

## **I-4 Ultimate Traffic and Revenue Summary**

The Traffic and Revenue study for planning purposes is now complete for the Ultimate I-4 Project. The project covers the Metro Orlando area beginning west of Kirkman Road in Orlando and ending east of SR 434 in Seminole County. The existing number of general use or non-tolled lanes on I-4 remains the same as today and managed lanes – two eastbound and two westbound – account for all the additional capacity on I-4. Managed lanes provide improved travel time for all users—managed and general uses lanes – because of the traffic they take off the general use lanes.

### ***General Characteristics***

General use lanes are not tolled. Only the managed lanes are toll lanes, based on congestion pricing, or value pricing. This means users pay higher toll rates during peak demand periods, and lower prices when demand is less. Toll collection uses All Electronic Tolls (AET) technology, such as SunPass and E-PASS, and coins are not accepted on the managed lanes. Pricing is also based on traveling distance with eight gantries spaced along the corridor. A concrete barrier separates general use lanes from managed lanes. Slip lanes and direct ramp access allows vehicles to enter and exit. Trucks are not permitted in the managed lanes.

The pricing policy for managed lanes is consistent with what's used in other states. Pricing is aggressive and necessary for financial feasibility, and results in a consistent, high speed, reliable trips for those using managed lanes.

### ***Methodology***

The study follows a five step process utilizing a local planning model calibrated for traffic and revenue studies, Turnpike Central Florida Model (TCFM). The TCFM provided the initial information regarding traffic and revenue performance on the I-4 managed lanes, supplying the probability model the necessary traffic and revenue results for each of the combinations generated in the experimental plan. From the probability forecasts, the socioeconomic, network, and value of time variables for the Base condition were chosen. Using the TCFM, the Base condition forecasts were developed. The daily TCFM results were then used by ELTOD to determine the hourly I-4 managed lanes traffic volumes and toll rates. The ELTOD model worked in conjunction with the TCFM, taking a daily subarea trip table and a subarea network extraction from the TCFM and producing traffic and revenue estimates by hour and by direction in the corridor for the general use and managed lanes. The Express Lanes Time Of Day Model results for traffic and revenue on an hourly basis were subsequently fed back into the probability process for final development of the risk curves percentiles. The traffic and revenue forecasts produced from the final probability effort became inputs to the toll revenue model, which determined gross toll revenue estimates, toll collection expenses, and net toll revenues.

### ***Results***

The best way to understand the result is to look at two typical trips and the associated cost. Average peak hour costs in the year 2020 shows a commuter traveling from east of S.R. 434 to South Street (downtown) pays a morning toll cost of approximately \$7.70, and the return trip in the evening totals approximately \$5.60. The total round trip cost is \$13.30 (in 2010 dollars) to travel 25.0 miles in the peak hours, or 53 cents per mile. An average 2020 peak hour costs shows a commute trip from west of Kirkman Road to South Street in the morning costs approximately \$4.60 and the return trip in the evening is approximately \$4.30. The total round trip cost is \$8.90 to travel 17.2 miles or 52 cents per mile. The Managed Lanes are expected to gross \$28 million in 2020. Projected estimates show managed lanes grossing gross \$225 million (in nominal dollars) by 2045.