REPORT OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION IN RESPONSE TO HOUSE RESOLUTION 92 ON THE

# Financial Alternatives For Funding The George P. Coleman Bridge

TO THE GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA



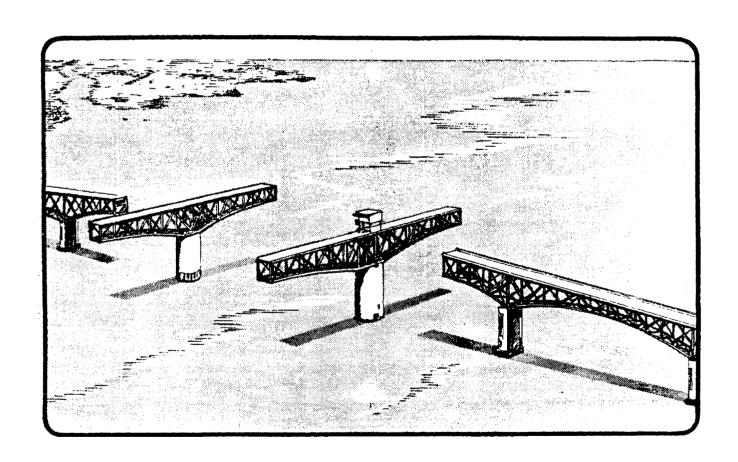
### HOUSE DOCUMENT NO. 26

COMMONWEALTH OF VIRGINIA RICHMOND 1990

### GEORGE P. COLEMAN BRIDGE

### FINANCIAL ALTERNATIVES

A study requested by House Resolution 92 passed by the 1989 General Assembly.



Virginia Department of Transportation

November 1989

#### TABLE OF CONTENTS

<u> </u>	age
Executive Summary	. i
House Resolution No. 92	. iii
Purpose	1
Background	1
Financial Alternatives	. 2
Conclusions	7
Appendices	

A. Commonwealth Transportation Board Resolutions

#### LIST OF TABLES

	<u>Page</u>
Table	
ı.	Toll/Revenue Bond Analysis Assumptions4
2.	Toll/Revenue Bond Analysis Findings5

#### **EXECUTIVE SUMMARY**

The improvement of the George P. Coleman Bridge was identified as a need by the Governor's Commission on Transportation in the Twenty-first Century to be accomplished with special funding. It was recognized that this costly project could not be accomplished with funds from normal sources.

Based on the conclusions from the environmental impact study for this project and toll analyses conducted by its staff, the Commonwealth Transportation Board resolved that the existing bridge be widened and that tolls be reinstituted to provide the revenue for the improvements.

In response to the concerns of citizens and elected officials, the Commonwealth Transportation Board reconsidered its action on reinstituting the toll to allow the General Assembly and voters an opportunity to investigate alternative methods of funding the project.

As requested by House Resolution No. 92, passed by the 1989 General Assembly, the Virginia Department of Transportation has conducted a study of financial alternatives for funding improvements to the George P. Coleman Bridge.

The normal funding source for this project would be through the primary route system allocations. If this process were to be used, it would require that 45 percent of the total primary funds allocated to the Fredericksburg and Suffolk Districts in the current Six-Year Program be dedicated to this single project. Financing solely with primary funds is not a viable alternative.

Several sources of Federal funds for special projects are demonstration funds, defense access funds, and bridge discretionary funds. While these programs have provided funds for special projects in the past, it is highly unlikely that significant financing will be available from these sources beyond the current demonstration funds that have been provided.

The creation of transportation districts is provided for by the Code to finance such projects as the Coleman Bridge improvements. However, special legislation would have to be passed to allow the appropriate counties to establish such a district, as they do not qualify under the current criteria. This alternative would increase taxes in these jurisdictions and it does not appear that it would generate sufficient revenue to completely address the funding need.

Toll financing, fees placed on users of the facility, was analyzed by the VDOT staff prior to the Commonwealth Transportation Board making its decision to reinstitute the toll. The result of the analysis was that toll financing is a viable option and the most prudent way to generate the revenue for the project.

With regard to the Commonwealth Transportation Board's resolution delaying the reinstitution of the toll, no further action regarding tolls will be made until the citizens have an opportunity to study alternative financing methods. Under this resolution tolls would be reinstituted on July 1, 1991, in order to proceed with right of way acquisition.

If no other viable financing alternative is found, the reinstitution of the toll may need to be at a higher rate than those set by the Board in their March 16, 1989, resolution. The Board's action also permits VDOT to proceed with preliminary engineering so that design will be completed and ready for advertisement by fiscal year 1993.

With a favorable referendum on pledge bonds the Commonwealth Transportation Board would have the ability to finance the improvements to the Coleman Bridge from the pledge bonds, demonstration funds, tolls, and primary allocations.

## 1989 SESSION ENGROSSED

	1. (0.(00012
1	HOUSE RESOLUTION 92
2	House Amendments in [] - February 23, 1989
3	Requesting the Virginia Department of Transportation to study the financial alternatives
4	for funding the George P. Coleman Memorial Bridge.
5	
6	Patrons-Cooper and Morgan
7 8	Referred to the Committee on Rules
9	Referred to the Committee on Rules
10	WHEREAS, construction alternatives of the George P. Coleman Memorial Bridge [ is are
11	necessary; and
12	WHEREAS, such construction would involve a considerable expenditure of financial
13	resources; and
14	WHEREAS, funding of such a project through currently available mechanisms would not
	permit timely construction; and
16	WHEREAS, it is desirable to find some alternative measures for financing; now
18	therefore, be it  RESOLVED by the House of Delegates, That the Virginia Department of Transportation
	study the financial alternatives available for funding construction of the George P. Coleman
	Memorial Bridge.
21	The Virginia Department of Transportation shall complete its work in time to report to
	the Governor and the General Assembly prior to the 1990 Session as provided in
23	procedures of the Division of Legislative Automated Systems.
24	
25	
26	
27 28	
<b>29</b>	
30	
31	
<b>32</b>	
33	
34	
35	
<b>36 37</b>	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47 48	
49	

#### Study of Financial Alternatives for the George P. Coleman Memorial Bridge

#### **PURPOSE**

As requested by House Resolution No. 92, passed by the House of Delegates during the 1989 General Assembly session, the Virginia Department of Transportation (VDOT) has conducted a study of the possible financial alternatives for funding the construction of the George P. Coleman Memorial Bridge.

#### **BACKGROUND**

The George P. Coleman Bridge was completed in 1952, replacing the ferry service between Gloucester County and Yorktown, Virginia. As a toll facility, the Coleman Bridge carried approximately 2,500 vehicles per day (vpd) during the first year of operation. In June 1976, when the tolls were removed, the traffic volume had increased to 10,000 vpd. With the tolls removed, Gloucester County became an attractive, more affordable place for the population of the Virginia Peninsula to reside. As Gloucester County rapidly grew as a bedroom community, the commuter traffic across the George P. Coleman Bridge also increased. By 1983, the traffic on the Coleman Bridge had increased to over 21,000 vehicles per day with congestion and operational problems frequently occurring during the commuter peak periods.

In March 1983, the Gloucester County Board of Supervisors passed a resolution requesting VDOT to "conduct a study relative to the George P. Coleman Bridge in terms of alternative crossings, widening of the bridge, or other appropriate solutions to relieve the problems being experienced at that location." In response, VDOT conducted planning studies of the facility, which included traffic surveys, the development of conceptual alternatives for improving the existing bridge, and the possibility of constructing new alternatives upstream, as well as downstream from the existing location. The study also indicated that sufficient funding to improve the bridge or construct a new alternative could not be drawn from the available Primary System funds. Therefore, based upon preliminary analysis, it was determined that the only financing means available would be through user fees or toll financing.

The Governor's Commission on Transportation in the Twenty-first Century recognized the need for widening the Coleman Bridge to four lanes in their Critical Needs Report. The Commission also realized that due to the high cost of the improvement, it would be difficult to fund through the normal process. They, therefore, identified the Coleman Bridge as a special project that would require financing through other means such as tolls.

In 1986, the Commonwealth Transportation Board allocated funds to initiate the preliminary engineering, traffic analysis, and environmental studies for alternative crossings of the York River or improving the existing Coleman Bridge. It was evident from cost estimates prepared as part of these studies, that the earlier findings regarding the need for alternative funding is still valid. Since funding through the normal process did not appear likely, toll financing was evaluated.

Based on the toll analysis and the conclusions from the environmental impact study, VDOT's administration recommended, and the Commonwealth Transportation Board concurred, through its actions on March 16, 1989, that tolls be reinstituted on the Coleman Bridge and that preparations be made for widening the existing bridge to a four-

lane facility (see Appendix A). As part of this action, the tolls were set at \$.60 for commuters, \$1.00 for noncommuters, and an additional \$.10 per axle for commercial vehicles above the base rate. An analysis of this toll structure indicated that it would provide sufficient funds to cover the cost for improving the existing George P. Coleman Bridge.

In response to the concern of the citizens and elected officials from York County and the counties of the Middle Peninsula, the Commonwealth Transportation Board reconsidered its action on reinstitution of the toll on the George P. Coleman Bridge. On May 18, 1989, the Commonwealth Transportation Board resolved to reaffirm its action to improve the existing George P. Coleman Bridge to a four-lane facility. The Board further resolved, however, that the reinstitution of tolls on the bridge would be deferred until July 1, 1991, in order to give the General Assembly and the voters of Virginia the opportunity to act on 9E pledge bonds (see Appendix A). This would also give local governments time to pursue the applicability of a special transportation district and give the Virginia Department of Transportation the opportunity to continue planning to meet the needs of the citizens of the Middle Peninsula and the North Hampton Roads Peninsula.

#### FINANCIAL ALTERNATIVES

This report, which responds to House Resolution No. 92, outlines the existing funding sources, as well as other possible financial alternatives for funding improvements to the George P. Coleman Bridge.

Primary System Allocations

Route 17 is part of the State Primary System and as such the George P. Coleman Bridge is eligible for Primary allocations. In fact, because the York River separates Fredericksburg and Suffolk Construction Districts, the George P. Coleman Bridge is eligible for allocations from both.

The forecast of revenue that will be available in the Fredericksburg and Suffolk Districts over the next six years for the primary system is \$201.2 million. Assuming that the Coleman Bridge project were to be advertised in January 1994, it is estimated that the construction cost for widening the facility to four lanes would be \$90.6 million. If this improvement were to be included in the current Six-Year Improvement Program, it would require that 45 percent of the total primary funds allocated to both districts be dedicated to this single project.

The current forecast of revenue for the primary system in these districts is \$68.9 million less than that necessary to fully fund the projects that have been programmed. The addition of this project would obviously widen this gap.

Based on the anticipated revenue that will be available for the primary system, financing solely from this source is not a viable alternative.

Federal Demonstration Project

The Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA '87) contained a number of demonstration projects, one of which was the York River crossing. Specifically, the act states "The Secretary, in consultation with the Governor of Virginia, the Secretary of Defense, and the Secretary of the Interior, shall carry out site selection and environmental studies and design and engineering for replacement or expansion of a bridge connecting Gloucester County with York County and the cities of Newport News and Hampton, Virginia, for the purpose of demonstrating methods of facilitating the resolution of Federal intragovernmental conflicts."

Federal funds in the amount of \$640,000 for each of the five years of STURAA '87 are being set aside for the George P. Coleman Bridge. As Congress begins drafting the new transportation act, it is hopeful that they will include supplemental funding for this demonstration project. It is not anticipated, however, that significant additional funding will be available for the project under the demonstration program.

#### Defense Access

A very small amount of money is available nationally to provide access to defense areas. In the past we have been able to acquire limited defense access funding, but the projects have to be adjacent to defense facilities. It would be highly unlikely to obtain defense access funding for the George P. Coleman Bridge.

#### Bridge Discretionary

There are special federal aid discretionary funds that are available to reconstruct or rehabilitate bridges that are structurally deficient. The Coleman Bridge is not structurally deficient; therefore, funding from this source is not an option.

#### Transportation District

The creation of a Transportation Improvement District as provided by subsection 15.1-1372 of the Code of Virginia would be one method of generating a portion of funds needed to finance improvements to the George P. Coleman Bridge. This would, however, require that legislation be passed to allow the appropriate counties to establish such a district, as the current definition of "county" in subsection 15.1-1372 is not applicable. The creation of a Transportation Improvement District would require the cooperation of each of the counties involved to ensure its implementation. Further, it would also require a significant increase in the real estate taxes of these jurisdictions. An observation of the commercial/industrial property in the corridor indicates that the tax base would be too small to generate any significant revenues for the bridge improvement.

Special legislation could also be passed to create a Transportation District that could impose an additional one cent per gallon tax on gasoline sales in Gloucester and York Counties. This revenue would be designated specifically for improvements to the Coleman Bridge. A very preliminary analysis indicates that revenue generated by an additional one cent tax would be approximately \$420,175 annually.

The creation of a transportation district is an alternative to consider; however, this would not generate sufficient revenue to fund the improvements to the George P. Coleman Bridge.

#### Toll Financing

Placing a toll on the George P. Coleman Bridge is one of the financial alternatives that has been considered. Various toll analyses were conducted based on what was felt to be reasonable toll rates.

Two scenarios were investigated in the initial analyses with three toll rate structures (\$.50, \$.75, and \$1.00) used to generate revenue in each scenario. There were a number of assumptions that had to be made regarding the toll analyses. These are outlined in Table 1.

The first scenario was the traditional toll financing procedure where revenue bonds are issued initially with tolls being imposed when the improved facility is opened. The results of this analysis indicated that there would be a shortfall ranging from \$17.7 to \$63.0 million (see Table 2).

# TABLE I George P. Coleman Bridge Toll/Revenue Bond Analysis Assumptions

#### Scenarios I and 2

- Construction and right of way costs were inflated at 6% annually from 1988 estimates in EIS.
- O Preliminary Engineering costs would be covered by current allocations.
- O Total cost includes construction, right of way, toll booths/administration facilities, and first year operations costs.
- Toll personnel and bridge maintenance costs were inflated at 5% annually.
- O Toll plaza operations costs were inflated at 2% annually.
- Since there are no alternative routes for traffic to take, tolls of \$.75 or less would not affect the projected traffic volumes. Tolls of \$1.00 would reduce the projected free flow traffic by approximately 5%.
- Oconstruction would be completed and the facility opened to traffic on 1-1-97.
- The bond term would be 25 years and the bond rate would be 9%.
- The debt service coverage would be 1.2 during the first year of operation and the level debt service coverage would be 1.5.
- Preparation fee and upfront interest are not included. Assumption made that bond proceeds would be deposited in an interest bearing account and drawn against as needed. Interest earned would be used to help offset these financing costs.

#### Scenario I

The maintenance and operation costs including toll collection costs would be extracted from the toll revenues.

#### Scenario 2

- O Toll would be reinstituted on 7-1-90.
- Toll collection costs would be financed with toll revenue.
- Maintenance cost would continue to be financed through the Department's maintenance allocation program until a new facility is opened, at which time maintenance would be financed with toll revenue.
- Net revenue from the reinstitution of tolls would be deposited in an interest bearing account and accrue interest at 8.5%. (Simple interest computed on an annual basis was used in this analysis.)
- Revenue, including interest, accumulated from the reinstitution of the toll would be withdrawn from the account for use at the time construction begins. Revenue would continue to accumulate during the construction period; however, interest would not be earned during this period. Total net revenue is the sum of the net revenue, including interest, available when construction begins and the net revenue collected during the construction period.

TABLE 2
George P. Coleman Bridge
Toll/Revenue Bond Analysis Findings
(Widen existing bridge – Total cost \$94,200,000)

Scenario	Toll Rates	Reinstitution of Toll Total Net Revenue	Bond Issue Supported by Toll	Surplus or (Shortfall)
1	\$ .50	NA	\$ 31,200,000	(\$ 63,000,000)
	.75	NA	56,300,000	( 37,900,000)
	I.00	NA	76,500,000	( 17,700,000)
2	\$ .50	\$ 32,300,000	\$ 31,200,000	(\$30,700,000)
	.75	50,500,000	56,300,000	12,600,000
	I.00	65,100,000	76,500,000	47,400,000
2	*\$.50/\$1.00	\$ 41,400,000	\$ 43,800,000	(\$ 9,000,000)
	*\$.60/\$1.00	46,900,000	51,300,000	4,000,000
	*\$.75/\$1.00	55,100,000	62,600,000	23,500,000

NA - Not applicable \* Commuter rate/Non-commuter rate

The second scenario was to reinstitute the toll prior to the completion of improvements, using the revenue to supplement funds for a bond issue. Based on the three toll structures used, the results ranged from a \$47.4 million surplus to a \$30.7 million shortfall (see Table 2).

The findings from these two scenarios indicate that a straight bond issue with a reasonable toll rate would not be a viable financing alternative. It would take the combination of reinstituting the toll and a bond issue. However, since a surplus was estimated under this scenario, an analysis was made using an adjusted toll structure with special rates for commuters. Three rate structures were analyzed for commuters (\$.50, \$.60, and \$.75) with a noncommuter rate of \$1.00 in each case. It was assumed that 75 percent of the daily traffic are commuters and that tolls would have no effect on traffic projections since commuter rates were \$.75 or less. The results of these analyses showed a shortfall of \$9.0 million for the \$.50 commuter rate and a surplus of \$4 million and \$23.5 million respectively for the \$.60 and \$.75 commuter rates (see Table 2). It was the result of these analyses on which the Commonwealth Transportation Board based its decision on March 16, 1989, to reinstitute the tolls on the Coleman Bridge.

#### Toll Facilities Revolving Account

To date, some \$9 million have been allocated to this project from the toll facilities revolving account.

Pledge Bonds

9E pledge bonds may be an option for financing improvement to the Coleman Bridge. However, further action on the Constitutional Amendment will be required by the General Assembly, and a statewide voter referendum must be held in 1990. With voter approval it would be possible for the General Assembly to implement actions to use pledge bonds for these improvements. The earliest that this could be accomplished is 1991.

#### CONCLUSIONS

Based on this study, the following conclusions have been made regarding financial alternatives for funding improvements to the George P. Coleman Bridge.

- Improvements cannot be financed through the normal transportation funding process.
- There are Federal programs that have provided funding for special projects in the past. However, it does not appear likely that significant additional funding will be available from these sources.
- A transportation district would require special legislation to implement and would result in increased taxes for residents. It does not appear that this would generate sufficient revenue to fund the improvements.
- O The Commonwealth Transportation Board has allocated \$15.32 million to the Coleman Bridge project. The sources of this financing are \$4.4 million from state funds, \$9.0 million from the toll facilities revolving account, and \$1.92 million from federal demonstration funds. The remaining funds required may be financed by tolls or through pledge bonds.
- Pledge bonds will require action by the General Assembly and a statewide voter referendum in 1990. If the statewide referendum on pledge bonds is approved by the voters, action by the 1991 General Assembly would be needed to allow the sale of bonds.
- Toll financing of these improvements is a viable option and the most prudent way to generate the necessary revenue.
- With regard to the Commonwealth Transportation Board's May 18, 1989, resolution, no further action regarding tolls will be taken until the citizens have an opportunity to study alternative financing methods. Under this resolution tolls would be reinstituted on July 1, 1991, in order to proceed with right of way acquisition. If no other viable financing alternative is found, the reinstitution of the toll may need to be at a higher rate than those set by the Commonwealth Transportation Board in their March 16, 1989, resolution.

### **APPENDIX A**

#### **COMMONWEALTH TRANSPORTATION BOARD RESOLUTIONS**

(Excerpts from minutes of March 16, 1989, and May 18, 1989, Board Meetings)

# Excerpt from minutes of the March 16, 1989 Commonwealth Transportation Board Meeting

Moved by Mr. Kelly, seconded by Mrs. Kincheloe, that

WHEREAS, in accordance with the statutes of the Commonwealth of Virginia and policies of the Commonwealth Transportation Board, a Location Public Hearing was held in the Gloucester County Intermediate School on September 26, 1988, and the York High School on September 27, 1988, at 7:00 p.m. for the purpose of considering the proposed location of Route 17/George P. Coleman Bridge from Route 17 in Gloucester County to Route I-64 or Route 17 in York County, in James City, York and Gloucester Counties, State Projects 6017-099-114, PE-101; 6017-036-115, PE-101; and

WHEREAS, proper notice was given in advance, and all those present were given a full opportunity to express their opinions and recommendations for or against the proposed project as presented, and their statements being duly recorded; and

WHEREAS, the economic, social, and environmental effects of the proposed project have been examined and given proper consideration, and this evidence, along with all other, has been carefully reviewed;

NOW, THEREFORE, BE IT RESOLVED, that the location of this project be approved in accordance with the plan for Alternative 12A as proposed and presented at the said Location Public Hearing by the Department's engineers.

Motion carried, Mr. Humphreys voting no.

Moved by Mr. Kelly, seconded by Dr. Howlette, that

WHEREAS, tolls on the George P. Coleman Bridge were removed June 1976 and since that time traffic has increased to the point of exceeding the capacity of the bridge; and

WHEREAS, this Board has considered various alternatives for providing the additional capacity for crossing the York River; and

3/16/89

WHEREAS, the cost of all alternatives far exceed the amounts available from regular funding sources which necessitates the need to finance through the sale of bonds the additional vehicular capacity across the York River; and

WHEREAS, current traffic estimates indicate that revenues from tolls imposed after completion of the improvements will be insufficient to support a bond issue necessary to provide the additional capacity unless the tolls are exorbitantly high; and

WHEREAS, the additional capacity will not be completed and opened to traffic until approximately 1997; and

WHEREAS, the funds required to supplement a bond issue could be provided by reinstating tolls on the existing bridge in 1989; and

WHEREAS, 33.1-287 of the Code of Virginia authorizes this Board to charge tolls for improving and reconstructing a project originally financed through the issuance of bonds after the debt has been retired.

NOW, THEREFORE, BE IT RESOLVED, that the Commonwealth Transportation Board does hereby reinstate tolls on the George P. Coleman Bridge effective July 1, 1989 or as soon thereafter as is possible at a rate of \$.60 for commuters, \$1.00 for non-commuters, and an additional \$.10 per axle for commercial vehicles above the base rate; and

BE IT FURTHER RESOLVED, that the tolls collected less an amount for collection cost shall be deposited into a separate interest-bearing account of the Transportation Trust Fund and shall be used exclusively for providing the additional vehicular capacity across the York River.

Motion carried.

# Excerpt from minutes of the May 18, 1989 Commonwealth Transportation Board Meeting

Moved by Mr. Beyer, seconded by Mr. Malbon, that

WHEREAS, the Route 17 crossing of York River at Gloucester Point and Yorktown has become increasingly congested, with projected continued growth in vehicular demand; and

WHEREAS, among the various alternatives studied, Alternative 12A was the best alternative in meeting current and future traffic demands, had the least environmental impact, and was the only option which could be reasonably funded, and the Commonwealth Transportation Board had existing authority to reinstitute tolls under the Revenue Bond Act; and

WHEREAS, the Commonwealth Transportation Board on March 23 chose Alternative 12A and reinstituted tolls effective July 1, 1989; and

WHEREAS, a resolution authorizing a voter referendum to consider an amendment to the Virginia Constitution authorizing 9E pledge bonds passed the 1989 General Assembly, is due in the 1990 General Assembly session, and a statewide voter referendum may be held in 1990, and pledge bonds may be implemented by action of the General Assembly in its 1991 session; and

WHEREAS, the availability of 9E pledge bonds will create an entirely new mechanism for full or partial funding of Alternative 12A or make possible the Commonwealth Transportation Board choice of a different funding mechanism, or a different toll structure; and

WHEREAS, the practical application of a Special Transportation District such as was used in the Route 28 improvements in Loudoun and Fairfax Counties may provide an additional means of funding this Alternative, when used in conjunction with 9E pledge bonds; and

5/18/89

WHEREAS, the Board's March 23 decision makes it possible to continue preliminary engineering for the reconstruction of the Coleman Bridge using funds from the toll revolving account; and

WHEREAS, the deferral of the reinstitution of tolls may lead to higher tolls and/or further delay in bridge reconstruction, in the event 9E pledge bonds are not applied; and

WHEREAS, representatives of local government have requested a delay in the reimposition of tolls in order to seek alternative funding from federal, state, local, and private sources;

THEREFORE, BE IT RESOLVED, that the Commonwealth Transportation Board reaffirms that the construction of Alternative 12A through tolls on the Coleman Bridge represents the best possible public policy decision for the Commonwealth Transportation Board given funding mechanisms currently authorized by the Virginia General Assembly; and

BE IT FURTHER RESOLVED, that the Commonwealth Transportation Board defers implementation of tolls until no earlier than July 1, 1991, in order to give the General Assembly and the voters of Virginia the opportunity to act on 9E pledge bonds, to give local governments the time to pursue the applicability of a Special Transportation District, and to give the Virginia Department of Transportation the opportunity to continue planning to meet the needs of the citizens of the Middle Peninsula and the North Hampton Roads Peninsula, and

BE IT FURTHER RESOLVED, that the Virginia Department of Transportation and its consultants undertake an extensive Public Information Program for the citizens of the affected counties, to develop better public understanding of the bridge reconstruction process.

Motion carried.