

# May 2016

## Monthly Operations Report



**Plenary**  
Roads

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# INTRODUCTION

Pursuant to Schedule 6, Section 1.8.2(a) of the Concession Agreement, Plenary Roads Denver (“PRD”) is required to submit a monthly report covering all essential statistics related to the Managed Lanes. The following data covers the month of May 2016. Operationally, May was a positive month. Several routine maintenance tasks were completed, there were minimal incidents to maintained elements, and traffic volumes were consistent with expectations.

## 1.0 VOLUMES AND LANE USAGE

On July 22, 2015, the Managed Lanes for Phase 1 on US 36 began toll operations. At the same time, HOV vehicles were required to use a switchable transponder in order to travel the I-25 and US 36 Managed Lanes at no charge. The traffic patterns immediately shifted towards more ExpressToll™ (AVI) and License Plate (LPT) vehicles and fewer HOV transactions. Over the last several months as more commuters use the transponders for either AVI or HOV, LPT transactions have decreased significantly. The total monthly gantry traffic volume for May 2016 in the I-25 Central and US 36 Managed Lanes was 282,186 and 1,088,985, respectively.

The table below provides the monthly summary for each Managed Lanes roadway, along with a detailed breakdown of weekday volumes. For reference, the AM Peak Period is considered to be weekdays from 6:45 am – 8:45 am. The PM Peak Period is considered to be weekdays from 4:30pm – 6:00pm. It should be noted that the I-25 Managed Lane traffic reflects traffic counts from a single gantry and US 36 Managed Lane counts reflect ten gantries, five gantries in each direction. Therefore, US 36 data will indicate higher traffic counts that are not comparative to those of I-25.

The following charts depict the distribution of traffic by type (Figure 1) and the daily traffic counts (Figure 2) and for the month.

| Traffic Summary (I-25C)               |         |        |        |                  |         |        |
|---------------------------------------|---------|--------|--------|------------------|---------|--------|
|                                       | AVI     | LPT    | HOV    | Non-Rev & Hybrid | Total   | Hybrid |
| <b>Total Monthly Traffic</b>          | 118,874 | 85,230 | 64,579 | 13,503           | 282,186 | 3,070  |
| <b>Maximum Weekday Traffic</b>        | 5,953   | 3,988  | 2,654  | 643              | 13,166  | 150    |
| <b>Average Weekday Traffic</b>        | 5,035   | 3,186  | 2,522  | 600              | 10,743  | 135    |
| <b>Average Hourly AM Peak Traffic</b> | 782     | 447    | 398    | 82               | 1,627   | N/A    |
| <b>Average Hourly PM Peak Traffic</b> | 629     | 360    | 337    | 78               | 1,326   | N/A    |

| Traffic Summary (US 36)        |         |         |         |                  |           |        |
|--------------------------------|---------|---------|---------|------------------|-----------|--------|
|                                | AVI     | LPT     | HOV     | Non-Rev & Hybrid | Total     | Hybrid |
| Total Monthly Traffic          | 458,645 | 303,039 | 285,637 | 41,664           | 1,088,985 | 9,186  |
| Maximum Weekday Traffic        | 23,072  | 17,377  | 11,733  | 1,991            | 53,457    | 478    |
| Average Weekday Traffic        | 18,964  | 11,614  | 9,146   | 1,784            | 41,508    | 380    |
| Average Hourly AM Peak Traffic | 2,959   | 1,457   | 959     | 238              | 5,613     | N/A    |
| Average Hourly PM Peak Traffic | 2,728   | 1,470   | 1,107   | 223              | 5,528     | N/A    |

Table 1 – Monthly Traffic Summaries

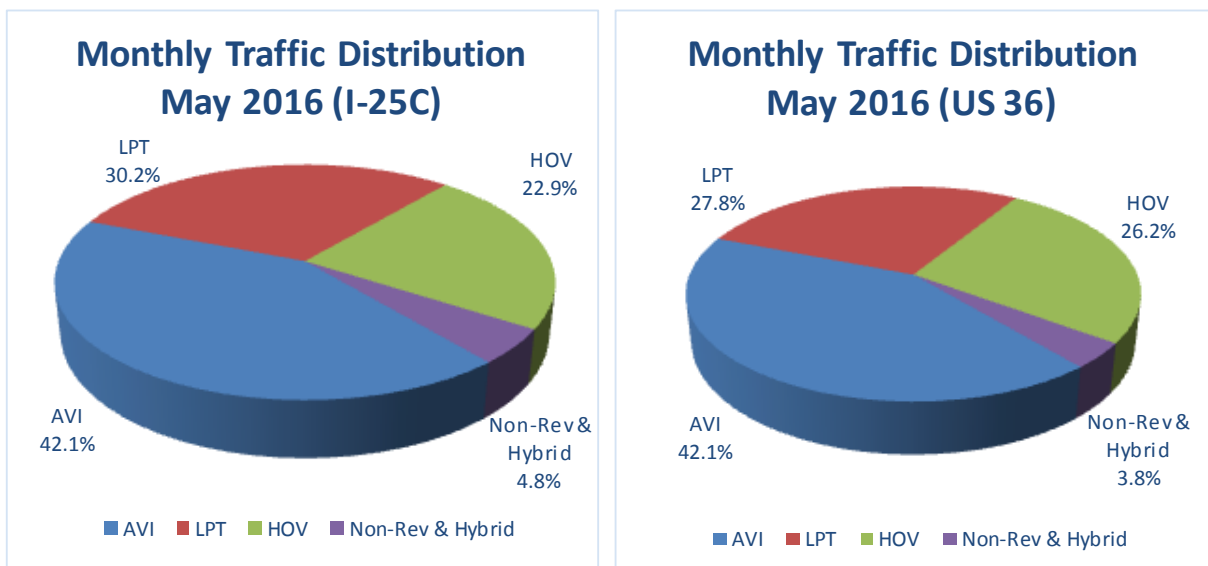
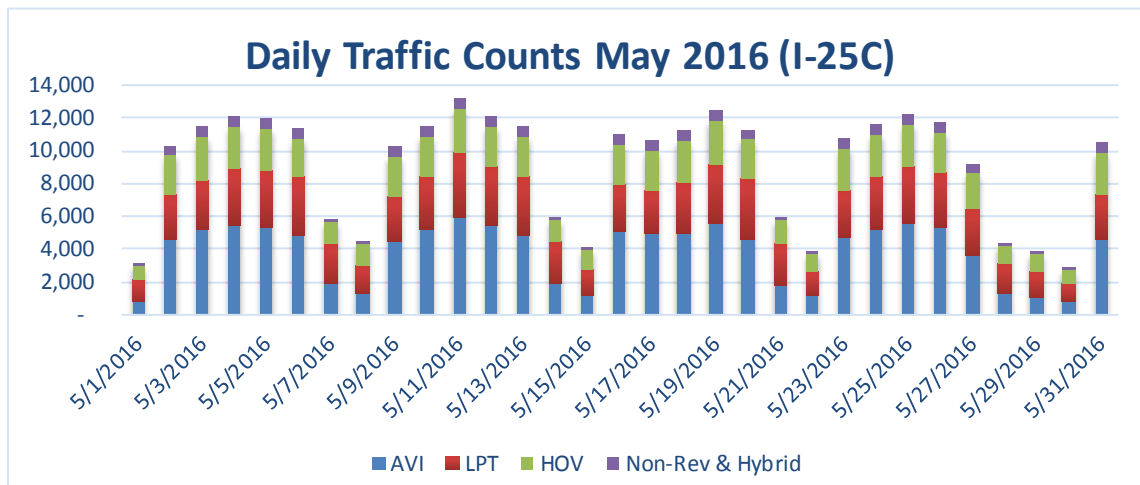


Figure 1 – Monthly Traffic Distribution



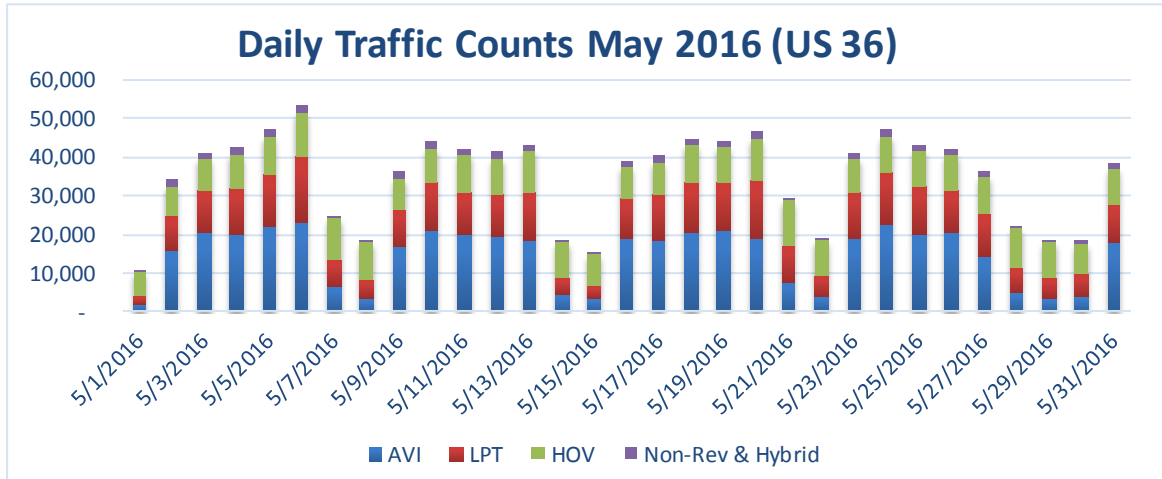


Figure 2 – Daily Traffic Counts

## 2.0 REVENUES

During the month of May 2016, PRD collected \$488,504 and \$300,327 from users of the I-25 Central and US 36 Managed Lanes, respectively. For purposes of this report, revenues are recognized at the time of collection, which is typically sometime after they have been incurred for those customers who are billed based on their license plate. For example, if a single-occupant vehicle uses the lanes in October but pays in January, the associated revenue is attributed to January.

## 3.0 OPERATIONAL INCIDENTS, ISSUES, AND CLOSURES

The project had numerous debris removals, litter removals, graffiti, and lighting repairs during the month. All routine lighting issues from April were repaired in May. All incidents were responded to and rectified within the allowable timeframes. Broadspectrum assisted authorities with traffic control for an incident on May 17<sup>th</sup>. Eastbound US36 Express Lane was closed for fifty four minutes on May 12<sup>th</sup>. Closures have exceeded the twelve hour limit and will be treated according to Section 29.7 (b) of the Concession Agreement.

| Date              | Start    | Stop     | Duration |
|-------------------|----------|----------|----------|
| July 3, 2015      | 12:58:00 | 13:39:00 | 0:41     |
| July 6, 2015      | 05:00:00 | 06:30:00 | 1:30     |
| October 2, 2015   | 10:12:00 | 12:47:00 | 2:35     |
| December 7, 2015  | 08:31:00 | 09:16:00 | 0:45     |
| December 10, 2015 | 08:18:00 | 09:10:00 | 0:52     |

|  |          |          |               |
|--|----------|----------|---------------|
| December 10, 2015                                | 14:58:00 | 15:57:00 | 0:59          |
| December 17, 2015                                | 08:08:00 | 08:45:00 | 0:37          |
| January 5, 2016                                  | 17:25:00 | 18:05:00 | 0:40          |
| January 11, 2016                                 | 18:13:00 | 18:33:00 | 0:20          |
| January 14, 2016                                 | 07:10:00 | 07:20:00 | 0:10          |
| January 20, 2016                                 | 16:24:00 | 16:35:00 | 0:11          |
| February 1, 2016                                 | 08:00:00 | 08:05:00 | 0:05          |
| February 25, 2016                                | 16:15:00 | 17:12:00 | 0:57          |
| February 26, 2016                                | 06:16:00 | 6:38:00  | 0:22          |
| March 14, 2016                                   | 17:51:00 | 18:30:00 | 0:39          |
| April 27, 2016                                   | 18:03:00 | 19:00:00 | 0:57          |
| May 12, 2016                                     | 16:52:00 | 17:46:00 | 0:54          |
| Total  |          |          | <b>13:14</b>  |
| Remaining Closure Hours Available (Ref: CA 29.7) |          |          | <b>(1:14)</b> |

Table 2 – Managed Lanes Closures to Date

On April 8, 2016 the eastbound toll points were set to \$0.00 from 4:00 PM to 6:00 PM at the direction of HPTE. This is the first closure case within the last twelve months and it will expire on April 8, 2017.

The table below provides a listing of ETCS items recorded this month, consistent with Appendix 6-2 of Schedule 6.

| Element Category | Reference | Element | Performance Item | PRD Notified | Contractual Cure Period | Cure Achieved |
|------------------|-----------|---------|------------------|--------------|-------------------------|---------------|
| None             | None      | None    | None             | None         | None                    | None          |

Table 3 – ETCS Issues per CA Schedule 6 Appendix 6-2

The table below provides a status of all Noncompliance categories in accordance with paragraph 1.2 of Schedule 10.

| Non-compliance Location   | Nature                  | Cause  | Cure Date   | Uncured Non-compliance Point | Unexpired Non-compliance Point | 365 Day Expiration Date | 1095 Day Expiration Date |
|---------------------------|-------------------------|--|---|------------------------------|--------------------------------|-------------------------|--------------------------|
| Promenade West Toll Point | Incorrect toll schedule | Incorrect Toll Schedule was applied during a software update on 3/7/16 | 3/16/16<br>(Period II)<br>Customer Accounts Corrected | 0                            | 3                              | 3/16/17                 | 3/16/19                  |

Table 4 – Status of Noncompliance Categories

#### 4.0 MEAN TIME BETWEEN FAILURE (MTBF) AND MEAN TIME TO REPAIR (MTTR)

Mean Time Between Failure (MTBF) and Mean Time To Repair (MTTR) data is provided in the table below. Only Maintained Elements that were repaired during the reporting period and had a failure type breakdown are listed in the table. We consider a breakdown to be a failure when the element cannot be used for its intended purpose until repaired.

| Maintained Element | Mean Time Between Failure (MTBF) (Hours) | Mean Time To Repair (MTTR) (Hours) |
|--------------------|--|------------------------------------|
| None               | N/A                                      | N/A                                |

Table 4 – Mean Time Between Failure & Mean Time To Repair

#### 5.0 HYBRID UTILIZATION

| Total Hybrid Trips |       |
|--------------------|-------|
| I-25 Central       | 3,070 |
| US 36              | 9,186 |

Table 5 – Hybrid Utilization



Fuel efficient “Hybrid” vehicles are permitted to access the Express Lanes free of charge, regardless of occupant numbers, provided that they have obtained a permit from CDOT, obtained a Hybrid transponder from E-470, and display an E-470 Hybrid decal on the vehicle’s windshield.