Overview of the 2018 Connecticut Tolling Options Evaluation Study

By: George Miles, Legislative Analyst II
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Issue

Provide a brief overview of the Connecticut Tolling Options Evaluation Study report that was prepared by consulting firm CDM Smith for the Connecticut Department of Transportation (DOT) and released on November 14, 2018.

Summary

The report provides estimates of revenue, cost, and congestion reduction benefits that could result from implementing a hypothetical statewide, all-electronic tolling system.

The system assumed erecting 82 toll gantries at specific locations across all of Connecticut’s interstate highways (I-84, I-91, I-95, I-291, I-395, and I-691) and four other major expressways and parkways (Route 2, Route 8, Route 9, and Route 15).

The report’s introduction notes that the toll system presented “should not be considered a ‘recommended toll system’ since its intent is to inform the on-going discussion on tolling.” It also states that tolling is one potential source of revenue that could raise sufficient funding to improve
the condition of Connecticut’s existing infrastructure and finance highway improvements while also meeting the goals of being sustainable and directly related to one’s use of the system.

In addition to the full, 87-page report, DOT published a separate, four-page Executive Summary and two-page Fact Sheet. An accompanying press release was issued as well.

Report Overview

The full report is made up of nine sections, with seven main chapters bookended by opening and closing summaries, the latter of which also sets out a series of potential next steps.

Chapter 1 details the past history of tolls in the state and provides rationales for considering them in the future. It also discusses how the geographic scope of the study’s tolling system was determined. Four criteria—fairness, equity, flexibility, and revenue efficiency—are emphasized.

Chapter 2 lays out several key assumptions regarding the study’s tolling system, including that it would be subject to review and approval by the Connecticut legislature and Federal Highway Administration before implementation. It also discusses that tolling would be enabled through Connecticut’s designation as one of 13 states within the federal Value Pricing Pilot Program, which requires the use of variable, time of day pricing (i.e., higher tolls during peak traffic periods, also known as congestion pricing) to encourage shifts of traffic from peak to off-peak conditions. A listing of the criterion for where to place the toll gantries is provided as well as a map (Figure 5) showing the locations considered. Additionally, a number of data points and estimates are set out such as the average (1) interchange spacing, (2) toll zone spacing, and (3) vehicle trip lengths within the study’s tolling system.

Chapter 3 addresses toll system configuration, system operating assumptions, and capital and operating cost estimates. It explains that all-electronic tolling implementation requires both roadside and back office systems and details what each of those involve. A description of how all-electronic tolling would work for customers is provided as well.

Chapter 4 outlines toll pricing objectives and strategies. Amongst the study’s determinations, it decided to impose higher charges for heavier vehicles such as trucks and provide discounts to frequent and local travelers. The variability of rates between several different conditions is also explored, including (1) peak versus off-peak; (2) vehicles with in-state issued transponders versus those with out-of-state ones; and (3) vehicles with transponders versus those without, which would be tolled by video and mailed bills. The report provides potential toll rates for the study’s tolling system and, for comparison, existing rates of tolls in northeastern states.
Chapter 5 examines the revenue potential of the study’s tolling system. It includes estimates of weekday transactions, toll revenue by corridor, the amount of transactions and toll revenue attributed to in-state versus out-of-state traffic, and annual gross and net toll revenue. Combining cars and trucks, the report estimates that out-of-state vehicles would produce over 40% of the toll revenue for the system.

Chapter 6 offers various frameworks and considerations for establishing an organizational structure to administer the study’s tolling system based on how other states currently run theirs. It suggests that DOT would contract out the civil, back office, and tolling operations and maintenance efforts but have internal management and staff to oversee the outsourced services. The report examines the procurement process as well.

Lastly, Chapter 7 explores the positive and negative impacts of implementing the study’s tolling system. It cites additional transportation investment revenue, congestion reduction, travel time savings, and reduced fuel consumption as positives. Traffic diversions and increased travel costs are described as negatives. Mitigation strategies for low income users are discussed as well.

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