

I-25 HOV/Tolled Express Trends

2006 to Present

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Report Compiled By:

Kari Grant, High Performance Transportation Enterprise Specialist

Stephen Sperry, Region 6 Electronics Specialist

Rodney Redman, Region 6 Electronics Specialist

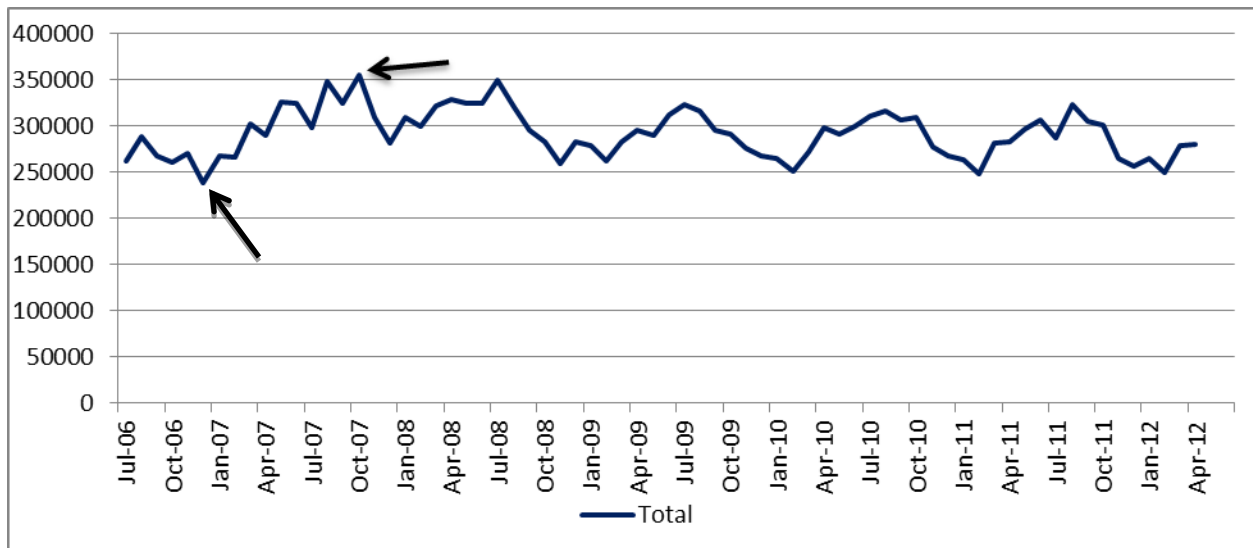
Introduction

The purpose of this report is to present an historical overview of the traffic performance of the I-25 High Occupancy Vehicle (HOV) and tolled Express lanes from 2006 to present. This overview should give us a better understanding of the stability of the system and how it will perform in the future.

Briefly, the I-25 HOV lanes were opened in the mid-1990's. Then referred to as the Downtown Express, the lanes are about seven miles in length, and are a barrier-separated facility with two lanes and shoulders on each side. The lanes are reversible, operating inbound during the morning rush, switching to outbound operations for the evening rush and remainder of the night.

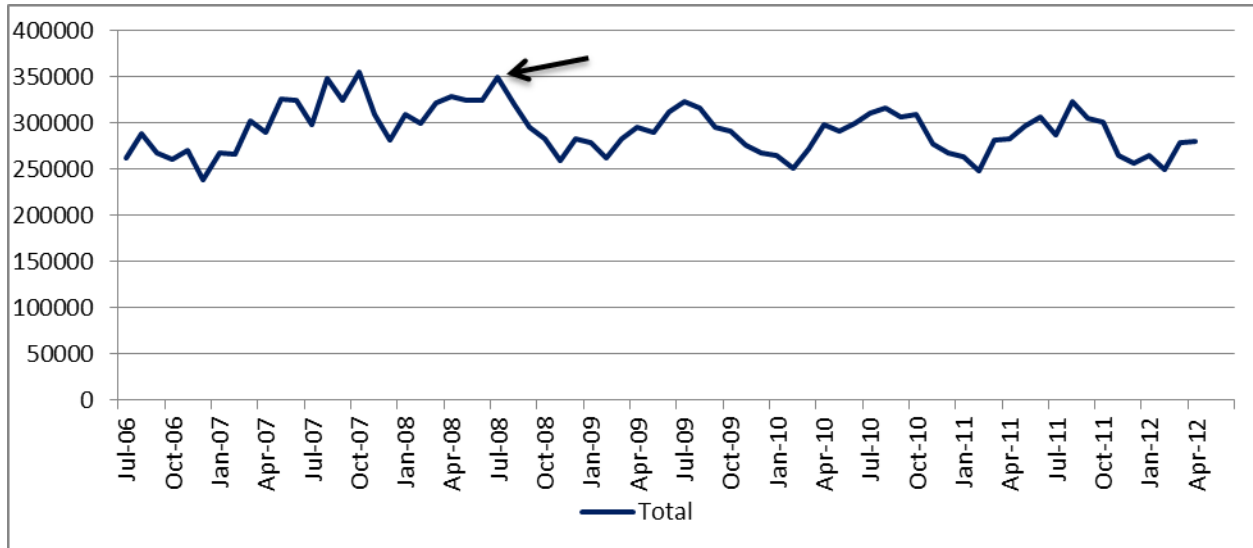
In 2006, toll paying Single Occupant Vehicles (SOV) were allowed to use the HOV lanes. Now called the I-25 Express Lanes, tolls are collected electronically using a single toll gantry and transponders. In 2009, License Plate Tolling (LPT) was introduced, allowing SOV's without a transponder to also choose Express Lanes travel.

Total Volume Over Time



From July 2006 to April of this year, 20,423,268 total vehicles have used the Express Lanes. By July 2012 we will have exceeded 21,000,000 total vehicles. Minimum monthly volume of 238,445 occurred in December 2006, and maximum monthly volume of 355,308 vehicles was attained in October 2007.

Impact of the Recession



We think the effects of the recent economic recession can be seen beginning about August 2008 with some recovery starting to occur about March 2009.

Yearly Cycles: What We Can Expect

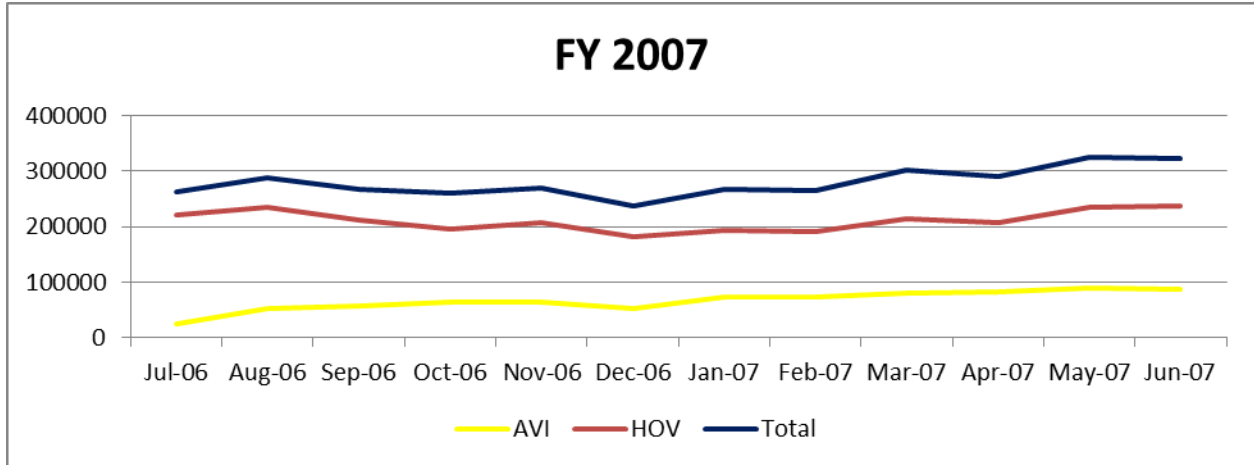


Since the beginning of 2009, a seasonal pattern of total volume has become established, with minimum volumes occurring in February, and maximum volumes in August. Interestingly, this is counter to the volume pattern we see on the general purpose lanes. We aren't certain why this

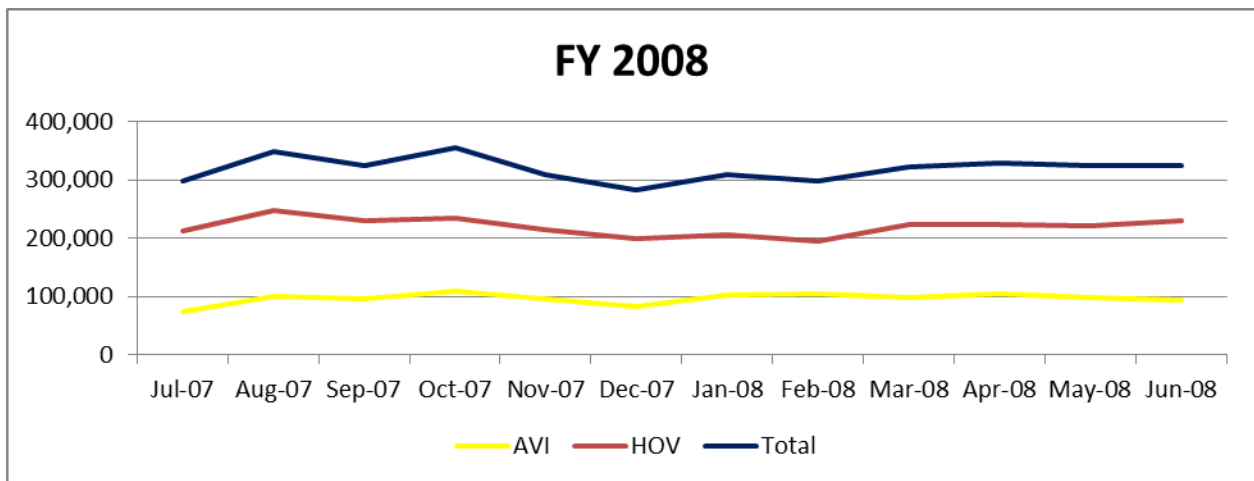
is, but it could be a post-holiday curtailing of personal spending. This would be a good topic to explore in a future customer survey.

Year-to Year HOV to Express Toll Volume Comparisons

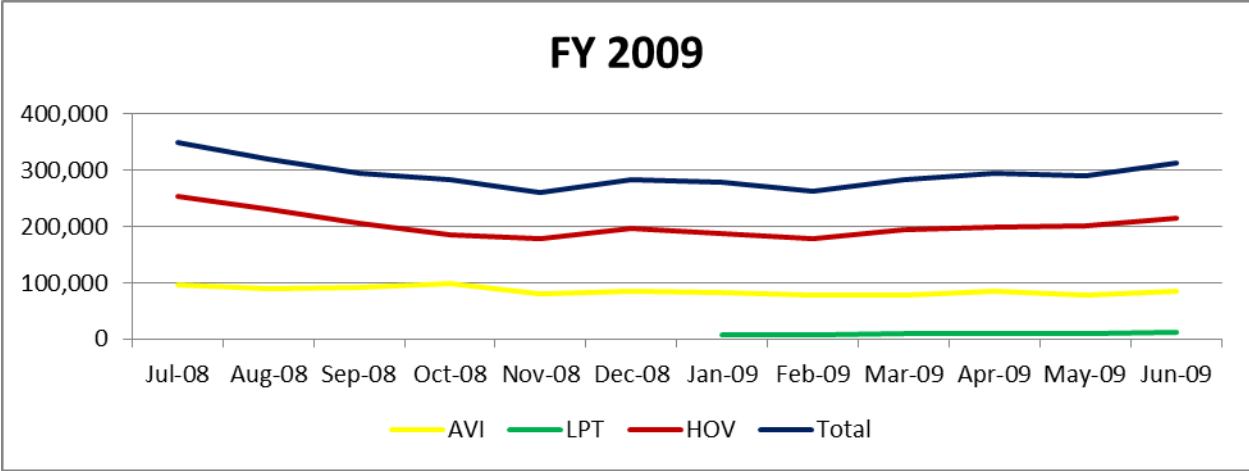
The charts below compare HOV volumes to Express Toll (or AVI for Automatic Vehicle Identification) volumes, and showing total volumes combined.



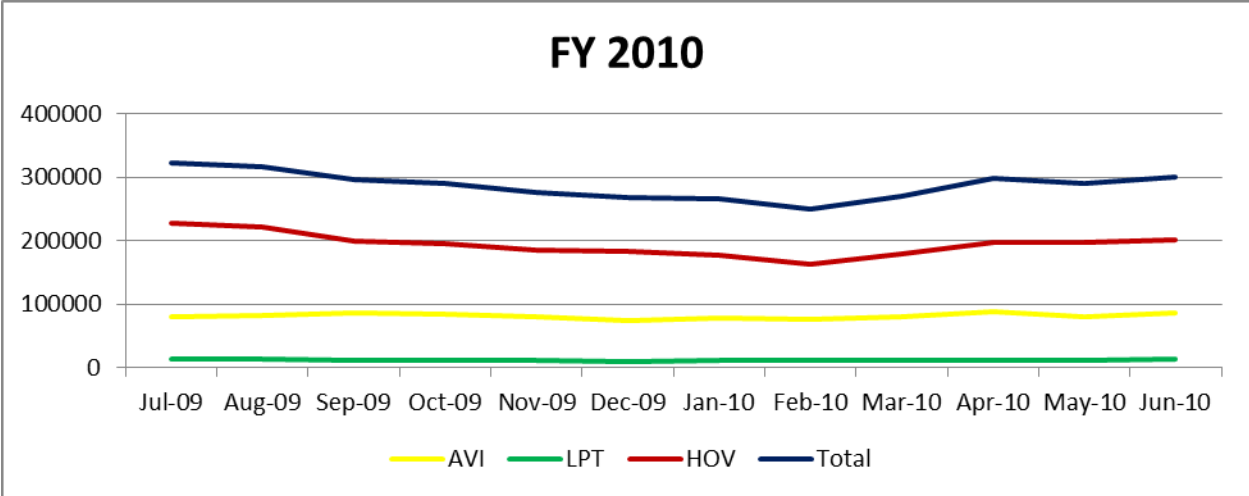
In FY 2007, the implementation of SOV tolling takes off and builds.



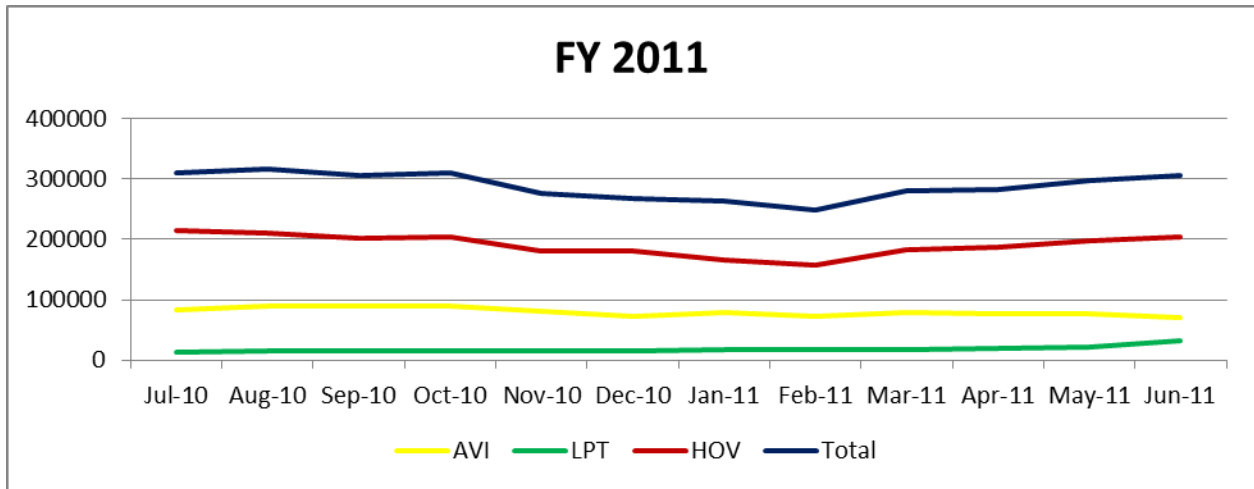
In FY 2008, toll volumes hold steady. The peak of total volume in October 2007 was the peak monthly maximum of 355,308.



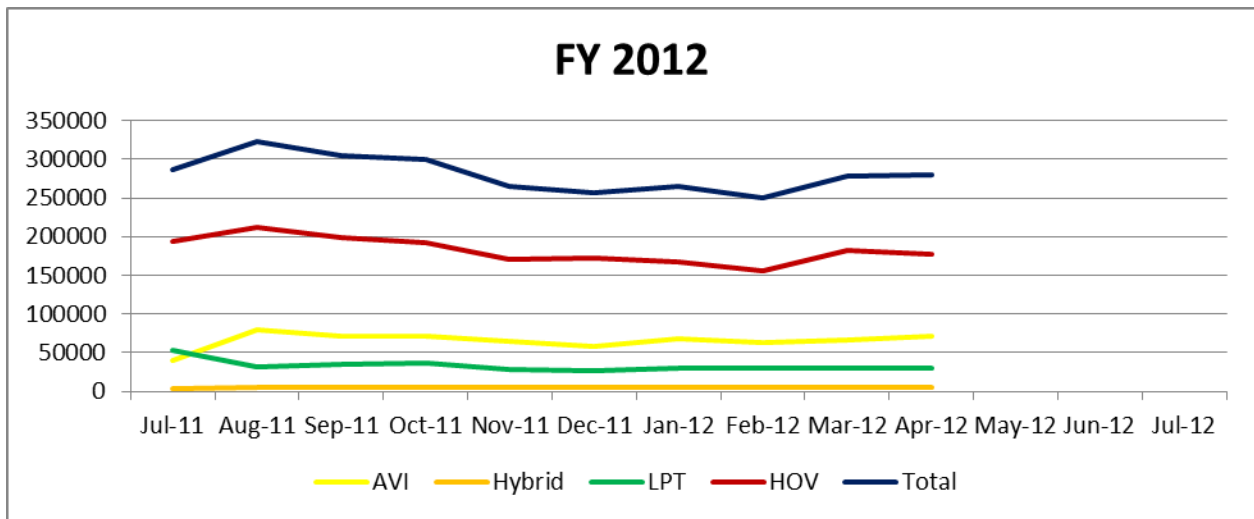
In FY 2009, the effects of the economic recession are apparent toward the end of 2008, while Express Tolls hold relatively steady. In January 2009, License Place Tolling (LPT) was introduced.



In FY 2010, the effects of the recession moderate, and the seasonal pattern of maximum total volume during the summer and minimum volumes in the winter begins to establish.

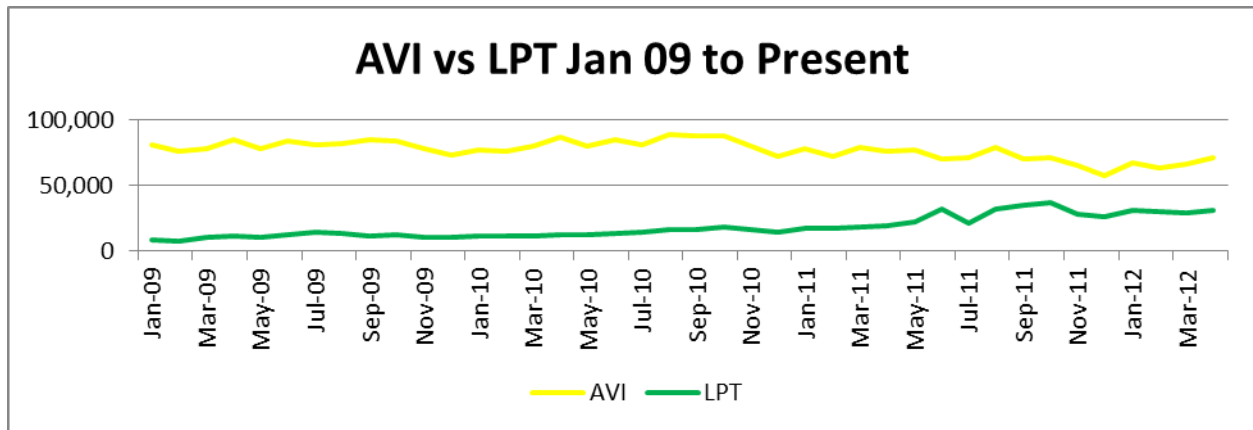


Volumes in FY 2011 hold to seasonal patterns. However, in June 2011 we noticed a strong increase in LPT and began our investigation of trends affecting the Express Lanes.

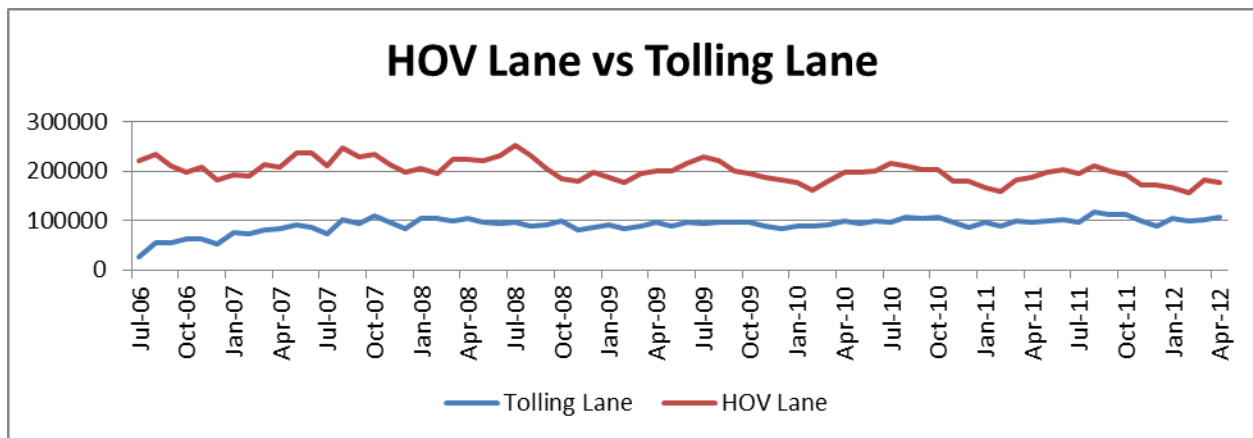


Early in FY 2012 there seemed to be an extraordinary surge in LPT with a concurring drop in vehicles with transponders. This was not a result of natural trending, rather a faulty AVI reader was discovered – when the AVI failed to detect a transponder, the vehicle was read as an LPT. Once the AVI reader was repaired, reporting returned to normal. In FY 2012, we are also beginning to report hybrid usage, which accounts for about 2% of peak period traffic in the morning and the evening.

Other Comparisons



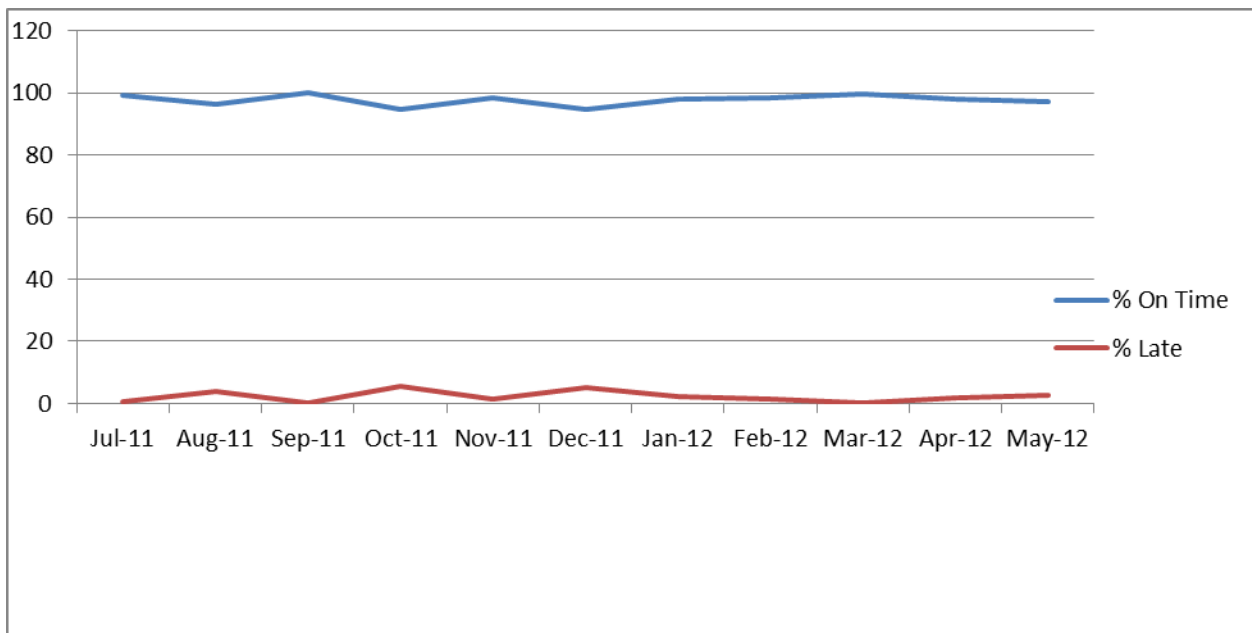
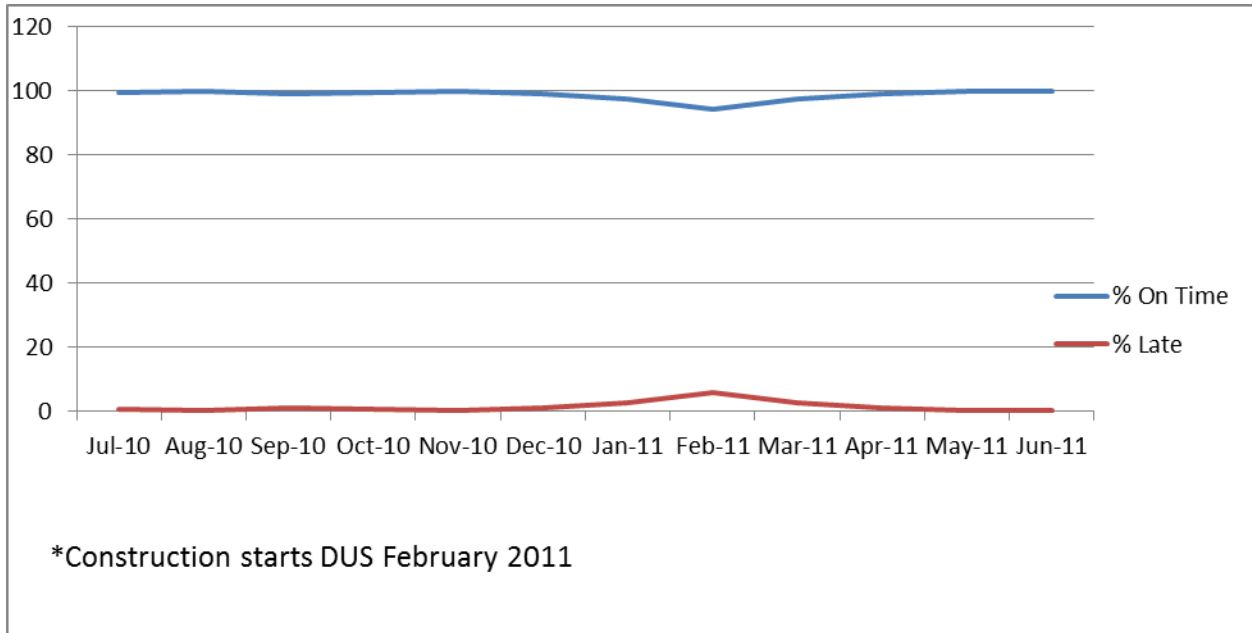
This chart shows good growth in license plate tolling. It could be that drivers are becoming more familiar with the concept and comfortable with paying their tolls through a billing process. In March 2012, we implemented a surcharge on LPT's, but it is too soon to tell how this might affect growth in LPT.



Over time, Express Toll volumes remain steady, with a perceived slight decline in HOV. It could be that the driving public is choosing the convenience of paying a toll to drive solo, over carpooling and its inherent complexities.

Bus On-Time Comparisons

The ultimate performance indicator for the HOV/HOT lanes is the percentage of buses that meet or exceed on-time parameters. The following charts compare on-time buses, based on 149 buses per morning peak period (6:00 a.m. to 10:00 a.m.), for 22 work days per month.



Generally, bus on-time rates hover around 96%.

Conclusions:

The success of the HOV/HOT lanes when compared to the initial usage/revenue estimates is evident. Initial usage projections were exceeded within the first 10 months of operation of the lanes and recent usage numbers have showed steady growth. For the month of May, the average weekday AM peak period high was 4,716 vehicles per hour (VPH). That is just over twice the 2,300 VPH maximum flow rate for southbound traffic projected in the initial I-25 HOT Lanes Traffic Forecast memorandum by Vollmer Associates LLP in 2004.

The amount of traffic coupled with the required maintenance activities over the years highlights the outstanding safety record experienced in the lanes. Safety of employees and the traveling public truly has been a priority and must continue to be in order to facilitate continued growth.

Based on the data collected to date, especially over the past three years, we can start to see a fairly predictable pattern developing regarding peaks and valleys for total lane usage. This data is critical in moving towards a dynamic pricing scenario -- not only to project revenue, but also to better manage travel speed maintenance which is critical to the continued success of the lanes.

Intermittent delays during the A.M. busy period for inbound traffic will continue for the interim due to construction at Denver Union Station and the single exit point (19th & Wynkoop) and its signal timing.

Going forward, additional traffic generated by the extension of the managed lanes to Boulder on US-36 and by the extension north on I-25 will become a concern in regards to maintaining travel time and managing congestion within the lanes. Maintenance costs will also have to be adjusted to compensate for faster deterioration of the roadway surface. The change to 3+ for HOV, a cap on hybrid permits and conversion to dynamic pricing are all throttling tools being considered for ensuring the long-term success of the lanes.