Table 7.5 C-470 Express Lane Maintenance Costs

Items Description	Unit	Annual Cost	Quantity	Total Annual Cost \$
Roadway Maintenance	Lane Mile	7,620.00	48	365,760.00
Roadside Gantry Toll System	Per Gantry	30,000.00	10	300,000.00
Host System Maintenance	LS	200,000.00	1	200,000.00
Engineering/Traffic Consulting	LS	100,000.00	1	100,000.00
Total Maintenance Costs				965,760.00

*Note: All values are in 2004 Dollars* 

## 7.3 FINANCIAL FEASIBILITY ANALYSIS

## 7.3.1 Debt Financing Considerations

To determine the extent to which toll revenues can support debt retirement, it is instructive to compare the current value of the project's cash flow to its capital cost. The cash flow in this case refers to the annual stream of toll revenues remaining after paying for current O&M costs; which is referred to as net revenue. This long-term future cash flow is discounted back to present year dollars so as to allow a dollar-to-dollar correlation. The present value (or discount) rate is used to simulate the project owner's cost of capital. In the U.S., state and local governments finance capital infrastructure in the tax-exempt municipal bond market.

The Bond Buyer Revenue Bond index represents the average yields on a select 25 tax-exempt revenue bonds with 40-year maturities. The current bond market conditions are at approximately 5.75 percent. A range of bond rates from 5.50 percent to 6.0 percent was used in this analysis to represent variability in this rate.

In addition to varying the bond interest rates, coverage rates for senior and junior lien debt were also varied. While the senior lien coverage rate was held constant at 1.75, the junior lien coverage rate was varied from 2.19 to 2.99 to represent a range of variability. These individual rates yielded a composite coverage rate of 1.3 to 1.4.

By using varying rates for bond interest and coverage rates, an overall range of financial feasibility was determined. It was believed that such a range would be most appropriate at this preliminary feasibility level. It was believed that this would bracket the most likely range of scenarios that the CTE would face upon pursing bond issuance, and would therefore be a good indication of the likely feasibility of a potential express lanes facility on C-470.

The project's financial feasibility was measured by the financial feasibility factor, which simply compares the current value of its estimated future cash flow (net revenue after

