above, TRIP II must apply cash flow monthly during the operating period to fund into escrow with the Trustee pro-rated monthly amounts for interest, principal, insurance premiums, property taxes, and basic rent payments under the agreement relating to the easement granted to TRIP II by the Metropolitan Washington Airports Authority. Amounts so placed into escrow are to be used to pay the relevant category of expense.

### **... And the Cash-Flow Waterfall**

During the operating period, TRIP II must apply monthly cash flow from all sources generally in the following order:

- 1) to pay trustee fees, Metropolitan Washington Airports Authority (MWAA) basic rent, VDOT reimbursable expenses, taxes, insurance premiums, and the acquisition/leasing costs of toll collection equipment;

- 2) to fund other expenses, including fees payable to the Operation and Maintenance Agreement;
- 3) to fund into escrow the monthly pro rata amounts of MWAA basic rent, insurance premiums, tax payments, and principal and interest, computed on the basis of the nexty scheduled payment of such items coming due;
- 4) to repay principal when due of any outstanding Supported Revolver loans;
- 5) to fund the Debt Service Reserve Account;
- 6) to fund the Working Capital Reserve Account (subject to certain conditions);
- 7) to fund the Maintenance Reserve Account;
- 8) to fund the Route 606 Interconnection Account with any additional monies needed to complete such construction work;
- 9) under certain circumstances, to fund portions of any unrestricted contractor bonus earned (but for which TRIP II previously did not have sufficient available cash to allocate to this use by reason of the priorities established by the Security Deposit Agreement);
- 10) to fund the Regulatory Reserve Account;
- 11) to fund the Repaving Reserve Account; and
- 12) finally, if all current expenses and reserve accounts specified above have been fully paid and funded, and certain other conditions are met, the amount then permitted to be used to pay MWAA percentage rent under the agreement relating to the MWAA easement, to pay any restricted contractor bonus under the construction contract and to be distributed to the Partners as their return on equity. n

## **Dulles Traffic and Revenue Forecast Enhanced with a Vision of Development (1/94, p.14)**

by Gerald V. Nielsten, Managing Partner, Vollmer Associates

This past fall saw the closing of a chapter on the development of a toll road—the successful financing of the Dulles Toll Road Extension Project (DTRE). The five years that elapsed from my first conversations with Ralph Stanley in 1989 regarding the revenue potential of the project to my congratulatory note to Tim Sutherland this past December provided a fascinating insight into the development of a private toll road.

The DTRE, now renamed the Greenway in its implementation phase, will extend the existing Dulles Toll Road from its current terminus at the Washington Dulles International Airport entrance toward the northwest to the Route 7/15 Bypass south of Leesburg, Virginia. This

new 14-mile toll road, combined with the existing toll road, will provide the only east-west limited access route from the Dulles corridor and points west to the northern Virginia/Washington D.C. metropolitan area.

Vollmer Associates prepared traffic and revenue projections based on our traffic model of toll-free traffic in the Loudoun County study area. These projections were keyed to regional forecasts made by the Metropolitan Washington Council of Governments, forecasts of local land-use market absorption, forecasts of enplanement and employment for the airport, and expectations of local roadway improvements in the traffic network.

This toll-free traffic forecast was adjusted to account for traffic diversions resulting from the imposition of tolls. Together, the model and toll structure produced revenue traffic projections, which were further used to forecast annual gross toll revenues.

#### Elements of the Project

To a large degree, each of the methodologies used in the analysis were based on traditional toll facility modeling techniques:

building a roadway network;

developing land-use and economic factors in traffic assignment zones;

modeling traffic assignments; and

determining the relative traffic diversion potential compared to travel time savings and the cost of travel.

However, a number of aspects of the forecast deviated from traditional approaches:

rather than broad, long-term land-use and economic development forecasts, Arthur Anderson & Co. provided a detailed market absorption analysis of the future growth in Loudoun County;

detailed studies of trip and travel patterns were provided by Cambridge Systematics for the Dulles Airport, providing both enplanement and, more importantly, vehicle-trip projections, which were used to allocate future toll road traffic to the airport; and

most importantly, Loudoun County when we began work was dominated by farmland, with development potential only beginning to be formulated. It was thus essential to develop, clarify and communicate a plausible vision of how Loudoun County would change and to explain why this was a solid and secure basis for a revenue forecast.

In the end, when it was necessary to explain the nature of the revenue forecasts to potential investors in the projects, these non-traditional elements became positive points.

#### Strengths of the Project

What are the ingredients of a healthy, new toll project? The following list is a good start:

the project should be in an area where there are other toll facilities (so potential users are familiar with tolls);

the project should be the only limited-access expressway-type facility in the corridor (the worse the competitive roads are, the better);

the project should serve a high-income area with significant potential for growth, somewhat independent of the normal boom/bust cycles of the real estate market; and

the project should serve a special high-traffic generator whose users are relatively undeterred by paying tolls for travel time savings.

The DTRE project is a near perfect match for this formula.

It is an extension of one of the most successful new toll road projects in the past 20 years; the Dulles Toll Road met its peak hour design year (20-year) forecasts 18 months after opening.

The DTRE will be the only high-level facility in the study area; parallel Route 7 has 14 signalized intersections between Leesburg and Dulles Airport, and will take nearly twice as long to traverse when the DTRE is open.

Loudoun County is the next major growth area in the metropolitan Washington D.C. area; even in this past recession, while most counties lost employment, Loudoun County experienced both employment and residential growth.

The DTRE literally traverses a portion of the property owned by the Washington Dulles International Airport, which is projected to continue to increase its market share of air passenger traffic in the region into the next century.

These strengths eventually convinced the investors of the solid foundation for the DTRE project.

#### What Can We Expect?

The Dulles Greenway is scheduled to be open in 1996, and will likely change the nature of land growth in eastern Loudoun County fairly quickly. Currently, there are some 105,000 vehicles traveling east-west in the study area on a number of roads parallel to the Greenway. Consistent with the continued development in Loudoun County throughout the current recessionary cycle, traffic has been increasing vigorously. This traffic growth also supports anecdotal evidence of the continued growth in the economic activity of West Virginia as a long-distance suburb to the northern Virginia employment centers.

We expect traffic passing a screenline in eastern Loudoun County to increase from 105,000 vehicles daily to about 130,000 vehicles by the time the Greenway opens, and we further expect the Greenway to "capture" about 20% of the screenline total. Thus, early-year traffic

volumes on the Greenway are forecast to be about 25,000 vehicles daily. We expect an extensive marketing program for Electronic Toll Collection (ETC) will attract some 20% to 30% usage to non-stop dedicated lane ETC mode. We further expect vigorous increases in both traffic and revenue through the decade, as the Greenway remakes the future land-use patterns in Loudoun County.

It has been an exciting though occasionally frustrating five years. The lessons learned show that the path to a successful new toll facility financing is not for the faint of heart. We are pleased to have contributed our skills to add in a small way to the success of the project. n

## **Regulatory Risk**

### **Dulles Contrarians Prefer Smart Rules to Market Blues (1/94, p.16)**

Virginia and California have chosen very different methods of ensuring that the long-term public interest is served by the private consortia developing and building toll roads in their states. Conventional wisdom holds that the flexible approach used in California, where business terms—including public default provisions—are negotiated and enforced under contract law, is superior to the statutory oversight of the Dulles project.

In all cases, most experts say, the cost of capital is higher for user-fee-supported infrastructure projects where the state regulates fees and service quality than where market mechanisms are relied upon to set prices, as in California.

“It’s the market that makes things work,” says Bernays Barclay, of King & Spalding, a financing law firm. “Everyone is greedy. If they’re too greedy, then the pricing will be wrong and the project will fail.” As important, he says, with modern communications, “the world will know almost instantly” when greed wins over prudence.

Citing state prudency reviews and other concerns, a panel of lenders, investors and attorneys at a recent Forbes conference agreed that the cost of capital is always higher on regulated projects than those that are governed by contracts.

#### **Dulles Contrarians**

For that reason, it’s puzzling that the institutional lenders on Dulles take a contrary view. They say they are pleased with the financial and technical oversight provided by Virginia, mainly because the quality of the staff work and the solid, pro-business reputation of the state.

Virginia’s State Corporation Commission (SCC) staff analyzed Dulles closely, knew what was needed and acknowledged that the financial structure would have to evolve with the market. “The SCC was not an issue at all on Dulles,” says Denise Duffy of CIGNA Investments.

No comparison can be made of the relative cost of capital without actually financing the same project simultaneously in both states. A toll road financing expert with experience on



both Dulles and the California AB 680 projects suggests, however, that Virginia's regulatory involvement may have reduced the risk for institutional lenders on Dulles.

Unlike the state revenue bond financing for the original Dulles toll road, there is no "moral pledge" by the government to make up deficiencies in toll revenues.

However, by agreeing to allow reasonable profits and to regulate the tolls according to the value of the service provided, the state indirectly grants market power in its franchise to the Dulles sponsors, he says.

That franchise, the SCC's long history of strong support for business, and the state's political commitment to Dulles almost ensures that there will be some return for the equity sponsors. The institutional lenders are first in line at the pay window, he says, so they're very pleased to see that political underpinning of the returns to equity.

### Smart Regulation

"If you do it right, you can turn regulatory oversight into a positive selling point when you're seeking debt and equity financing," says Robert Gibbons, the Debevoise & Plimpton partner who represented the institutional lenders in the Dulles financing. The key, he says, "is to have a definable set of rules."

Toward that end, a comprehensive agreement on the technical rules of engagement for both public and private partners was negotiated in detail over three years and signed by the Virginia Dept. of Transportation a few weeks before the financial close. "It gives you comfort that they're not going to change the rules on you in an arbitrary and unreasonable way," says Gibbons.

In addition, the financial returns to investors in the Dulles partnership are regulated in much the same way as a Virginia public service corporation. Toll rates and the return on equity are set by the State Corporation Commission (SCC), which has the power to change both over time.

### Angelic Details

The SCC's decisions "are not totally arbitrary," Gibbons says. Its oversight is governed by the private toll road enabling legislation which requires that the tariffs be set at a level that:

is reasonable to the user in relation to the benefit obtained;

will not materially discourage use of the highway; and

will provide the owner with a reasonable return on equity.

A seven-year schedule was adopted in 1990 setting tolls at \$1.75 through 1995 and \$2.00 through 1997, when TRIP II will have to apply for an increase if necessary. A schedule of proposed toll increases required to earn a reasonable return for the full term of the private concession was presented to the SCC during its initial rate hearings. The financial model for

Dulles assumes those rates are adopted.

Allowed returns on equity are capped at 30% and remain there for the longer of five years or until debt service coverage equals 1.15x. Returns drop to 25, 20 and then 15% as debt service coverage increases. When it reaches 1.75, the maximum return notches down to 14% and remains there for the rest of the private operating period.

The SCC also included an accounting mechanism that allows returns that are earned but not paid during the rampup period to accrue in a special account that pays out profits with interest if project revenues grow substantially in later years. Balances in this reinvested earnings account (REA) compound at the authorized rate of return.

REA satisfies important financing and regulatory concerns, says Richard Williamson, of Shaw, Pittman, Potts & Trowbridge, which represented the Dulles sponsors.

To provide for fair treatment of known, early losses during the high-risk startup period, investors need a set regulatory mechanism that will allow the operators to earn high returns much later, when regulators would normally limit profit-taking. "Without that opportunity, the necessary capital for Dulles would simply not be available," says Williamson.

Secondly, he says, to meet the statutory requirement for a reasonable return, regulators now and in the future need a way to track the impact of the anticipated early losses on the equity returns later on.

#### The California Way

The AB 680 legislation in California allowed the California Dept. of Transportation (Caltrans) to negotiate detailed financial, legal and contracting terms with the private consortia and their financial advisors. Based on the successful close of the SR 91 financing, it appears that the department's leadership was up to the task.

Caltrans, which authored the AB 680 law, took it upon itself to determine the public interest. Its long-term view, held most strongly by Assistant Director Carl Williams, is that the initial private projects must be very profitable to create a large, liquid market for infrastructure project debt issued without recourse to the government's pocketbook.

California has the largest economy and the most sophisticated state transportation department in the country. For others, AB 680 has proven to be a hard act to follow. Arizona's disastrous, first attempt at promoting private toll roads, for example, shows what happens when government lawyers and highway bureaucrats lead the march.

Also, Caltrans had no alternative. The state's highly politicized public utility commission has a long history of antibusiness rulings. Trying to gain its approval for the SR 91 project's market-sensitive congestion-pricing concept and other innovative financing schemes wasn't in the cards.

Nevertheless, the lack of toll rate regulation on SR 91 is worrisome, Duffy says. While attractive in the short term, she says, the contract regulation approach adds political uncertainty. "What happens if more toll roads are built in California and people come to feel like they're being abused," says Duffy, "will they change the AB 680 legislation? If you're already working in a regulated environment, you can make one kind of assessment. The fact that it's not regulated in California adds another nuance that we need to understand."

As government involvement increases in the financing and promotion of public-private partnerships, a key factor in the project risk analysis will be the attitude of state regulators to business and profits generally.

Simply put, says CIGNA's Larry Drake, states that want new investment the most will get it.  
n

By William G. Reinhardt

## **The Dulles Closers (1/94, p.18)**

The Dulles closing effort was led by magalen Bryant's son, Michael Crane, who was closely advised by his friend, gas industry management consultant Timothy Sutherland, President of C.C. Pace Resources Inc., Fairfax, Va.

Retired Corps of Engineers Maj. General Charles E. Williams is managing the construction program for the sponsors. No one has been selected yet to oversee the marketing and operation of the completed road.

Larry Henry, Director of Corporate Finance for Brown & Root Civil Inc., led the Houston-based contractor's negotiations on Dulles. Project Manager James Harvey is directing the construction effort.

London-based Michael Hamilton, Director o Autostrade International, led the financial discussions for Italian toll developer Iritecna Group. Attorney Debra Ashford, of the Washington, D.C. firm Hogan & Hartson, represented Autostrade in the project negotiations.

The 10 long-term lenders were led by CIGNA Investments, Prudential Insurance Co. and John Hancock Mutual Life Insurance Co. CIGNA's early, strong commitment helped keep the project alive sinve 1991. Its efforts were directed from Hartford, Conn., by Denise Duffy and Larry Drake.

Prudential Power Funding's Marie Fioramonti and John Hancock's Barry Welch both are credited for having anchored the institutional group during the often frantic closing weeks.

Robert A. Gouldin of Christian, Barton, Epps, Brent & Chappell represented the project before the State Corporation Commission.

Barclays Bank, which had been hired in February 1992 to co-advise the developers and to syndicate the bank term debt in the original financing plan, stayed on through the transition in the fall of 1992.

Its efforts were led by Michael J. Wynne, Associate Director of the Infrastructure Group of Barclays Structured Finance. Also involved were Sanjay Khettry, who heads the infrastructure group, and Walter Fellows, who led the syndication effort.

Joining Barclays later were Deutsche Bank and NationsBank of Virginia, which has a substantial portfolio of problem loans in the Dulles corridor.

Traffic and revenue studies were done for the sponsors by Gerald Nielsten of Vollmer Associates and checked for the lenders by URS Consultants Inc. and Greiner Engineering. Also contributing to the confidence-building effort on the traffic studies were real estate consultants Elliott Farber and Matteson Scott, formerly of GA Partners, which is now part of Arthur Andersen's Washington, D.C. office.

Farber, smart, engaging and humble, is often called the unsung hero of the Dulles project because of his exhaustive knowledge of the demographic and land-use development issues that eventually drove the deal.

Goldman, Sacks & Co. built the financial model that drove the project financing up until the spring of 1992. Barclays took over but was forced to take a back seat to the institutional group after delays forced a last-minute restructuring of the debt.

The financial models underpinning the closing effort were built and run by Barclay's Michael Wynne and CIGNA's Duffy.

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## **Vital Statistics (1/94, p.20)**

The total project cost for a 14-mile limited access toll road with four lanes and nine interchanges is 838.18 million.

The total financing is \$418.18, which includes two \$40-million standby equity facilities supported by the general and limited partners in the TRIP II operating company.

The concession term extends for 10 years past the longest debt, which is 32.5 years.

Allowed returns on equity are capped at 30% and remain there for the longer of five years or until debt service coverage equals 1.15x. Returns drop to 25, 20 and then 15% as debt service coverage increases. When it reaches 1.75x, the maximum return notches down to

14% and remains there for the rest of the private operating period.

Returns that are earned but not paid during the rampup period are allowed to accrue in a special account that pays out profits with interest if project revenues grow substantially in later years.

The internal rate of return on Dulles is 18%, using the financing base-case traffic and revenue numbers from URS Consultants Inc.

The weighted average interest rate on the long-term debt during operations is 10.18%.

The all-in cost of capital for the tax-exempt debt on the San Joaquin Hills startup toll road in California is about 7.5%.

The \$340-million project budget includes:

\$68.8 million of costs incurred before the start of construction, including almost \$7 million in legal fees and \$18 million used to purchase the right-of-way. In addition, agreements with 26 landowners affected by the road require TRIP II to do more than \$5 million worth of property improvements as part of the construction effort;

\$187.8 million of construction, engineering, quality control and inspection costs;

\$7.3 million for administration, toll equipment installation and other project costs;

and \$49.15 million in financing costs, including current interest during construction and \$5.1 million in bank and advisory fees.

At Closing:

Management consultant C.C. Pace Resources was paid \$2 million for its work since last October in coordinating the financing effort.

Goldman, Sachs & Co. took \$2 million in preferred partnership interest for bringing CIGNA Investments into the Dulles project.

Bank fees paid during the construction period total \$4 million.

Using Vollmer Associates' base-case assumptions on traffic and revenue:

Cash flow from operations becomes net positive in the fall of 1999, 42 months after the completion of construction.

Draws on the \$40-million supported revolver to make up cash shortfalls during that 3.5-year period total about \$33.6 million. However, the outstanding balance after six years of operation is zero, and the underlying LCs are never drawn upon.

Taxable income to the partners during the 42.5-year operating period will total \$3.4 billion.

Interest paid on the project debt will total \$805 million.

Federal and state income taxes (37.96% rate) paid during the operating period will total \$1.3 billion.

Real property taxes paid to local governments will total \$103 million.

Operation and maintenance costs paid from equity toll revenues will total \$1.2 billion. •

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Rampup Period Cash Flows (1/94, p.20)

Years Since Start of Operations	0.5	1	1.5	2	2.5	3	3.5
Semi-Annual Period Ending	Oct-96	Apr-97	Oct-97	Apr-98	Oct-98	Apr-99	Oct-99
Semi-Annual Road Revenues	\$11,150,000	11,150,000	14,050,000	14,050,000	14,050,000	14,050,000	14,050,000
	18,150,000	18,150,000	21,800,000				
Average Passenger Toll	\$1.97	1.97	1.96	1.96	2.19	2.19	2.19
Daily Toll Paying Traffic	34,302	34,302	43,445	43,455	50,228	50,228	60,329
Cash Management	\$34,844	34,844	43,906	43,906	43,906	56,719	56,719
			68,125				
Total Cash From Operations	\$11,184,844	11,184,844	14,093,906	14,093,906	14,093,906	14,093,906	14,093,906
	18,206,719	18,206,719	21,868,125				
Total Use of Cash in Operations	\$6,410,543	4,335,825	5,940,204				
	5,870,038	6,189,898	6,126,954	6,108,008			
Net Cash Generated by Operations	\$4,774,301	6,849,019	8,153,702				
	8,223,868	12,016,821	12,079,765	15,760,117			
Senior Debt Service	\$13,470,362	13,784,724	14,035,450	14,257,101			
	15,025,603	15,149,161	15,259,822				
Project Cash	(\$8,696,061)	(6,935,705)	(5,881,748)	(6,033,233)	(3,008,782)		
	(3,069,397)	500,295					

Source: TRIP II, L.P.

**Dulles Construction Risk Sharing (1/94, p.21)**

The complexity of the Dulles financing, not its construction or operation, was the dominant risk factor for open-shop contractor Brown & Root, Inc., the builder and part owner of the toll road.

The Halliburton subsidiary has signed a fixed-price, date-certain contract with incentives for delivering the project earlier than the April, 1997, deadline. All of the design and construction is being done under the specific terms of the comprehensive agreement with the Virginia Dept. of Transportation.

Brown & Root's crews will build the final third of the road as it approaches Leesburg. Two subcontractors will build the rest, including the logistically difficult interchange at Dulles Airport. All of the subcontractors and major suppliers locked in prices a few months ago.

The contract provides for per diem liquidated damages, intended to cover the full payment of debt service, for failure to complete the road and open it to traffic on schedule.

By order of the State Corporation Commission, Brown & Root has furnished payment and performance bonds in the full amount of the fixed price. It also has warranted its work for the two years following the acceptance of the project by the design engineer, and will be obligated to repair or replace damage to or defects during the warranty period. The company also has secured force majeure insurance as additional protection.

The physical project and terrain are not technically challenging. Environmental and land-use permits all are in hand and local opposition is nonexistent. The design has been completed by Dewberry & Davis, the most experienced highway engineer in northern Virginia. The Virginia Dept. of Transportation (VDOT) has signed off on the details of the design, construction, maintenance and operation. All of the right-of-way is in hand. And the original 24-month schedule has been extended by six months to account for the late start on construction last September.

#### Contractor Owners

Construction was never the significant risk for Brown & Root; its hurdles were about equity. A decision had to be made to invest the time and effort required to understand the dauntingly complex financing, and then, how much of an ownership position to take and what form that should take.

To help make those decisions, Larry Henry, Director of Corporate Finance for Brown Root Civil, spent seven months as part of the Dulles project team.

Brown & Root's management had decided to get into the private infrastructure business, he says, and the only way to understand the risks and rewards involved is to participate in a deal. Most of the lessons were learned in negotiating the compromises needed to keep everyone interested. The hard part, says Henry, was selling all the parts of the delicate package to Houston.

New management under Thomas Knight, CEO, and new thinking among the construction veterans, notably Steve Zander, head of the civil division, and CFO Pat Moore, produced a willingness to look closely at the underlying economics of the Dulles project. Once that happened, the commitment of \$16 million in equity was made on the merits of the deal.

## Construction Oversight

The contract negotiated in 1992 with Kiewit was altered to shift early construction period risks to the Toll Road Corp. of Virginia (TRCV). Its construction management staff will coordinate efforts by Brown & Root, VDOT and others. It will also manage utility relocations, wetlands mitigation and minority subcontracting goals.

TRCV's construction team is being led by Mrs. Bryant's close confidant, retired Maj. Gen. Charles E. Williams, a 29-year veteran of the U.S. Army Corps of Engineers. Williams broke his \$145,000-a-year contract as head of the New York City School Construction Authority to come to Leesburg as TRCV's Chief Operating Officer in 1991.

In addition to experience managing a large contracting staff, Williams had knowledge of the Corps wetlands permitting process. He also is an expert at handling minority and small business set-aside programs. Williams had been involved in addressing minority subcontractor concerns and other matters for the Corps during Morrison Knudsen's fast-track construction of the Fort Drum light infantry base near Watertown, N.Y.

Wetlands mitigation work has begun along the Dulles alignment under a contract awarded to Driggs & Co. Its team of subcontractors includes C. E. Williams Inc., a minority subcontractor partly owned by the general's son, Calvin. So far, those family ties have not caused concern among the TRIP II partners, according to Michael Crane, CEO of the Toll Road Corp. of Virginia. Crane himself is the son of the lead sponsor in TRIP II, he points out.

In addition to handling change orders, Williams' key assignment is to keep the local, state and federal authorities informed and happy so that Brown & Root can build its road. On that count, everyone's smiling so far. n

By William G. Reinhardt

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## **Permanent Period Cash Flows (1/94, p.21)**

### Sources From Operations

Cash From Operations \$5,981,592,335

Cash Management 18,692,476

Total \$6,000,284,811

### Uses In Operations

Semi-Annual Escalated O&M Expense 882,171,719



Police Contingency	79,474,804	
Lease Expenses	13,457,457	
TRIP II Administrative Costs	87,886,752	
Liability Insurance	116,486,030	
Funding & Return of Insurance Escrow		0
MWAA Basic Payment	20,225,000	
Real Property Tax	103,005,272	
Commitment Fee of Revolver	1,320,975	
Letter of Credit Fees	18,600,000	
Independent Engineer Costs	12,229,135	
Agency Fee	1,300,000	
Repaving and maintenance Reserve Contributions		74,879,650
Regulatory Reserve	0	
Total	\$1,411,036,795	
Net Cash Generated by Operations		4,589,248,016
Senior Debt Service	1,152,534,965	
Project Cash	\$3,436,713,051	
Draws for Cash Shortfall		
New Draws on Revolver	0	
Standby Equity Commitment	0	
Subordinated Debt Service	349,053,644	
Uses of Cash in Financing/Investment		
Road Improvements	24,284,055	
Road Widening & New Interchange Expenditures		37,824,887

Less New Borrowings (62,108,942)  
MWAA Participation 16,109,629  
Cumulative Net Cash 1996-2036 \$3,071,549,778

Source: TRIP II, L.P.

## **Kiewit Rides a Faster Horse (1/94, p.22)**

Not coincidentally, the firing of the entire TRCV project staff came on the heels of a July 31, 1992 financial closing scheduled by Barclays Bank that didn't happen (PWF June 1992).

There were many reasons Dulles didn't close in 1992. Depending on whether Barclays or Kiewit is telling the story, the financing didn't close last year because Barclays didn't syndicate the bank debt, or it didn't close because Kiewit wouldn't accept any development risk or subordinated debt. In reality, it didn't close for a dozen reasons, not the least of which was the friction between the equity sponsors.

From the start, Kiewit was not comfortable being in a deal without having control of the Dulles financial model, which was being kept by Barclays and Goldman Sachs & Co. The Omaha-based construction conglomerate had pledged a substantial amount of cash and its construction profits as project equity. And it was willing to honor all of its construction commitments. But Kiewit wouldn't take any of the roughly \$28 million in 32.5-year subordinated debt proposed by Barclays as part of the permanent financing.

Barclays believed that Kiewit's construction profits were so strong on Dulles that it should have been willing to assume the subordinated debt. (Barclays now claims the base price in Kiewit's construction contract was \$7 million greater than the price agreed to by Brown & Root.)

Having Kiewit in longer than the banks would have made it easier to syndicate the bank term debt, Barclays believes. The bank advisors also figured that Kiewit could quickly sell down its position once construction was underway.

### **Faster Track**

Kiewit's CFO Robert Julian and Magalen Bryant were hardly on speaking terms, however. Mrs. Bryant wanted Kiewit to take a larger role in the development effort. Julian wasn't about to save Mrs. Bryant's venture equity investment and make Barclays' bank syndicate work by taking on the subordinated debt.

Kiewit believed it wouldn't be able to sell down that debt for some time after the construction period, if at all. Besides, it had other plans for its venture capital.

Julian and Kiewit's Steve George were holding talks last summer with CRSS Inc. about

acquiring the firm's ownership interest in the \$126-million SR 91 toll road project in southern California (PWF July-August I 1993). MFS Network Technologies, Kiewit's toll automation company, had already signed a turnkey contract with the SR91 sponsors to install the world's first fully automated toll system. MFS had previously lost a similar contract to Lockheed IMS for automating the San Joaquin Hills toll road, being designed and built under a turnkey contract by Kiewit and Granite Construction Co. in Orange County.

The race was on to capture the second generation automatic vehicle identification market by meeting California's new statewide AVI standard, the first in North America requiring read-write capability for smart cards that debit electronic accounts. And SR91, which closed on its financing July 20, turned out to be the fastest horse in town.

It also seems to have put Kiewit's high-flying communications company on the right track.

MFS and its partner, Texas Instruments, won a \$30-million contract on Dec. 27 to design and install its electronic toll and traffic management system on nine bridges owned by Caltrans, which are used by 100 million vehicles paying \$140 million per year. The contract is seen as the first and most important step in automating the state's massively congested road system.

#### Riskier Fish

Unlike the tolled express lanes being built in the median of California's SR91, bankers say, the Dulles revenues do not depend on untested congestion pricing theories or the all-AVI toll collection system being designed for the private operators by MFS and Cofiroute Corp.

The toll collection technology used on Dulles will be integrated with the electronic toll and traffic management system expected to be put in place this year for the state's toll road. In addition, the toll pricing on Dulles doesn't push the envelope much beyond rates already being charged on the New Jersey Turnpike and other successful eastern toll roads.

Bankers also warn that large cost overruns are likely on the \$1.4-billion San Joaquin Hills project (PWF March 1993). Compared to the open-ended process being used to design and build San Joaquin, the Dulles bankers say there is little construction completion risk on the Virginia toll road.

Technically, both are greenfield projects. But Dulles is much smaller, it is a continuation of an existing toll road, financial risks are more contained, it is being built privately as a long-term investment and the public agency involvement in Dulles is precisely defined in an agreement with the state.

The politics of building California's last major highway system have yet to be fully played out on San Joaquin. For that reason, some bankers believe that the persistence of environmental litigants, the large debt reserves in the capital structure, and the bond covenants allowing the public sponsors to sell more junior and senior debt almost ensure there will be costly change orders.

The bondholders own most of that risk, but Kiewit is worried too. Richard Geary, Executive Vice President in charge of the San Joaquin project, issued a public warning recently about delays from the public owner's close management of the turnkey contractor's work. Most of the completion risk is with the private builders, he said, yet the joint action agency and its consultants are managing the work as though it was their money on the line. n

By William G. Reinhardt

## **Long-Awaited Road Financing Almost Became a Dead Fish (1/94, p.24)**

There's plenty of blame to go around for the poor performance of the various groups assembled to finance the Dulles Greenway. Most participants in the arduous campaign that finally led to the financial close agree on five contributing factors:

The timing and complexity of this first effort to fund a startup toll road in the taxable markets made Dulles a very difficult story to tell on Wall Street.

Traffic and revenue forecasting has not advanced to the degree of scientific precision desired by banks and other institutional lenders, very few of whom are capable of analyzing project risk anyway.

Though revenue rich in the out-years, the negative cash flow on Dulles during the rampup to full traffic made structuring the right balance between equity and debt very difficult.

There are few, real experts in the infrastructure project finance field, making delays inevitable.

The lack of legal or political precedents made the financial closing process extraordinarily—almost overwhelmingly—complex. Assembling the land without eminent domain powers and negotiating local government land-use approvals without being able to exercise the political and bureaucratic power of the state added substantially to the development risk and the documentation work at closing.

### **Roller Coaster Ride**

After agreeing on those points, people go their own way in laying blame for the seven-year, \$68-million roller coaster ride on Dulles. Some project finance experts say Magalen Bryant Should have stepped aside in 1991, become a passive investor and let Kiewit or Autostrade control the deal. By insisting on active sponsorship and full control, bankers say, Mrs. Bryant eliminated most of the pool of project debt and equity as Dulles participants.

Barclays Bank finally got comfortable with Mrs. Bryant after being reassured by the chief financial officer at one of her major holdings, Dover Elevator, who also sits on Barclays' board of directors.

Some observers say the Toll Road Corp. of Virginia's (TRCV) original chairman, Ralph

Stanley, should have been more willing to share control after the preconstruction development was substantially completed in 1991-92.

TRCV was capitalized and staffed under Stanley. It pulled together the first Dulles consortium—including Kiewit, Autostrade, Goldman, Sachs & Co., Barclays and CIGNA Investments. It negotiated, documented and escrowed 49 of 50 easement deeds and plats needed for the closing on the right-of-way. It obtained environmental permits, and successfully promoted the project in northern Virginia and Washington, D.C.

However, completing any large project financing takes different skills and temperaments during the various phases of the development process. Few, if any, individuals have all the tools required at the specific times they're needed.

Stanley and the lean development staff he assembled were expert at moving the project through the long chain of reluctant bureaucrats and local landowners. But some bankers say they didn't focus closely enough on the myriad financial details. Others point to TRCV's public battles with the state highway bureaucrats and question whether Stanley ultimately could have won the full cooperation of VDOT in negotiating the comprehensive agreement.

In hindsight, some bankers say letting Goldman, Sachs control the financial model instead of TRCV may have been a mistake. Part of the problem was the perception that TRCV—lacking a dominant institutional sponsor and frequently rattled by internal disputes—was not in full control of its project. Part of the problem, bankers say, was Goldman, Sachs.

#### Institutional Momentum

To Goldman's great credit, it was the only major firm on Wall Street that was willing to take on Dulles as a speculative venture in 1990. In addition to its credibility, Goldman poured resources into the financing effort and gave the project top-level attention for most of a year. Yet it failed to arrange financing for Dulles from 1990 to 1992.

"Dulles was a very difficult assignment," says a real estate venture capital expert. "Had a major institutional player been in the lead as the developer, maybe Goldman would have pulled out all the stops and made it go no matter what," he says.

Having a Kiewit or Bechtel in the lead raises its own set of problems, however, in terms of capital costs and financial structuring. That's partly because large fee-for-service firms have a different agenda than pure development. They also have a hard time playing poor.

Keeping costs down and the preconstruction development effort focused is difficult enough for the most seasoned experts working on private deals. Doing it in public with a deep-pocket player leading the team is nearly impossible.

#### People Problems

All of the commercial bankers involved in Dulles point to former Goldman partner Marcus Dash as the source of their greatest frustration: They couldn't lend on his terms even if they

wanted to, the bankers say.

The real problem, others believe, is that none of the bankers wanted to lend—most seemed to be interested only in advisory fees. Furthermore, had Goldman originally proposed a capital structure requiring as much equity as was in the final deal, everyone would have dropped the project in 1991.

The bankers' greatest complaint is that they were ignored. "The story of Dulles is mainly about institutional arrogance," says one of the early bank leaders. "You had Goldman completely misreading the bank market and not admitting that it was the wrong approach for most of the first three years."

Dash reportedly set the tone during the first bank meeting in 1991 when he handed out the Dulles prospectus and then put the closing schedule on an overhead projector calling for bank term-loan commitments within a matter of weeks. Two groups had formed, one led by Barclays Bank and another by Citibank. Neither was very encouraged by the proposed deal.

Most disconcerting to the banks was the projected negative cash flow for the first seven years after completion of construction while traffic on the new road was ramping up. Yet, when the banks asked to see details of the Vollmer Associates traffic studies, they say they were told by Goldman that they didn't need the information and wouldn't understand it if they got it. The banks were also told that there was no need for a second opinion by their own traffic experts.

### Goodbye Banks

After chasing their tails for almost two years, the two main bank groups fell apart early in 1992. Near the end, Citibank approached TRCV independently and proposed a different mix of equity, short-term bank debt and short and long-term financing from institutional lenders. Citibank dropped out after Goldman wouldn't come to the table. The Barclays group dissolved soon afterward.

Anxiously, TRCV asked Smith Barney to take out Goldman, restructure the deal and move it to market quickly so that Peter Kiewit Sons Co. could meet its 24-month construction schedule. That would have required the funding to be in place by late summer of 1992, giving Kiewit time to clear the right-of-way, install drainage systems for spring rains and prepare for winter work on critical path items, mainly bridges.

### Barclay's Role

Smith Barney refused TRCV's request but suggested that Barclays could arrange the financing. For a substantial fee, Barclays agreed in February, 1992, to coadvise TRCV, along with Goldman, which had already placed and priced the CIGNA debt.

Barclays also agreed to attempt to syndicate the construction and medium-term debt. It developed a financial model for the project and scheduled a July, 1992, closing that called for \$128 million in 10-to-14-year bank financing (PWF June 1992).

Barclays' structured finance group had turned Dulles over to its syndication unit, which was not able to gear up in time to place the term loans. Barclays now says it was able to provide fully committed bank financing twice, first in November, 1992, and again in September, 1993. Kiewit had already dropped out, however, after the July, 1992, deadline passed, which left the Dulles equity group about \$20 million short for a financial closing.

On the strength of Barclays' loan commitments and with CIGNA's circle on the long-term debt, a new financing effort was put together early in 1993 by Timothy Sutherland of C.C Pace Resources. The capital structure that finally financed was a further evolution of the deal proposed for the July, 1992, closing. It was nothing like the original structure proposed by Goldman.

"This project came full circle," says one of the bank leaders. "Goldman, Sachs tried to push a bank deal with a small piece of institutional debt as a plug to make their numbers look reasonable." At the end of the day, however, "the banks weren't really in the deal that got done," he says. n

By William G. Reinhardt

## **Change Agents**

### **The Dulles Pioneers: A Short History (1/94, p.26)**

The idea of building the Dulles extension as a private toll road was first proposed by John Miller, CEO of Municipal Development Corp., a publicly traded infrastructure development company, and Bill Allen, a rising star at consulting engineer Parsons, Brinckerhoff, Quade & Douglas.

It seemed like an easy privatization deal. The existing state-owned toll road had been a remarkable cash cow since its opening in 1984 at 85 cents a trip. Rapid real estate development, created by the new, time-saving tollway and the predominance of wealthy, two-income families in the corridor, resulted in traffic and revenue growing much faster than state highway engineers predicted.

Traffic quickly ramped up to as high as 80,000 trips per day in some segments. Rough calculations indicated that a privately financed extension of the state's road to Leesburg would have to attract only half that number of trips per day to be financially rewarding.

In addition:

Development pressures were growing in Loudoun County.

Its conservative leaders were ready for a faster, market-driven alternative to more waiting at the public trough for a solution to its growing traffic congestion.

The landowners along the state's proposed alignment had indicated a willingness to donate

the right-of-way.

The design and construction risks seemed minimal.

The politicians in Richmond were in a bind: They had made a long list of promises in order to win voter approval for an earlier transportation bond issue, yet were coming back to the legislature in 1986 to ask for another \$428 million each year to complete the job.

Miller had begun to lay the legislative groundwork in 1986. His efforts gained credibility from the findings of a commission set up in 1987 by Virginia Gov. Gerald Baliles which found a \$7-billion shortfall in public funding for needed transportation projects.

The commission recommended and the legislature passed the Virginia Highway Incorporation Act of 1988. It removed a state prohibition on private toll roads and set public policy to encourage construction of safe, convenient and economically viable highways by private parties. Although the act did not specifically cite the Dulles project, there were no others seeking approval.

Among its key points, the legislation stipulated:

that the state would not exercise eminent domain (although local jurisdictions could choose to do so);

that the operator would be responsible for obtaining liability insurance;

that the franchisee would pay the state to enforce traffic laws on the highway; and

that the facility would transfer to the state at no cost at the end of the franchise period, which would extend for 10 years beyond the longest term debt.

Total project costs for Dulles in 1986 were estimated by Miller and Allen at \$146 million, which was to be financed at a 75/25 debt-to-equity ratio.

#### MDC'S Last Gasp

Ralph Stanley joined Municipal Development Corp. in 1987. MDC was a publicly traded company launched by James J. Lowrey a year earlier to develop private infrastructure projects. One of its first possibilities was the private extension of the Dulles toll road.

Never very strong, MDC ran out of gas late in 1988, about a year after Stanley got there. Lowrey, a former Salomon Brothers investment banker, had taken Catalyst Energy Corp. public in 1986 in one of the early blockbuster deals in the private power business.

That same year, with no real projects or much of a business plan, Lowrey raised \$8 million in an initial public offering for MDC. Most of that seed money was gone by the end of 1988; about half for an acquisition that went sour (PWF September 1988).

After leaving MDC, John Miller went to work for Sam Katz at Public Financial Management



Inc. (PFM), a municipal finance advisory firm in Philadelphia.

Stanley and MDC director John R. Reilly went to Leesburg to try to make Dulles the first private toll road in modern America. They paid \$254,000 for the development rights and quickly teamed with Goldman, Sachs & Co., Parsons Brinckerhoff, Kiewit Eastern Inc. and Vollmer Associates to finance and build their road to riches.

Italian toll road operator Autostrade was brought in later by Stanley, after environmental permits and most of the land-use questions had been settled.

#### The TRCV Team

Stanley, like his former boss, Ronald Reagan, was a strong believer in privatization during the 1980s. Where President Reagan had Maggie Thatcher to show the way, Stanley eventually found Maggie Bryant, a wealthy member of northern Virginia's rural gentry, whose deep pocket made change seem possible in Loudoun County.

As head of Reagan's Urban Mass Transportation Administration (UMTA), Stanley had instituted a policy that forced big-spending transit agencies to consider privatization before buying more buses or trains with federal subsidies. Strong opposition from cities and unions resulted in the policy having little effect on federal transit subsidies. It did make Stanley wildly unpopular with UMTA's constituency, which ultimately drummed him out of Washington.

(The Clinton Administration, bowing to union pressure, recently abolished Stanley's policy, along with the private-sector initiatives group at the transit agency.)

With Wall Street booming and the disastrous results of the 1986 tax act still unclear, Stanley set out to prove that privatization was good business—if not good politics.

At 37, he became chairman of the Dulles development company, Toll Road Corp. of Virginia (TRCV). Reilly, a top Democratic president. Lauren Walters, political advisor, was TRCV's Fulbright scholar and Stanley's law school classmate, also 37, was chief operating officer. Paul Hayden, a seasoned merchant banker with infrastructure project finance experience in Europe and Latin America, was CFO.

Reilly and John Milliken, former Secretary of Transportation in Virginia, were law partners together at Winston & Strawn in Washington, D.C. Reilly left TRCV in 1990, however, after a bitter dispute with Stanley over money and control. He was not replaced.

Milbank, Tweed Partner Robert E. Spring was hired to advise the TRCV sponsors. His connections to J.P. Morgan's private banking group and to Stanley, a family friend, brought Mrs. Bryant, a Morgan client, into the Dulles toll road project in 1988.

Mrs. Bryant took most of a \$4-million private placement that capitalized TRCV in October of that year. She has been the development company's main financial backer ever since, eventually putting \$24 million in cash into the Dulles effort before the financial close.

## Public vs. Private Costs

Most of TRCV's first two years were spent working with landowners, local governments and the state in trying to define the private project, gain control of the land and secure all permits and approvals from the Dept. of Transportation (VDOT) staff.

State transportation bureaucrats, uncertain of the landmark legislation and unwilling to cede control of their franchise to an unknown private entity, were not helpful. They believed then—and still do—that they could finance and build the new toll road at much lower cost than the private developers.

As evidence, VDOT cited a 12-mile toll road in neighboring Fairfax County that it had completed in 1984 with proceeds of a \$57-million revenue bond sale. The state's road from Dulles Airport to the capitol beltway had already begun to produce a surplus by 1986. That generated talk about an extension to Leesburg, and later about widening the just-competed four-lane road.

Well aware of the private plans and legislative intent, VDOT formally proposed its competing public project anyway and got approval in 1989 to issue a general obligation bond to fund it. A GO bond was proposed instead of a revenue bond partly because VDOT didn't have control of the surplus revenues from its toll road. Some also say its traffic and revenue accounting was suspect.

PFM's Katz later advised VDOT on financial matters relating to the certificate of public necessity for TRCV's proposed private road. A key question raised was the cost of public versus private development. Katz made the case against purely private development based on the high cost of equity and taxable debt.

The opposite case was made by Steven Steckler, Stanley's former speechwriter at UMTA. Steckler had left government to head a new transit and infrastructure finance group at Price Waterhouse. He countered PFM's case with an analysis that showed public delivery could be more expensive, if the state's risk was properly accounted for in a stand-alone revenue bond, and if landowners donated the right-of-way to TRCV.

Loudoun County insisted that the toll road be regulated by the State Corporation Commission (SCC), which oversees the state's insurance industry, banks, and utilities. The SCC, once involved, evaluated the public and private proposals itself. Its comparison revealed even larger benefits from adopting the public alternative than VDOT's analysis.

All discussion stopped soon after newly elected Gov. Douglas Wilder announced his support for the private project. VDOT quickly withdrew its competing proposal, rendering the cost comparisons moot. TRCV's application to build and operate the Dulles Toll Road Extension was approved in 1989 by the Commonwealth Transportation Board. The SCC issued a Certificate of Authority to TRCV a year later.

## Into Goldman's Arms

Having overcome that hurdle, Stanley and a core group from Leesburg opened an office in New York and announced a financial close for July, 1990. Goldman's municipal project finance expert, Jeff Miller, and Goldman partner Marcus Dash, were put in charge of the high-priority Dulles effort.

The plan proposed by Dash called for a substantial amount of term bank loans in a capital structure that was light on equity but loaded with debt reserves and other protections to cover the negative cash flow projected for seven years after startup.

It was a bad time to be talking to banks about anything, much less about long-term debt for an ideologically driven real estate venture disguised as a toll road that existed in the twilight zone between public and private control. Goldman, it turns out, wasn't up to telling the story. That's mainly because, until recently, hardly anyone was listening.

### The End of the Road

After a jolting and expensive roller-coaster ride, Mrs. Bryant got desperate after a third attempt at a financial close flopped in July, 1992. Stanley and nearly all of the TRCV staff got fired two months later.

Miller did not make partner and left Goldman to work for another Wall Street firm. Dash left Goldman quietly sometime last year.

Parsons Brinckerhoff (PB) and TRCV split paths on Dulles a few years ago after a dispute over money that turned into a personal feud between Stanley and Allen. Among other things, Allen went on to start Parsons Brinckerhoff Privatization and to lead ARTBA's Public-Private Ventures Division.

Financially strapped by the recent loss of 650 jobs designing the Superconducting Super Collider, Parsons Brinckerhoff's management recently cut off all funding for private development projects in the U.S. That includes PB's share of the SR 125 privatization demonstration project in San Diego County, Calif. Allen is reported to be looking for a new job, possibly with CH2M Hill. Morrison Knudsen Corp. has restarted talks with PB's partners about a buyout.

Spring, still a Milbank partner, was general counsel to Sen. Patrick Moynihan's Infrastructure Investment Commission. With support from Lehman Bros., he is hoping to get Moynihan to launch hearings on a federal entity to put subordinated debt into privately sponsored infrastructure projects.

Miller is still working with Katz, whose entrepreneurial business venture has grown into a national force in municipal finance. Katz, a Republican, ran a strong campaign for mayor of Philadelphia in 1992, and recently announced his candidacy for governor of Pennsylvania.

Walters was replaced late in 1991 by retired Corps of Engineers General Charles E. Williams. Walters went home to Concord, Mass., and teamed up with a group of New England wise men to form Conifer Partners, which recently launched an international infra

structure investment fund. Walters was paid for his early contribution to the Dulles effort at the financial closing.

Steckler's infrastructure finance advisory business at PriceWaterhouse has grown exponentially. He recently turned down a partnership offer and this month joined HNTB Corp. as CEO of The Infrastructure Management Group Inc., a Washington, D.C. full-service development advisory firm.

John Reilly was paid \$260,000 at the closing for his early work with TRCV.

Stanley was paid far less. After failing to draw in Bechtel Group as a sponsor and program manager on Dulles, Stanley joined the firm in San Francisco last fall as head of infrastructure development for Bechtel Enterprises. He will soon join Kiewit's Gerald Pfeffer, Steve George and others in Chicago, where the Bechtel-Kiewit joint venture, United Infrastructure Corp., is forming under its new CEO, real estate developer Scott Miller. n

By William G. Reinhardt

## **September 1993**

### **Dulles Greenway Groundbreaking (9/93, p.1)**

On the strength of Magalen O. Bryants's belief in the revival of private turnpikes, the wealthy widow's deep pocket and \$80 million in commitments incurred by the developers since 1987, the sponsors of the private toll road extension from Dulles airport to Leesburg, Va., held a groundbreaking ceremony on Sept. 29.

The construction start beats an Oct. 1 deadline set by the Loudoun County Commissioners, who threatened to withdraw their approval if work was not underway by then.

With the clink of champagne glasses, Brown & Root Inc. and its two subcontractors began clearing and grubbing work under a \$150-million contract that will deliver the newly named Dulles Greenway in 30 months along right-of-way assembled by the private developer. Despite the late start, the Houston-based contractor/project sponsor still hopes to complete the clearing work on the 14-mile, four-lane toll road before winter closes in on Leesburg.

The Toll Road Corp. of Virginia (TRCV) had not been able to convert letters of commitment for over \$300 million in private funding into a financial closure before the groundbreaking. The closing did occur a day later, after last-minute details were sorted out in New York.

Dozens of parties had some claim on the project purse as a result of five turbulent years

spent trying to develop and build the private toll road. Chief among them was Goldman, Sachs & Co., which sources say was seeking payment of its \$11.7-million fee for trying to fund the private project through its public finance group in 1991 and 1992.

The debt-equity financing plan proposed a few months ago estimated total project costs, including interest, fees and return, at \$330 million. PWF sources said that as of mid-September commitments had been received from all of the debt and equity participants, with the exception of General Electric Capital Corp.

Rather than haggle, Mrs. Bryant's investment company, Lochnau Ltd., agreed to take most of GE's \$22 million in equity. The other sponsors, Brown & Root, Autostrade International and Reliance Development Group, all are said to have increased their shares in the limited partnership as well.

The financing includes permanent project equity of \$40 million, standby equity of \$40 million plus a \$40 million revolving credit line supported by the general partners. Before taking GE's piece, Lochnau had committed to \$40 million, Autostrade, \$32 million, Reliance Development Group, \$10 million and Brown & Root, \$10 million.

Toll rates are set to start at \$2.75 and will be reviewed periodically by the Virginia State Corporation Commission. Equity returns are also capped by the SCC, at 30% after tax during construction and rampup. Returns drip gradually to 17% in later years as the risk lessens. A reserve account is set up to accrue unearned returns at the capped rate during the early years of operation until profits are sufficient to pay them out to investors.

The new financing team is being led by Michael Crane, Mrs. Bryant's son, and includes Michael Hamilton, a director of Autostrade, and Tim Sutherland and Wayne Trumbull of CC Pace Resources, a cogeneration developer in Fairfax, Va. Attorney Richard Williamson of Shaw, Pittman, Potts & Trowbridge, Washington, D.C., is handling the closing for the TRCV partners.

NationsBank, which owns a substantial amount of real estate in the Dulles Greenway corridor, took a lead role in pulling together the bank group providing the construction financing and part of the supported revolver. Prudential Power Funding leads an institutional group of ten firms that includes CIGNA Investments, John Hancock, Teachers, and others. They recently committed to provide \$258 million of long-term debt, due in 2022 and 2026, enough to take out the \$59 million in 12.5-year bank term loans proposed as part of an earlier financing plan. Traffic volumes are projected to grow at 8% a year over the life of those notes.

Close to 500 dignitaries, journalists and others attended the groundbreaking. No member of the Clinton Administration, Congress, or the Federal transportation bureaucracy was there in any official capacity. Ralph Stanley, TRCV's original CEO and the person most responsible for promoting the Dulles project and the privatization concept in the U.S. transportation community, attended and was recognized for his contribution.

Appropriately, the ceremony was held on Innovation Drive near Dulles Airport and dedicated to Mrs. Bryant “for her vision, dedication and perseverance.” Included on the invitation were the following lines from poet Lillian Smith:

*“To believe in something not  
yet proved, and to underwrite it  
with our lives: it is the only way  
we can leave the future open.”*