

#1.00

Route 12 Sacramento River
Crossing at Rio Vista Funding
Evaluation Rio Vista Bridge Project
BR 105.12.93.0

ROUTE 12

SACRAMENTO RIVER CROSSING AT RIO VISTA

FUNDING EVALUATION RIO VISTA BRIDGE PROJECT



Prepared For:
City of Rio Vista
Rio Vista, California

Caltrans District 10
Stockton, California

Prepared by:
William R. Gray and Company

Date:
July 1993

JUL 22 1993



William R. Gray and Company
Transportation Consulting & Strategic Project Planning

Boise, Idaho

DATE: July 20, 1993

TO: Norman Gutcher, Centennial Civil Engineers

FROM: William R. Gray, President *William R. Gray*SUBJECT: FUNDING EVALUATION - RIO VISTA BRIDGE PROJECT

This report identifies potential funding sources for the two alternative projects described in the Project Study Report (PSR) prepared by Centennial Civil Engineers on the Rio Vista Bridge project.

Funding for a new high or mid-level Rio Vista Bridge project from traditional sources will be difficult, especially when other state and regional priorities are considered. While the project would technically be eligible for funding from a number of sources, availability of these funds, particularly in the short term, is extremely limited. Existing processes and procedures at the state, regional and local levels through which transportation funds are programmed would effectively limit the availability of traditional funds to this project.

Re-allocation of already programmed funds ~~would~~ require that other, already programmed, projects be reconsidered. Factors such as congestion mitigation, air quality consequences, compatibility with other project priorities and availability of funding would all be factors in any such consideration. When the magnitude of the proposed project is considered along with its location, relative need and benefit (when contrasted with other state and regional priorities), it is clear that funding from traditional sources would be difficult. It is important to note however, that greater flexibility for funding from some of the more traditional sources may improve when time frames beyond those assumed in current programming documents are considered.

This report identifies potential federal, state and local funds that might be available for this project. To the degree that existing state and federal resources are not available, other less traditional (non-typical) sources will need to be considered. Additional discussions are needed with key state, regional and local staff to identify the most probable amounts of funding and their timing.

The various funding sources considered in this report are summarized in Table I. In the discussion that follows, these potential sources along with the federal, state and regional programming requirements are discussed. This list was prepared through research and discussions with staff from regional and local agencies.



During the last three years, there have been dramatic changes in the way public transportation projects are programmed and funded at the federal and state levels. Common to the new approaches at both the federal and state levels is an increased flexibility in use of funds among the various transportation modes.

Table I
Potential Funding Sources

Federal

- National Highway System
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Surface Transportation Program (STP)
- Bridge Replacement
- Privatization

State

- Flexible Congestion Relief (FCR)
- Toll Bridge Funds
- Privatization

Local

- Local Transportation Sales Tax
 - Developer Impact Fees
-

Within California, the legislatively-enacted and voter approved California Transportation Blueprint of 1990 increased funding for highway projects and modified responsibilities related to the funding and programming of projects. The legislation created new programs such as Flexible Congestion Relief (FCR) and the Congestion Management Program (CMP), and provided opportunities for privatizing highway and transportation projects (AB 680, Baker).

At the federal level, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) changed the process under which federal transportation dollars are allocated and programmed. This landmark federal legislation created new programs such as the Surface Transportation Program (STP), the Congestion Mitigation and Air Quality Improvement Program (CMAQ) and the National Highway System (NHS). In addition,



ISTEA provides opportunities related to the construction of toll facilities and encourages privatization as a financing option.

Because these programs are new and the identification of projects and the programming of funds requires the participation and cooperation of a number of new constituencies and organizations, California and the region has little experience with the new procedures and processes. As a result, it is difficult to estimate specific amounts of funds that might be available for new projects. It is for this reason that much of the discussion that follows identifies potential programs and funding sources that might become available for construction of a new high or mid-level river crossing on Route 12 in or around Rio Vista. It is important to note that significant work will be required prior to the Rio Vista Bridge project being entered into the local, regional and state programming processes.

The specific funding sources are described below. The federal sources are discussed first, followed by state and local sources.

FEDERAL FUNDS

1. NATIONAL HIGHWAY SYSTEM. The NHS Program calls for designation of a strategic National Highway System of interconnected principal highway and arterial routes to serve key facilities including major population centers and travel destinations, international border crossings, ports and airports, and public transportation and intermodal facilities. State Route 12 has been nominated by Caltrans for inclusion in the National Highway System. A proposed NHS is to be submitted to Congress for approval no later than December 18, 1993.

Under ISTEA, a total of \$21.0 billion in funding is authorized for expenditure under the NHS program nationwide. NHS, in conjunction with STP, replaces the categorical Federal-Aid highway programs for what were formerly the Primary, Secondary and Urban systems.

Prior to the passage of ISTEA, Title I Highway funds were used exclusively for highways and related road projects. Through programs such as NHS, CMAQ and STP, portions of these funds can now be used for transit capital needs. ISTEA allows states to transfer up to 50% of the NHS program funds to STP or other programs with the concurrence of the Secretary of Transportation.

2. CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ PROGRAM). The CMAQ program accounts for almost 5% of the Title I distribution of funds, or \$6.0 billion over the seven year ISTEA authorization period.



CMAQ funds are specifically targeted for transportation projects that improve air quality in non-attainment areas for ozone and carbon monoxide. Since these funds are targeted for areas on the basis of need for air quality improvement, recently enacted state legislation (SB 1435 Kopp) calls for CMAQ funds to be programmed independent of statewide North-South split and county minimum requirements.

Among the changes made by ISTEA were changes in the process by which federal and state highway funds are programmed. Whereas the state was responsible for allocating these monies in previous years, significant programming responsibility now lies with the Metropolitan Planning Organizations (MPO) such as the MTC and the Sacramento County Council of Governments (SACOG), as well as the local Congestion Management Agencies (CMAs).

While CMAQ funds are programmed through MTC and SACOG programming process that involves cities, counties, CMAs, transit operators, Caltrans, ABAG and the Air Quality District, much of the final priority setting is conducted by the CMAs who submit priorities to MTC. MTC recommends a list of priority projects to be funded with CMAQ (and STP) funds. These projects, once approved, become part of the recommended TIP for the region (RTIP).

3. SURFACE TRANSPORTATION PROGRAM (STP). The STP is the largest and most flexible of ISTEA's programs. Combined with NHS, this program replaces what were previously the Federal Aid Urban, Primary, Secondary, and other categorical highway programs. STP provides a new block grant program that makes funds available for highway, bridge, and other projects. Over the 7-year ISTEA period, a total of \$23.9 billion is authorized for the STP program nationwide.

As with CMAQ, the county CMAs prioritize projects which are then recommended to the MTC and/or SACOG for eventual inclusion in the RTIP. Projects are funded by formula funds from STP coming to the region. There are an estimated \$337 million authorized for the MTC region if the STP program is fully appropriated. This amount does not include the region's share of funding for the 1990 STIP. Like CMAQ, STP funds are targeted for areas on the basis of need for air quality improvement, and are thus also exempt from statewide North-South split and county minimum requirements under SB 1435 (Kopp).

4. BRIDGE REPLACEMENT PROGRAM. The federal bridge replacement program is oriented at replacement of existing bridges that have been identified as deficient. As the existing Rio Vista bridge has not been identified as "structurally deficient," the Bridge Replacement program does not apply to this project.



5. PRIVATIZATION. Congress, in the 1987 Federal Surface Transportation Assistance Act, enacted a Toll Pilot Program to examine the merits of federal participation in toll projects. Among the projects identified in the Act are three in Orange County, the Foothill, Eastern and San Joaquin Hills corridors. The law limits federal participation to 35% and requires projects to be publically owned.

ISTEA was built on concepts in the 1987 pilot program, expanded its coverage and introduced several new features to encourage private sector involvement. For the first time, private entities may own toll facilities. Caltrans, as the responsible public authority, is required to ensure that Title 23 federal requirements are met.

Under provisions included in ISTEA, federal aid funds can be combined with tolls to construct bridges and approaches or to replace existing free or tolled bridges. For such projects, states have the option of using higher program-based federal match funds (e.g., 75% for National Highway System projects) and removing tolls after debt repayment. If they want to continue collecting tolls after repayment of the debt, the 35% limit on the federal share applies. Funds generated by tolls may be used for other transportation improvements after debt service and reasonable return on investment. Significant to the situation in Rio Vista, when toll-financed improvements are constructed parallel to existing free non-interstate facilities, tolls can be imposed on the combined facility.

Another provision of ISTEA allows states to loan federal funds to public or private agencies to construct projects. Repaid funds can be used for any of the purposes under the original category from which the loan is made. This provision would allow California to loan up to 35% in its federal funds to the project.

STATE FUNDS

6. FLEXIBLE CONGESTION RELIEF (FCR). Among the provisions in the "The Transportation Blueprint of 1990" discussed earlier was the creation of a new funding program that provides flexibility in the use of state funds across modes.

Under the Flexible Congestion Relief (FCR) program, regional agencies have discretion to program funding for eligible projects "which reduce or avoid congestion on existing routes" through increased capacity, which includes new facilities. FCR projects are programmed by regional agencies in the RTIP and are then included in the California Transportation Commission's State Transportation Improvement Plan (STIP). Currently, \$302 million in FCR funds are programmed in the MTC region over the current 7-year STIP cycle. FCR funds are subject to the North-South split and count against county minimums.



7. TOLL FINANCING. California has a history of using toll revenues to finance the construction of high cost bridge projects. Toll revenues can be used to design, construct and maintain a bridge project as well as the defined approaches to the bridge. Given the cost as well as the situation with respect to the availability of the more traditional state and federal funds, the Rio Vista Bridge is clearly a candidate for consideration as a toll bridge project. State legislation would be required to define the project, allow for the collection of tolls, authorize a bond sale to generate funds for construction and designate an authority to administer the project. The provisions of ISTEA that allow for grants or loans of federal funds for the development of toll facilities would need to be addressed in any such legislation.

Two very preliminary initial toll financing strategies were evaluated for the project (see attached). Under both scenarios, the project is to be 100% financed through toll revenues and/or toll revenue bonds. Under one scenario, toll collection would begin after completion of the project. Under the other scenario, toll collection would begin in 1995.

Under both scenarios, project development work is assumed to begin in 1995 and a new two lane, high level bridge complete and open to traffic in 2002. Tolls would be collected in one direction only. Project costs and tolls escalate with inflation (4% per year was assumed). Removal of the existing bridge is assumed to avoid ongoing operation and maintenance costs. Existing Route 12 through the City of Rio Vista would be widened. Information from the Antioch Bridge was used to estimate collection costs. The traffic projections prepared by TJKM were used along with cost estimates from your office.

The findings of this very preliminary analysis suggest that an initial one-way toll of approximately \$5.00 (in the year 2002) would be required if the project were to be 100% financed by tolls and the toll collection does not begin until the facility is opened to traffic. A total of \$225 million in bonds would be required, with an initial bond sale of \$50 million in 1995 to finance project development and initial right of way acquisition. Some security, other than future toll revenues, would likely be required to secure this initial bond sale. For this scenario to be viable, other local, state or federal participation (or guarantees) would likely be required.

While it is typical for projects to be constructed first and tolls started after the project is opened to traffic, an option that should be considered for this project is conversion of the existing bridge into a toll facility in advance of completion of the new bridge. Funds would be kept in a special account for the benefit of the project and be available for project development activities, design and construction. While a bond sale would still be necessary, our initial analysis suggests an initial one-way toll of \$2.00 (in 1995) and a \$140 million in bond would be required. In addition, the terms of the bond sale should



be significantly better as a cash flow will have been established.

Regional Measure 1, approved by voters within the nine bay area county MTC region in 1990, divided the bay area bridges into two groups. The Northern Group, made up of the Antioch bridge, the Benicia/Martinez bridge, the Carquinez bridge and Richmond/San Rafael bridges and the Southern Group, comprised of the Bay bridge, the San Mateo bridge and the Dumbarton bridge. Regional Measure 1 also allows toll bridge revenues, beyond those required for bridge operations, maintenance and debt service, to be used for transit improvements.

One option that might be considered would be to add the Rio Vista Bridge to the Northern Bridge group. This would allow a sharing of revenues between the various bridges and provide increased flexibility in bonding and financing of bridge projects. However, existing programmed projects to add new bridge structures to the existing Benicia/Martinez and the Carquinez crossings appears to be somewhat underfunded and therefore this approach, without an overall increase in tolls, might not have any benefit, and might actually delay a project at Rio Vista.

8. PRIVATIZATION. The California legislature, as a component of the comprehensive transportation funding package adopted in 1989, authorized the construction of four toll roads on a demonstration-project basis. The toll roads, authorized by AB 680 (Baker), are to be planned, built, financed and operated by private firms under a franchise agreement negotiated with Caltrans. The goal of the legislation is to secure private capital to accelerate highway investment in California. Franchise agreements have been negotiated and planning is underway for the four projects.

Depending on how the current projects progress, it might become possible to request legislative authorization to develop a new mid to high-level crossing as a privatization project. The financing concepts would be similar to those discussed in section 7 related to toll financing, with addition of a "for profit" component.

Privatization is an option that should be considered for this project. As noted above, federal funds could be used or loaned to the project under the provisions of ISTEA.

LOCAL FUNDS

For purposes of this discussion, local revenues are defined as existing non-federal, non-state sources that are raised within a city or a county that could become available for the project.



9. LOCAL SALES TAXES. The proposed project involves two counties, Solano and Sacramento. Voters have approved a local transportation sales tax in Sacramento County. While the expenditure plan for the program does not include any funds for replacement of the Rio Vista bridge, a loan might be favorably considered if future tolls were pledged as a source of repayment.

Solano County does not currently have a local transportation sales tax. A twenty year, half-cent tax in Solano County, similar to those in other counties throughout California, could generate in excess of \$400 million for local transportation projects. While local priorities might not favor projects such as the Rio Vista Bridge, some funds could be available for initial project development work and/or right of way acquisition.

It might be beneficial to pledge a portion of the revenue stream from a local transportation sales tax as additional security for a bond sale for the bridge project. In exchange, a new toll bridge authority and/or the Solano County Transportation Authority could be assigned toll revenues available in excess of debt service requirements. This could establish a long term revenue stream for the Authority. Even if federal funds are also used on the project, the provisions of ISTEA would allow these revenues to be applied to any transportation purpose to which federal aid is applicable.

10. DEVELOPER IMPACT FEES. Another option that should be considered for this project is a local transportation impact fee. The City of Rio Vista anticipated significant growth under their current General Plan. The traffic report identifies the need for significant improvements to existing Route 12 under any of the alternatives. Consideration should be given to establishment of a developer fee program in Rio Vista for improvements to existing Route 12 through the City.

If the "project" were to be defined as both a high level crossing and improvements to existing State Route 12 in Rio Vista, a local developer fee program could be characterized as the source of a "local match" for the project. This would be beneficial in development of an overall financing strategy and in discussions with the various agencies responsible for programming state and federal funds for the project.

CONCLUSIONS

Based on this initial analysis of capital funds available for this project, it would appear that the prospects of receiving significant funding for this project from traditional sources will be difficult, especially in the near term.

It would appear that the best opportunities for funding will come from more non-traditional sources. Conversion of the existing bridge to a toll facility, toll financing,

July 20, 1993
Page 9



privatization, a Solano County transportation sales tax and a local developer impact fee program must all be considered for this project.

WRG:nc

W:\DATA\WP51\BILL\RIOVISTA.TQB

PROJECT REVENUES

| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--|---------|--------|--------|--------|--------|--------|--------|
| Projected annual daily traffic (ADT) | 14,400 | 15,192 | 16,028 | 16,909 | 17,839 | 18,820 | 19,855 |
| Annual increase (to 2010) - | 5.5% | | | | | | |
| Annual increase (after 2010) - | 2.0% | | | | | | |
| Percent trucks - | 15.0% | | | | | | |
| Projected Gross Revenues, toll starts at | \$2.00 | | | | | | |
| Projected Gross Revenues, toll starts at | \$5.00 | | | | | | |
| Projected Gross Revenues, toll starts at | \$10.00 | | | | | | |
| tolls assumed to increase at - | 4.0% | | | | | | |

PROJECT CASH FLOWS

| | '93 \$ | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|----------------------------------|--------|------|------|------|-----------|-----------|-----------|------------|
| Administration (toll collection) | - | | | | | | | |
| Project Development (15%) | 17.25 | | | | \$1,620 | \$2,800 | \$5,800 | \$7,200 |
| right of way | 10 | | | | | | | \$6,000 |
| Construction | 115 | | | | | | | |
| Contract Administration (12%) | 13.8 | | | | | | | |
| Operation and Maintenance | | | | | \$1,620 | \$2,800 | \$5,800 | \$13,200 |
| SUB-TOTALS | | | | | | | | |
| Gross Toll Revenues | | | | | \$50,000 | | | |
| Proceeds of Bond sale | | | | | (\$1,620) | (\$2,800) | (\$5,800) | (\$13,200) |
| expenses | | | | | | (\$5,000) | (\$5,000) | (\$5,000) |
| debt service | | | | | | \$1,935 | \$1,701 | \$1,337 |
| interest earned | | | | | | | | |
| cumm balance | | | | | \$48,380 | \$42,515 | \$33,416 | \$16,552 |

note - truck toll assumed at 4x auto toll

-- no reductions due to diversion

L:\data\lotus\bill\rvovist1.wk1

1 1.04 1.08 1.12 1.16 1.2

