



Plenary Roads Denver  
400 Burrard Street, Suite 2000  
Vancouver, BC V6C 3A6  
Telephone: 604.638.3905  
Facsimile: 604.638.3906  
www.plenarygroup.com

September 28, 2015

HPTE  
4201 East Arkansas Ave.  
Denver, CO 80222

Attention: Nicholas Farber

**RE: U.S. 36 Managed Lanes Project –US36 Phase 2 Managed Lanes Proposed Toll and Penalty Schedule**

Dear Nicholas,

Enclosed please find our Proposed Toll and Penalty Schedule for your review in accordance with the Concession Agreement Schedule 16, Section 1.2 and 2.1. Also set out below is the additional information requested by HPTE pursuant to the Concession Agreement.

**2. Establishment of and Changes to Established Toll and Penalty Schedule**

**2.1. Every Proposed Toll and Penalty Schedule that proposes to establish or modify Tolls shall include:**

*(a) All data necessary for HPTE to consider the Proposed Toll and Penalty Schedule for adoption as the Established Toll and Penalty Schedule. Each Proposed Toll and Penalty Schedule shall include:*

***(i) The Proposed Algorithm***

Tolls will be charged based on Variable methodology consistent with the current regime, and not on a software based algorithm. As a result there is no new proposed algorithm.

*(ii) Tolls to be charged to Tolloed Vehicles using the Managed Lanes, or any portion thereof, while using an electronic, automated system enabling the ETCS to recognize the Motor Vehicle by means other than imagery, including Transponders (in each case a using a Vehicle Recognition System (VRS)), which in all cases must be Dynamic Tolling*

ExpressTolls: Passenger Vehicle Tolls

At this time, we are requesting to establish ETCS Automated Vehicle Identification (AVI) (a.k.a, ExpressToll) rates, which are as set out in Table 1 through Table 4 below.

Table 1: US36 ETCS AVI (ExpressToll) Tolls McCaslin Toll Point (Southbound) Everyday (S8)

Time	Current Rate	Proposed Rate	Increase	% Increase
0.00-6.00	N/A	\$0.25	N/A	N/A
6.00-6.45	N/A	\$0.25	N/A	N/A
6.45-7.15	N/A	\$0.35	N/A	N/A
7.15-8.15	N/A	\$0.50	N/A	N/A
8.15-8.45	N/A	\$0.35	N/A	N/A
8.45-10.00	N/A	\$0.25	N/A	N/A
10.00-15.00	N/A	\$0.25	N/A	N/A
15.00-15.30	N/A	\$0.35	N/A	N/A
15.30-16.30	N/A	\$0.50	N/A	N/A
16.30-18.00	N/A	\$0.50	N/A	N/A
18.00-19.00	N/A	\$0.35	N/A	N/A
19.00-24.00	N/A	\$0.25	N/A	N/A
Weekends	N/A	\$0.25	N/A	N/A

Table 2: US36 ETCS AVI (ExpressToll) Tolls Overlook Toll Point (Southbound) Everyday (S9)

Time	Current Rate	Proposed Rate	Increase	% Increase
0.00-6.00	N/A	\$0.25	N/A	N/A
6.00-6.45	N/A	\$0.25	N/A	N/A
6.45-7.15	N/A	\$0.35	N/A	N/A
7.15-8.15	N/A	\$0.65	N/A	N/A
8.15-8.45	N/A	\$0.35	N/A	N/A
8.45-10.00	N/A	\$0.25	N/A	N/A
10.00-15.00	N/A	\$0.25	N/A	N/A
15.00-15.30	N/A	\$0.50	N/A	N/A
15.30-16.30	N/A	\$0.50	N/A	N/A
16.30-18.00	N/A	\$0.65	N/A	N/A
18.00-19.00	N/A	\$0.50	N/A	N/A
19.00-24.00	N/A	\$0.25	N/A	N/A
Weekends	N/A	\$0.25	N/A	N/A

Table 3: US 36 ETCS AVI (ExpressToll) Tolls McCaslin Toll Point (Northbound) Everyday (N7)

Time	Current Rate	Proposed Rate	Increase	% Increase
0.00-6.00	N/A	\$0.25	N/A	N/A
6.00-6.45	N/A	\$0.25	N/A	N/A
6.45-7.15	N/A	\$0.35	N/A	N/A
7.15-8.15	N/A	\$0.50	N/A	N/A
8.15-8.45	N/A	\$0.35	N/A	N/A
8.45-10.00	N/A	\$0.25	N/A	N/A
10.00-15.00	N/A	\$0.25	N/A	N/A
15.00-15.30	N/A	\$0.25	N/A	N/A
15.30-16.30	N/A	\$0.25	N/A	N/A
16.30-18.00	N/A	\$0.35	N/A	N/A
18.00-19.00	N/A	\$0.25	N/A	N/A
19.00-24.00	N/A	\$0.25	N/A	N/A
Weekends	N/A	\$0.25	N/A	N/A

Table 4: US36 ETCS AVI (ExpressToll) Tolls Overlook Toll Point (Northbound) Everyday (N8)

Time	Current Rate	Proposed Rate	Increase	% Increase
0.00-6.00	N/A	\$ 0.25	N/A	N/A
6.00-6.45	N/A	\$ 0.35	N/A	N/A
6.45-7.15	N/A	\$ 0.35	N/A	N/A
7.15-8.15	N/A	\$ 0.65	N/A	N/A
8.15-8.45	N/A	\$ 0.35	N/A	N/A
8.45-10.00	N/A	\$ 0.25	N/A	N/A
10.00-15.00	N/A	\$ 0.25	N/A	N/A
15.00-15.30	N/A	\$ 0.25	N/A	N/A
15.30-16.30	N/A	\$ 0.35	N/A	N/A
16.30-18.00	N/A	\$ 0.50	N/A	N/A
18.00-19.00	N/A	\$ 0.25	N/A	N/A
19.00-24.00	N/A	\$ 0.25	N/A	N/A
Weekends	N/A	\$ 0.25	N/A	N/A

***(iii) Tolls to be charged to Tolloed Vehicles using the Managed Lanes, or any portion thereof, without using a Vehicle Recognition System (VRS)***

Vehicles without VRS: License Plate Tolls (LPT) Passenger Vehicle Tolls

Table 5-Table 8 depicts combined ETCS AVI tolls and surcharge to be charged to Managed Lane users that do not use a transponder (switchable or fixed) to communicate with the VRS.

*Table 5:US36 Non-VRS (LPT) McCaslin Toll Point (Southbound) Everyday (\$8)*

Time	Current Rate	Proposed Toll Rate	\$ Increase	Proposed LPT Surcharge	Total Proposed Toll + Surcharge	% Increase
0.00-6.00	N/A	\$0.25	N/A	\$0.75	\$ 1.00	N/A
6.00-6.45	N/A	\$0.25	N/A	\$0.75	\$ 1.00	N/A
6.45-7.15	N/A	\$0.35	N/A	\$0.75	\$ 1.10	N/A
7.15-8.15	N/A	\$0.50	N/A	\$0.75	\$ 1.25	N/A
8.15-8.45	N/A	\$0.35	N/A	\$0.75	\$ 1.10	N/A
8.45-10.00	N/A	\$0.25	N/A	\$0.75	\$ 1.00	N/A
10.00-15.00	N/A	\$0.25	N/A	\$0.75	\$ 1.00	N/A
15.00-15.30	N/A	\$0.35	N/A	\$0.75	\$ 1.10	N/A
15.30-16.30	N/A	\$0.50	N/A	\$0.75	\$ 1.25	N/A
16.30-18.00	N/A	\$0.50	N/A	\$0.75	\$ 1.25	N/A
18.00-19.00	N/A	\$0.35	N/A	\$0.75	\$ 1.10	N/A
19.00-24.00	N/A	\$0.25	N/A	\$0.75	\$ 1.00	N/A
Weekends	N/A	\$0.25	N/A	\$0.75	\$ 1.00	N/A

Table 6: US36 Non-VRS (LPT) Overlook Toll Point (Southbound) Everyday (S9)

Time	Current Rate	Proposed Toll Rate	\$ Increase	Proposed LPT Surcharge	Total Proposed Toll + Surcharge	% Increase
0.00-6.00	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
6.00-6.45	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
6.45-7.15	N/A	\$0.35	N/A	\$0.75	\$1.10	N/A
7.15-8.15	N/A	\$0.65	N/A	\$0.75	\$1.35	N/A
8.15-8.45	N/A	\$0.35	N/A	\$0.75	\$1.10	N/A
8.45-10.00	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
10.00-15.00	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
15.00-15.30	N/A	\$0.50	N/A	\$0.75	\$1.25	N/A
15.30-16.30	N/A	\$0.50	N/A	\$0.75	\$1.25	N/A
16.30-18.00	N/A	\$0.65	N/A	\$0.75	\$1.35	N/A
18.00-19.00	N/A	\$0.50	N/A	\$0.75	\$1.25	N/A
19.00-24.00	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
Weekends	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A

Table 7: US36 Non-VRS (LPT) McCaslin Toll Point (Northbound) Everyday (N7)

Time	Current Rate	Proposed Toll Rate	\$ Increase	Proposed LPT Surcharge	Total Proposed Toll + Surcharge	% Increase
0.00-6.00	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
6.00-6.45	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
6.45-7.15	N/A	\$0.35	N/A	\$0.75	\$1.10	N/A
7.15-8.15	N/A	\$0.50	N/A	\$0.75	\$1.25	N/A
8.15-8.45	N/A	\$0.35	N/A	\$0.75	\$1.10	N/A
8.45-10.00	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
10.00-15.00	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
15.00-15.30	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
15.30-16.30	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
16.30-18.00	N/A	\$0.35	N/A	\$0.75	\$1.10	N/A
18.00-19.00	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
19.00-24.00	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A
Weekends	N/A	\$0.25	N/A	\$0.75	\$1.00	N/A

Table 8: US36 Non-VRS (LPT) Overlook Toll Point (Northbound) Everyday (N8)

Time	Current Rate	Proposed Toll Rate	\$ Increase	Proposed LPT Surcharge	Total Proposed Toll + Surcharge	% Increase
0.00-6.00	N/A	\$ 0.25	N/A	\$ 0.75	\$1.00	N/A
6.00-6.45	N/A	\$ 0.35	N/A	\$ 0.75	\$1.10	N/A
6.45-7.15	N/A	\$ 0.35	N/A	\$ 0.75	\$1.10	N/A
7.15-8.15	N/A	\$ 0.65	N/A	\$ 0.75	\$1.35	N/A
8.15-8.45	N/A	\$ 0.35	N/A	\$ 0.75	\$1.10	N/A
8.45-10.00	N/A	\$ 0.25	N/A	\$ 0.75	\$1.00	N/A
10.00-15.00	N/A	\$ 0.25	N/A	\$ 0.75	\$1.00	N/A
15.00-15.30	N/A	\$ 0.25	N/A	\$ 0.75	\$1.00	N/A
15.30-16.30	N/A	\$ 0.35	N/A	\$ 0.75	\$1.10	N/A
16.30-18.00	N/A	\$ 0.50	N/A	\$ 0.75	\$1.25	N/A
18.00-19.00	N/A	\$ 0.25	N/A	\$ 0.75	\$1.00	N/A
19.00-24.00	N/A	\$ 0.25	N/A	\$ 0.75	\$1.00	N/A
Weekends	N/A	\$ 0.25	N/A	\$ 0.75	\$1.00	N/A

**(iv) Tolls to be charged to Motor Vehicles that are not Passenger Vehicles**

**US36**

We are proposing to charge Non-Passenger Vehicles (defined as vehicles with four or more axles) a \$25.00 premium per gantry on the applicable gantry Passenger Vehicle Toll which is consistent with Phase 1.

- (b) *A statement (if it is the case) that the Proposed Toll and Penalty Schedule is a remedial adjustment to the Established Toll and Penalty Schedule which the Concessionaire considers to be necessary to correct a Bus Delay Event, an error, or some other unintended consequence of that Established Toll and Penalty Schedule;*

**US36**

Not applicable as this is the first proposed toll and penalty schedule for the corridor.

- (c) *A statement providing the highest and lowest Tolls that are proposed to be charged for each of the Tolls described in paragraphs 2.1(a)(i), 2.1(a)(ii), 2.1(a)(iii), and 2.1(a)(iv);*

For paragraph 2.1(a)(i)(ii), 2.1 (a) (iii) please refer to above tables where the highest ETCS AVI toll rate (Tables 1 – 4) or highest ETCS AVI toll rate plus non-VRS (LPT) surcharge (Tables 5 – 8) for each segment and direction is highlighted in red and lowest ETCS AVI toll rate (Tables 1 – 4) or lowest ETCS AVI toll rate plus non-VRS (LPT) surcharge (Tables 5-8) for each segment and direction is highlighted in green.

For paragraph 2.1(a)(iv), the Non-Passenger Vehicle premium is proposed to be \$25 per gantry for the US36 Phase 2 which is consistent with US36 Phase 1.

- (d) *If any of the Tolls described in paragraphs 2.1(a)(i), 2.1(a)(ii), 2.1(a)(iii), or 2.1(a)(iv) contain the right for the Concessionaire to manually override the Proposed Algorithm, a schedule of what specific Tolls will be if manually overridden, a description of when and on what terms the Tolls may be overridden, and a range of what the manually overridden Tolls will be:*

As we are not at this time utilizing an algorithm, there is no algorithm for us to override. The only manual change to the system would be sent as a request to E470 to either reduce the toll rates or waive toll revenues during time periods requested by emergency services. This is consistent with the existing protocol and we are not requesting any changes to this at this time.

- (e) *An explanation of the changes between the Proposed Toll and Penalty Schedule and the current Established Toll and Penalty Schedule, including why the changes are being proposed;*

The proposed changes to ETCS AVI (ExpressToll) rates (as detailed in Tables 1 to 8) are being made in continuing efforts to balance traffic and lane flow to ensure we meet our commitments to the Managed Lanes Goals, RTD, and to account for inflation. The Managed Lanes Goals are defined in the Concession Agreement Schedule 16; Section 1.3 and are as follows:

*Concessionaire acknowledges and agrees that all Established Toll and Penalty Schedules must be designed to ensure that Motor Vehicle speeds (a) For the portion of the US 36 Managed Lanes from Table Mesa to the Broomfield Park-n-Ride are an average of 55 miles per hour; (b) For the portion of the US 36 Managed Lanes from the Broomfield Park-n-Ride to Pecos Street are an average of 50 miles per hour; and (c) For the portion of the Managed Lanes from Pecos Street to Denver Union Station, that they maintain a travel time of no more than 8.75 minutes. In all cases during Peak Periods only (collectively, the “Managed Lanes Goals”).*

Changes to the Civil Penalty are being proposed to provide a stronger deterrent to toll evasion (e.g. declaring as a high-occupancy vehicle when not actually meeting the definition). The current penalty along I-25 and US36 Phase 1 is \$250.00. \$250.00 is requested for US36 Phase 2.

The US36 rates will become effective upon Phase 2 Commencement.

- (f) *The Concessionaire’s good faith estimate, on a semi-annual basis, for as long as an effect persists, of incremental difference between the Toll Revenues generated under the Established Toll and Penalty Schedule and the Proposed toll and Penalty Schedule once Toll Revenues are being generated in accordance with the Proposed Toll and Penalty Schedule.*

US 36: N/A

- (g) Additional Request

PRD is also proposing a Special Event Toll Rate. The Special Event was established in the 2006 Intergovernmental Agreement (IGA) between Colorado Department of Transportation (CDOIT), Regional Transportation District (RTD), and Colorado Tolling Enterprise (CTE) which has been succeeded by HPTE. A Special Event is considered a sporting event, concert, performance, school function, fair, parade, and other events that could generate significant traffic volume. In most cases, special events occur during off-peak hours and days when the toll rates are relatively low. The low toll rates could entice many drivers to enter the Express Lanes and subsequently slow travel speeds which contradicts the purpose of the Express Lanes. Special Event rates can apply on weekends and weekdays to facilitate reliable travel times for buses, HOV, and tolled vehicles. In scenarios when special events overlap with peak periods, the proposed peak period toll rates will still be used instead of special event toll rates.

The Special Event Toll Rate would be applied as demand rises in an effort to maintain reliable and quick travel times along US36 and I-25 Central. The pricing per gantry could escalate as drivers near the destination and congestion worsens. It is

unlikely that the demand throughout the length of the corridor is such that the maximum Special Event Toll Rate would be applied at each gantry. The Special Event Toll Rate would end as the Express Lane traffic levels return to pre-special event levels. The regularly scheduled toll rate will then apply. The IGA established a fixed Special Event Rate of \$5.00 in 2006.

**PRD is proposing Special Event AVI rates up to the maximum rates used during peak hours at each gantry during Special Events (See the red highlights in Tables 1-12).** License Plate Toll rates will be set based on the corresponding AVI rate used. This pricing flexibility will allow PRD to set the appropriate rate to balance driver demand along the corridors.

The proposed Special Event rates will become effective upon Phase 2 Commencement.

Example applications of the Special Event (S.E.) Toll Rate (Not meant as all-inclusive scenarios):

**Scenario 1: University of Colorado Boulder Graduation Saturday AM:**

West-bound Toll Point	I-25	Federal	Sheridan	Church Ranch	Wadsworth	Interlocken	McCaslin*	Scenic Overlook*	Trip Total
Proposed AVI Toll Rate	\$0.70	\$0.25	\$0.50	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$2.70
Pre-S.E. Toll Rate ML Volume	Typical Weekend	Typical Weekend	Typical Weekend	Typical Weekend	Typical Weekend	Similar to a Weekday Peak Hour	Similar to a Weekday Peak Hour	Similar to a Weekday Peak Hour	
Pre-S.E. ML Speed	Speed Limit (SL)	Speed Limit	Speed Limit	Speed Limit	Speed Limit	+/- 10 MPH under S.L.	+/- 10 MPH under S.L.	+/- 20 MPH under S.L.	
Proposed S.E. AVI Toll Rate	\$0.70	\$0.25	\$0.50	\$0.25	\$0.25	\$0.35	\$0.50	\$0.65	\$3.45

\*Phase 2 Toll Point. Rates pending approval, see Tables 1-4.

**Scenario 2: University of Colorado Boulder Football Game Saturday PM:**

West-bound Toll Point	I-25	Federal	Sheridan	Church Ranch	Wadsworth	Interlocken	McCaslin*	Scenic Overlook*	Trip Total
Proposed AVI Toll Rate	\$0.70	\$0.25	\$0.50	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$2.70
Pre-S.E. Toll Rate ML Volume	Similar to a Weekday Peak Hour								
Pre-S.E. ML Speed	+/- 10 MPH under S.L.	+/- 20 MPH under S.L.							
Proposed S.E. AVI Toll Rate	\$4.65	\$0.25	\$0.75	\$0.50	\$0.35	\$0.35	\$0.50	\$0.65	\$8.00

\*Phase 2 Toll Point. Rates pending approval, see Tables 1-4.

**Scenario 3: 1<sup>st</sup> Bank Center Concert Saturday PM\*\*:**

West-bound Toll Point	I-25	Federal	Sheridan	Church Ranch	Wadsworth	Interlocken	McCaslin*	Scenic Overlook*	Trip Total
Proposed AVI Toll Rate**	\$0.70	\$0.25	\$0.50	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$2.70
Pre-S.E. Toll Rate ML Volume	Similar to a Weekday Peak Hour	Typical Weekend	Typical Weekend	Typical Weekend	Typical Weekend				
Pre-S.E. ML Speed	+/- 10 MPH under S.L.	+/- 10 MPH under S.L.	+/- 10 MPH under S.L.	+/- 20 MPH under S.L.	Speed Limit	Speed Limit	Speed Limit	Speed Limit	
Proposed S.E. AVI Toll Rate	\$4.65	\$0.25	\$0.75	\$0.50	\$0.25	\$0.25	\$0.25	\$0.25	\$7.15

\*Phase 2 Toll Point. Rates pending approval, see Tables 1-4.

\*\*East-bound rates could also be changed at Wadsworth, Interlocken, McCaslin, and the Scenic Overlook



Respectfully,  
**PLENARY ROADS DENVER, LLC**

A handwritten signature in black ink, appearing to read 'Simon Stachnik', written in a cursive style.

Simon Stachnik  
Project Manager

cc: Michael Cheroutes, HPTE  
Scott Rees, HPTE  
Joe Mahoney, HPTE  
Brian Clark, Plenary Group  
Dan Wurst, Plenary Group  
Terry Ostrom, Plenary Group