

C-470 Tolling Assumptions

Access Configuration and System Design

- Iterative screening process
- Determine optimal access configuration considering traffic demand and capital cost
- Traffic forecasts made from dynamic model using time delay to represent toll cost
- Toll schedule developed based on peak toll cost, peak period length
- Toll revenue calculated from traffic volumes on segments and toll rate per mile

Financial Feasibility Considerations

- Objective is to determine initial feasibility of stand-alone corridor
- Feasibility is not a fixed number – varies depending on bond market conditions, issuing agency credit rating, etc.
- Conservative assumptions and methods are used to minimize risk
- Must meet Wall Street's requirements for bonds not backed by governments
- Final test is Investment-grade Traffic and Revenue Study meeting strict banking guidelines
- Financial model is typically designed as self-sufficient, including all life-cycle costs – annual Operations and Maintenance (O&M) costs, bond interest, capital improvements and rehabilitation
- Certain life-cycle costs can be excluded if pledged by other agencies
- CTE takes conservative approach of bonding for entire life-cycle cost
- CTE is a not-for-profit business enterprise
- Bonding capacity – hierarchy of disbursements
 - Gross revenue from toll receipts
 - Annual O&M costs (Net Rev = Gross Rev – O&M)
 - Capital reserve for future improvements and rehab
 - Sr. Lien Bonds – “safety factor” used to determine amount
 - Subordinate Debt – remaining revenue available for subordinate debt, but at higher “safety factor”
- Bonding capacity = sum of Sr. Lien Bonds and Subordinate Debt
- Feasibility = portion of capital cost that bonding capacity can cover

C-470 Express Lanes Feasibility Study Findings

- Given several different interest rates and coverage rates, Feasibility ranged from 68-81% of capital cost, after interest, O&M, and capital reserve are paid
- Alternatively, gross revenues would be sufficient to pay for 100% of capital cost
- This is a base case – other strategies can leverage more bonding capacity
- O&M guarantee – remove O&M from equation and bond against gross rev – 12% increase
- ROW donation from CDOT – effectively reduces construction cost – 4% increase
- With this additional 16%, Feasibility ranges from 84-97% of capital cost, after interest, O&M, and capital reserve are paid