

US 36, I-25 Central Dynamic Pricing Informational Update

Sept. 12, 2018

Summary

Plenary Roads Denver (PRD) is pleased to provide this informational update as part of the High-Performance Transportation Enterprise Board's June 2018 approval to transition from time-of-day tolling to real-time, dynamic pricing along US 36 and I-25 Central lanes. This is part of PRD's planned regular updates on dynamic pricing testing and implementation to the Board and these adjustments will directly assist in the development of parameters within the dynamic tolling algorithm by providing additional data points.

Why is Plenary Roads Denver Adjusting Toll Prices?

As part of the transition to dynamic express lane pricing, PRD is making some adjustments to time-of-day tolling rates. These adjustments will allow PRD to better manage traffic flow in the US 36 and I-25 Central Express Lanes during the transition and calibrate the traffic to provide a more indicative baseline for the dynamic express lane pricing and implementation.

These toll adjustments are helpful for the transition as they provide data for the development of parameters within the dynamic tolling algorithm. Specifically, some adjustments will be made to assist in the development of:

- Algorithm step functions
 - Frequency of dynamic change
 - Rate of change of pricing
- Calibration of peak travel times
 - Provide additional information for peak travel times
- Sensitivity data for pricing
 - 1 rate adjustment to date, adjustment provides additional data

What can Express Lane drivers expect to pay as part of the adjustment?

On average, rates are going up about 4 percent, mostly during peak travel periods. For instance, an eastbound trip at 7 a.m. from Boulder to Downtown Denver will be adjusted from \$7.30 to \$7.65. There are also adjustments during the peak travel time in which the rate will decrease. An 8 a.m. trip from Boulder to Denver will decrease from \$8.35 to \$8.30.

In one instance, based on increased traffic volume and dynamic pricing testing, we are extending the morning peak travel pricing from 8:45 a.m. to 9 a.m.

The adjustments in time-of-day tolling will directly assist the development of parameters within the dynamic pricing algorithm.

Updated Dynamic Pricing Transition Timeline

- **In Progress:** Working with tolling vendor Kapsch TrafficCom on implementation; working on the design of the tolling system and development of the algorithm
- **September 23, 2018:** Make initial toll adjustments as part of transition to dynamic pricing
- **2019:** Continued testing along the corridor
- **2020:** Roll out dynamic pricing on US 36 and I-25 Central Express Lanes
- **Contingencies**
 - PRD will need to install additional traffic-monitoring technology along the entire corridor
 - Based on traffic use, the algorithm will need to be fine-tuned to ensure optimal use in the Express Lanes

Communication Outreach

Each phase of the transition to dynamic pricing will include an outreach component, similar to the outreach component leading up to and following the HPTE board’s approval of dynamic pricing and rate adjustments in June. Here’s an overview:

- **Drivers:** Outreach through overhead message boards in advance of the adjustment
- **Media and social media:** PRD communications team will notify the media and post relevant information on social media and the website
- **Community:** We will continue to share relevant updates with community organizations including Commuting Solutions, as well as with elected officials

Dynamic Pricing Overview:

With dynamic pricing, Express Lanes rates would be continually adjusted according to real-time traffic conditions to maintain free-flowing levels of traffic. Toll rates would increase when the Express Lanes get congested and decrease when the Express Lanes are less full. This advanced technology helps to manage traffic flow through the Express Lanes and helps to maintain reliable travel times along the corridor.

Proposed Tolling Adjustment Schedule (Peak times shown):

Please note the extended peak travel period from 8:45 a.m. to 9 a.m.

US-36 and I-25 (eastbound)

AM Peak AVI's
Whole
Corridor

Time	Old	New	Delta
06:00-06:30	5.15	5.30	0.15
06:30-07:00	7.25	7.45	0.20
07:00-07:15	7.30	7.65	0.35
07:15-07:30	8.15	8.30	0.15
07:30-08:00	8.25	8.30	0.05
08:00-08:15	8.35	8.30	-0.05
08:15-08:30	7.90	8.30	0.40
08:30-08:45	7.90	7.85	-0.05
08:45-09:00	4.95	7.65	2.70

US-36 & I-25 (westbound)

PM Peak AVI's
Whole
Corridor

Time	Old	New	Delta
15:30-16:15	5.60	5.70	0.10
16:15-16:30	7.75	7.95	0.20
16:30-17:45	8.05	8.15	0.10
17:45-18:00	5.95	6.05	0.10
18:00-18:15	5.70	5.95	0.25
18:15-18:30	5.50	5.80	0.30