

Table 7.6
Toll Rate Structure

Time Period	Hours
AM Off-Peak	5:00 - 5:30
AM Shoulder	5:30 - 6:30
AM Peak	6:30 - 8:00
AM Shoulder	8:00 - 9:00
AM Off-Peak	9:00 - 12:00
PM Off-Peak	12:00 - 2:00
PM Shoulder	2:00 - 3:00
PM Peak	3:00 - 6:00
PM Shoulder	6:00 - 7:00
PM Off-Peak	7:00 - 10:00

The driver's value of time derived from the value-of-time analysis discussed earlier in this report was used to establish the toll rate used in the AIMSUN model. The toll rate is set based on the requirement of maintaining operations at LOS C/D in the express lanes. The toll rate is varied until an equilibrium of LOS C/D is established. The actual toll rate and structure developed for the recommended alternative is discussed in Section 8.5, "Final Alternative Optimization."

7.3.3 Revenue and Feasibility Calculations

The gross revenue was calculated using the traffic volume, number of transactions, and toll rates generated from the AIMSUN model. The gross revenue was calculated by taking vehicles miles traveled for each corridor tolling segment and multiplying by the toll rate during that time period.

The net revenue was then calculated by subtracting the combined O&M costs from gross revenue. The senior lien debt was then determined by applying the 1.75 coverage rate. The remaining revenue was considered available to pay off subordinated debt, so the junior lien debt was determined using coverage rates of 2.19 and 2.99. The remaining net toll revenue (free cash) was then set aside as a capital reserve to pay for future maintenance and rehabilitation, and perhaps as additional revenue for future bonding.

The current value of the covered net toll revenue was then calculated. The aggregate current value of the covered net toll revenue over the 40-year bond term was then divided by the capital construction cost to produce the financial feasibility factor. As noted above, a range of factors was produced based on varying interest and coverage rates.