Why GAO Did This Study

Many Americans spend frustrating hours each year stuck in traffic. While estimates vary, the Department of Transportation (DOT) estimates that traffic congestion costs the United States $200 billion each year, and that more than one-quarter of total annual travel time in metropolitan areas occurs in congested conditions. Road pricing or congestion pricing—assessing tolls that vary with the level of congestion or time of day—aims to motivate drivers to share rides, use transit, travel at less congested times, or pay to use tolled lanes. Since the first U.S. congestion pricing project opened in 1995, 19 project sponsors have 41 pricing projects in operation or under construction. About 400 miles of priced highway lanes including nearly 150 miles on the New Jersey Turnpike are in operation today with current tolls varying from 25 cents to $14.

All U.S. projects in operation are either High Occupancy Toll (HOT) lanes, which charge solo drivers to use newly constructed lanes or carpool lanes, or peak-period pricing projects, which charge a lower toll on already tolled roads, bridges and tunnels during off-peak periods. GAO examined (1) the federal role in supporting congestion pricing, (2) results of U.S. congestion pricing projects, and (3) emerging issues in congestion pricing. Eight project sponsors have current and completed evaluations on at least 1 project, for a total of 14 evaluated projects, all of which GAO reviewed. GAO interviewed officials about the performance of their pricing projects and effects. DOT provided technical comments, which GAO incorporated as appropriate.

What GAO Found

DOT approves all congestion pricing projects on roadways that receive federal funds and provides grants for project studies, implementation, and evaluation. Nearly all HOT lane projects and most peak-period pricing projects in operation today received federal funds at one time or another. DOT’s largest programs for congestion relief, the Urban Partnership Agreement and Congestion Reduction Demonstration programs, have provided grant funds totaling nearly $800 million since 2006 to six metropolitan areas to implement pricing and other strategies. DOT requires sponsors of congestion pricing projects to monitor and evaluate performance and, for HOT lanes when applicable, ensure that a federal standard for minimum traffic speeds is met.

The 14 congestion pricing projects that have current and complete evaluations generally show that pricing can help reduce congestion, although other results are mixed, and not all possible relevant impacts have been assessed. HOT lane projects, which aim to reduce congestion by decreasing travel time and increasing speed and the number of vehicles using the lane, have reduced congestion, but some HOT lane projects also added new lanes, and studies did not distinguish the extent to which performance improvements were due to added lanes or pricing. In addition, although the number of cars using HOT lanes has risen, there were fewer people in those cars because of an increase in the proportion of toll-paying solo drivers or a decrease in carpools. Peak-period pricing projects, which aim to reduce congestion by encouraging drivers to travel at off-peak times, have shifted some travel to those times. Other congestion pricing effects—such as equity income impacts—have not always been evaluated. Potential concerns include income equity (whether low-income drivers are disproportionately affected by congestion pricing) and geographic equity (whether one geographic area is more negatively affected than another, such as when traffic diversion occurs). These impacts are important to assess as they address the public and elected officials’ concerns about the effects of pricing on travelers and communities. Ongoing multi-year evaluations across six metropolitan areas will assess the performance and effects of congestion pricing projects using a specific set of measures to assess the effectiveness of congestion reduction strategies.

Concerns about equity may grow as pricing projects become more widespread. New projects are under construction, and several metropolitan areas have networks of HOT lanes planned that will expand the relatively limited use of pricing today. Equity concerns may become more acute where sponsors are using pricing not only to manage congestion, but also to raise revenue to build new projects. Raising revenue can be at odds with managing congestion (e.g., increasing passenger throughput) if higher tolls can produce more revenue from fewer paying vehicles. Options to address equity issues include using a portion of toll revenues to finance public transit service.