FY 2016/17 – Q1

July – September 2016

Quarterly Report







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# **Appendices**

Appendix A - Broadspectrum Quarterly Report





# **INTRODUCTION**

This quarterly report draws upon data from July 1 – September 30, 2016 (the "Quarter" or "Q1") on the US 36 and I-25 Managed Lanes (collectively, the "Project"). The purpose of the report is to provide an overview of the Project's operational performance and key events for the reporting period. This will cover items such as traffic reports, customer service levels, environmental monitoring activities and discussion of key events.

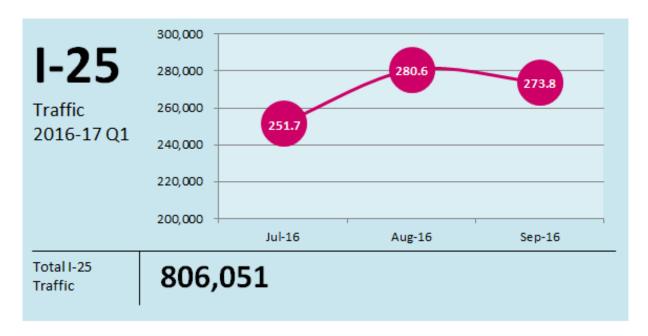
# A. SUMMARY OF MANAGED LANES TRAFFIC

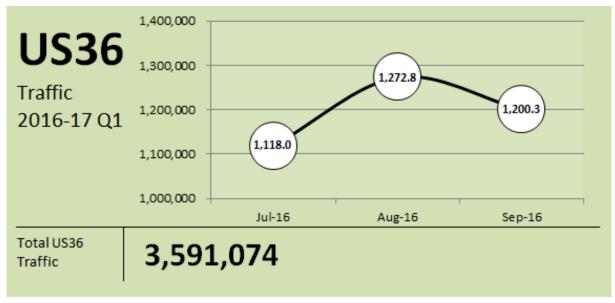
I-25 Managed Lanes traffic volumes during the Quarter were slightly higher compared to the prior quarter and relatively in-line with the prior year. For the US36 Managed Lanes, traffic volumes were higher this Quarter compared to the prior quarter and substantially higher than the prior year due to Phase 2 lanes coming online in late March 2016. In general, traffic during summer months is comparable to spring months since the driving conditions are ideal, along with increased hours of daylight, which offsets the loss of traffic resulting from schools not being in session. There was a substantial shift in historical traffic patterns with I-25 Managed Lane usage in late July 2015. At the same time the Phase 1 toll operations of the US 36 Managed Lanes commenced July 22, 2015, HOV vehicles traveling on both US 36 and I-25 Managed Lanes were required to use a transponder in order to use the lanes at no charge. As a result there were noticeable increases in ExpressToll™ (or "AVI") and License Plate ("LPT") traffic counts but a significant drop in HOV traffic. For the most part this temporary trend has changed over the last few quarters as the average daily LPT user counts have fallen and the number of AVI and HOV vehicles has steadily climbed as a percentage of total traffic. This current trend is likely to continue for the remainder of the calendar year as more commuters purchase transponders in order to pay lower costs as an ExpressToll™ customer or to use the Managed Lanes as an HOV vehicle at no charge. For purposes of this report, non-revenue transactions are omitted.

Summary graphs and charts depicting the trends in traffic volume for the Quarter are provided below. 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 fourteen gantries, seven gantries in each direction. Therefore, US 36 graphs will indicate higher traffic counts that are not comparative to those of I-25. By way of example, a single vehicle making a journey from Boulder to Denver in the Managed Lanes would get counted seven times on US 36 but only one time on I-25. Therefore, US 36 traffic data will indicate higher traffic counts that are not comparable to those for I-25.



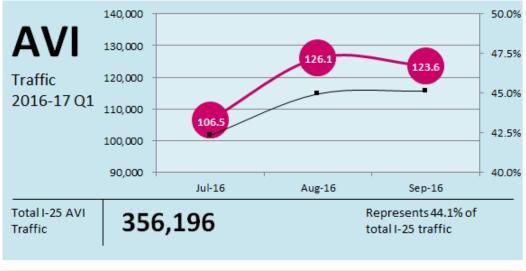


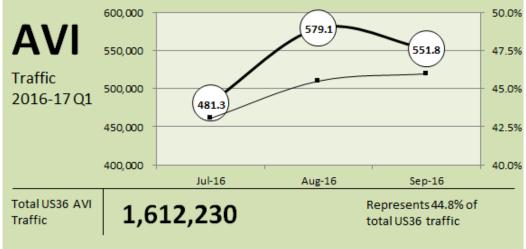


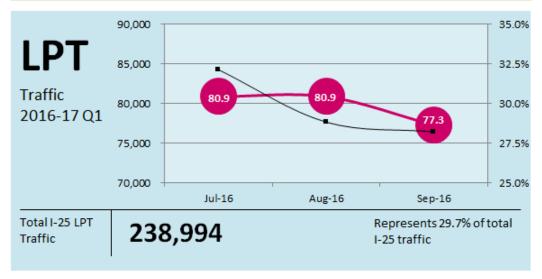






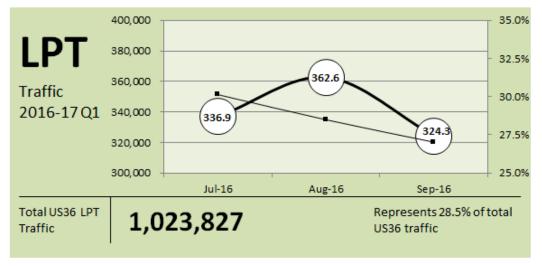


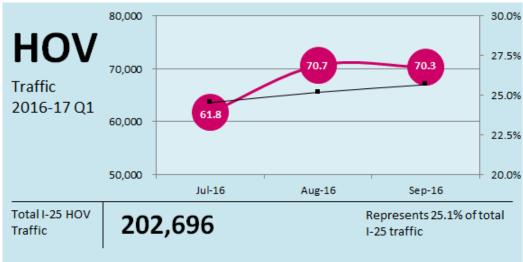


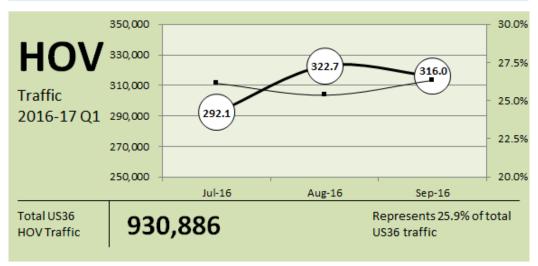






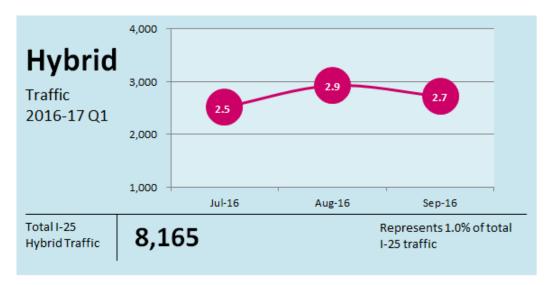


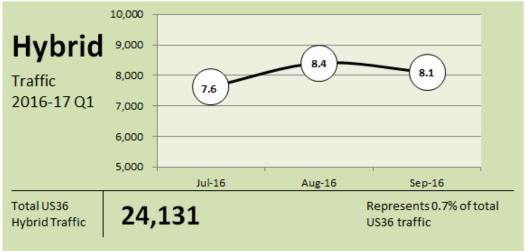






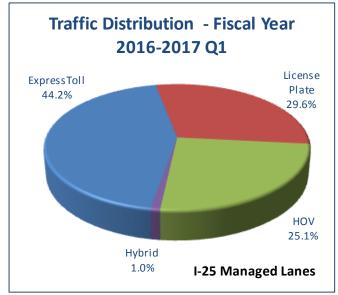


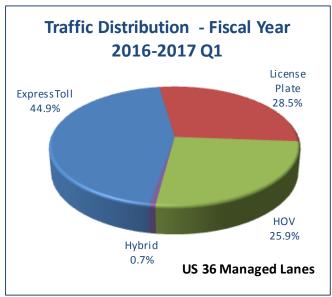




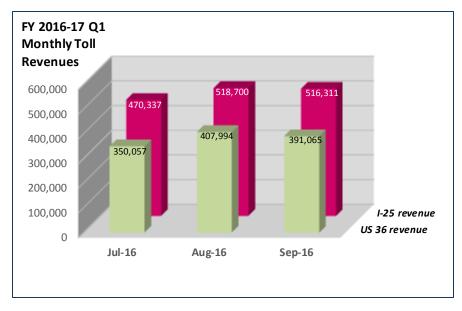








The Project collected \$1,505,348 and \$1,146,116 in toll revenues from users of the I-25 and US 36 Managed Lanes, respectively, during the Quarter. It is important to note that this represents the amount of revenue collected during the period, and not the amount of revenue earned in the period. For example, License Plate transactions are normally paid several weeks after the journey has taken place. If a customer completes a license plate journey in June, but pays for it in July, that revenue would be included in July's report, not June's.



On an annual basis HPTE evaluates the expected future cash flows and financial performance of the Project. If certain cash flow thresholds are achieved, HPTE may be entitled to share in such cash flows from toll revenues. The earliest this would begin would be 2020, although currently no such thresholds are projected to be surpassed.





### B. OPERATIONAL INCIDENTS

There were 17 operational incidents during the quarter. All incidents were accidents without any significant damage to maintained elements. Details of each incident are provided in the Broadspectrum Quarterly Report included as Appendix A.

### C. NON-COMPLIANCE REPORTS FOR MAINTAINED ELEMENTS

All repairs and responses related to the Performance and Measurement Criteria Table were made within the allowable cure time during the Quarter, except for one issue which is described below.

Non-compliance Location	Nature	Cause	Steps taken to address
Promenade West Toll Point	Incorrect toll schedule applied (Sch. 6 App. 6-2, ID 6)	Incorrect toll schedule was applied during a software update on March 7 <sup>th</sup> .	On March 16 <sup>th</sup> E470 reversed toll charges to customers that have posted to accounts and applied the correct toll amounts. Schedule verification is now part of the E470 software update checklist.

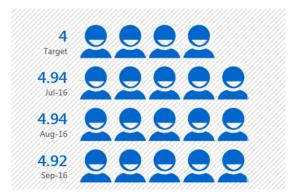
## D. CUSTOMER RELATIONS ACTIVITIES

The E-470 contact center performed at a high level during the Quarter and exceeded the Customer Satisfaction and Inbound Call Service Level goals. There was a delay in completing training in Q4 of the prior year that resulted in a temporary dip in the inbound call service level. However, as the new staff began taking calls in late May the service levels immediately improved and in June the desired service level was achieved. In September 2015, E-470 completed their training facility renovation by doubling its capacity and trained several new representatives. As a result, their strong performance during the current and prior quarters reflects the benefits of the improved training and facility expansion.

Five customers also contacted PRD or CDOT regarding their invoices, how to use the Express Lanes, or requesting speed limit changes. Responses were made within the seven days as required by Table 3 of Schedule 10.

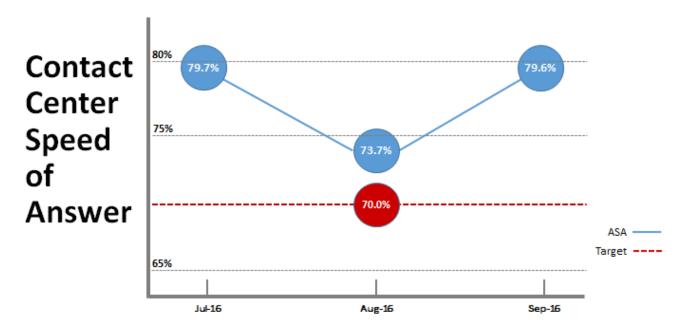
As our main point of contact with our customer base, the contact center's performance is a key aspect of the overall Project. We will continuously improve this service over the life of the Project, building upon the initial success.

# **Customer Satisfaction**









### E. TRAFFIC REPORTS

Hourly traffic reports are available upon request. For ease of use, this voluminous data has been excluded from the base Quarterly Report.

# F. QUALITY CONFORMANCE SUMMARY

As stated previously, the handover condition of the I-25 HOV/HOT lanes has been jointly inspected and evaluated by HPTE, PRD, and Broadspectrum and numerous Category 2 defects have been identified. Pursuant to CA Section 22.10, these Category 2 defects have mostly been repaired as part of the I-25 Initial Work Package but others that still exist require non-compliance penalties to be waived at this time. These joint inspections replaced the Audit Inspections and will be used to form the basis of the 5-year Lifecycle Plan. Items that were not pending the I-25 Initial Work Package were being maintained per the performance criteria listed in Appendix 6-1 of Schedule 6.

# G. ENVIRONMENTAL MONITORING ACTIVITIES

No abnormal activities were observed that would have an impact on water quality, air quality, noise, wildlife, paleontology or archaeology.

### H. TIGER PERFORMANCE MEASURER

Measurement of the Project's performance against the TIGER performance criteria is scheduled to commence post-construction, per the table below. October 2016 will be the first reporting month which coincides with Phase 1 Project Acceptance.





TIGER Performance Goal	Focus	Report Timing
Travel Time Reliability	GP Lanes	Report post construction
	Busses	Report post construction
Improved Speeds	ML Lanes	Report post construction
	ML & GP Lanes	Report post construction
Throughput	ML & GP Lanes	Report post construction
Transit Use	Busses	Report post construction
Carpool Use	ML Lanes	Report post construction
GP Lane Speeds	GP Lanes	Report post construction
GP Lane Travel Time Reliability	GP Lanes	Report post construction
Crash Rates	ML & GP Lanes	Report post construction







# OPERATIONS QUARTERLY REPORT 1ST QUARTER OF FISCAL YEAR 2017

US 36 and I-25 Express Lanes Project



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# OPERATIONS – QUARTERLY REPORT, Q1, FY2017 US 36 and I-25 Express Lanes Project

Revision	Date	Approved
Rev. 0	10/18/2016	Just De

This report titled Operations Quarterly Report, 1st Quarter of Fiscal Year 2017 has been prepared by Broadspectrum for the exclusive use of Plenary Roads Denver, LLC (PRD). No other party is an intended beneficiary of this report or the information, opinions, and conclusions contained herein. Any use by any party other than PRD of any of the information, opinions, or conclusions is the sole responsibility of said party. The use of this report shall be at the sole risk of the user regardless of any fault or negligence of PRD or Broadspectum.

The information and analyses contained herein have been completed to a level of detail commensurate with the objectives of the assignment and in light of the information made available to Broadspectum at the time of preparation. This report and its supporting documentation have been reviewed and/or checked for conformance with industry-accepted norms. To the best of the information and belief of Broadspectum, the information presented in this report is accurate to within the limitations specified herein.

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The O&M Monthly Report contains all relevant information for the 1st quarter of fiscal year 2017 as required in Schedule 6, Section 1.8.2 of the Operating Contract.

# A. Summary of Managed Lanes

Intentionally deleted, please see PRD's Report Section A.

# B. Monthly Incident Reports

Below is a summary of incidents this quarter that resulted in damaged to Maintained Elements and/or required emergency medical services:

#	Nature of Incident	Parties Involved	Actions
1	Vehicle #1 travelling on W/B On-Ramp to US36 from W104th Ave. Vehicle #1 driver fell from vehicle and slid to left shoulder area. Vehicle #1 continued on W/B unattended and collides with curb and road sign on raised median in RTD bus stop area. Vehicle #1 continued W/B and collided into Vehicle #2 RTD Bus stopped picking up passengers. Vehicle #1 continues W/B on the On- Ramp US 36 rolling over raised median and coming to rest in the grass gore area between the On-Ramp and US 36 roadway. Driver #1 ran to pickup and drove west bound on US 36 from location.  Time: 9:10 AM Date: 7/12/2016 Location: US36, MP 50.5 W.B.	Unknown	No assistance from Broadspectrum requested.







#	Nature of Incident	Parties Involved	Actions
2	Vehicle #1 travelling E/B US36 in the left through lane, partially entered the right through lane and collided with Vehicle #2. After the collision, Vehicle #2 lost control, ran off the left side of the roadway and collided into the center concrete barrier. Vehicle #1 left the scene.  Time: 9:06 AM Date: 8/5/2016 Location: US36, MP 55.1 E.B.	Unknown	No assistance from Broadspectrum requested.
#	Nature of Incident	Parties Involved	Actions
3	Vehicle #1 E/B US36 in #2 travel lane. Vehicle #2, a construction vehicle with left arrows illuminated, also E/B US36 in #2 lane; Vehicle #2 was moving slowly as other construction vehicle was laying cones. Vehicle #1 struck impact sled attached to rear of Vehicle #2.  Time: 9:37 PM Date: 8/17/2016 Location: US36, MP 51.3 E.B.	Unknown	No assistance from Broadspectrum requested.
#	Nature of Incident	Parties Involved	Actions
4	Vehicle #1 and Vehicle #2 travelling E/B US36 in #1 thru lane. Vehicle #2 slows for stopped traffic and is rear ended by Vehicle #1. Post impact, Vehicle #2 continues in northeast direction and collides with jersey wall.  Time: 5:40 PM Date: 8/25/2016 Location: US36, MP 52.3 E.B.	Unknown	No assistance from Broadspectrum requested.





#	Nature of Incident	Parties Involved	Actions
5	Vehicle #1 E/B US36. Vehicle #2 WFD Ambulance w/emergency equipment activated E/B US36, attempting to make U-turn thru emergency access in concrete barrier to proceed westbound on US36. Vehicle #1 fails to yield right of way and collides front to side with Vehicle #2. Post impact- Vehicle #1 travels in a northeasterly direction and collides with concrete barrier. Vehicle #2 continues eastbound and collides with concrete barrier.  Time: 4:19 PM  Date: 8/26/2016  Location: US36, MP 54.4 E.B.	Unknown	No assistance from Broadspectrum requested.
#	Nature of Incident	Parties Involved	Actions
6	Vehicle #1 traveling W/B on US36 #1 thru lane experienced a rear wheel failure and lost control. Vehicle #1 veered to the left and collided with the concrete barrier. Vehicle #1 then travelled right across all westbound lanes of traffic and collided with the other concrete barrier.  Time: 4:03 PM  Date: 8/26/2016  Location: US36, MP 53.0 W.B.	Unknown	No assistance from Broadspectrum requested.





#	Nature of Incident	Parties Involved	Actions
7	Vehicle #1 traveling W/B on US36 in the #1 thru lane evasively swerved to the left into the HOV lane. Vehicle #1 then swerved back to the right overcorrecting and losing control. Vehicle #1 traveled across the #2 and 3 thru lanes colliding with Vehicle #2 in the #3 thru lane. Vehicles #1 and #2 then collided with the concrete barrier.  Time: 7:48 PM Date: 8/26/2016 Location: US36, MP 53.0 W.B.	Unknown	No assistance from Broadspectrum requested.
#	Nature of Incident	Parties Involved	Actions
8	Vehicle #1 W/B US36 approaching Sheridan Blvd in #3 lane. Vehicle #2 in #2 lane. Vehicle #1 fell asleep, struck Vehicle #2, then struck right side concrete barrier, then went across highway striking left side concrete barrier.  Time: 4:50 PM Date: 8/29/2016 Location: US36, MP 53.3 W.B.	Unknown	No assistance from Broadspectrum requested.
#	Nature of Incident	Parties Involved	Actions
9	Vehicle #1 traveling W/B on US36 in the right thru lane lost control and ran off the right side of the roadway colliding with a highway sign.  Time: 6:59 PM Date: 9/3/2016 Location: US36, MP 51.0 W.B.	Unknown	No assistance from Broadspectrum requested.





#	Nature of Incident	Parties Involved	Actions
10	Vehicle #1 travelling W/B US36 off ramp to Sheridan Blvd. Vehicle #1 driver advised she lost consciousness and drifted off the right side of the roadway striking a yield sign.  Time: 2:12 PM Date: 9/26/2016 Location: US36, MP 53.4 W.B.	Unknown	No assistance from Broadspectrum requested.
#	Nature of Incident	Parties Involved	Actions
11	Vehicle #1 was W/B on US36 in the #2 lane. Vehicle #1 began to rotate counterclockwise and continued off the left side of the road and collided with the concrete median.  Time: 9:45 PM Date: 7/15/2016 Location: US36, MP 45.0 W.B.	Unknown	No assistance from Broadspectrum requested.
#	Nature of Incident	Parties Involved	Actions
12	Vehicle #1 was E/B on US36. Vehicle #1 traveled off the left side of the roadway and collided with the concrete median barrier. Vehicle #1 then rolled 1/2 times. Vehicle #1 came to rest on its roof facing west.  Time: 5:00 PM Date: 7/19/2016 Location: US36, MP 55.0 E.B.	Unknown	No assistance from Broadspectrum requested.





#	Nature of Incident	Parties Involved	Actions
13	Vehicle #1 traveling E/B on US36 approaching mile point 56 in the left lane. Vehicle 1 passed a slower vehicle, quickly accelerated, lost control and travelled off the left side of the roadway. Vehicle #1 collided with the concrete highway barrier at mile point 55.8.  Time: 5:25 AM Date: 8/5/2016 Location: US36, MP 55.8 E.B.	Unknown	No assistance from Broadspectrum requested.
#	Nature of Incident	Parties Involved	Actions
14	Vehicle #1 was traveling W/B on the off ramp from west bound US36 to Pecos St.  Vehicle #1 ran off the left side of the roadway and the front end collided with a concrete culvert. Vehicle #1 continued west bound on its wheels across the north bound lanes of Pecos St, and undercarriage collided with the center concrete median. Vehicle #1 was moved from final rest.  Time: 8:37:00 PM  Date: 8/4/2016  Location: US36, MP 56.0 W.B.	Unknown	No assistance from Broadspectrum requested.





#	Nature of Incident	Parties Involved	Actions
15	Vehicle #1 was traveling W/B on Highway 36 in the #3 lane when it had a sudden tire failure. Vehicle #1 began to rotate clockwise and off of the right side of the road colliding with a concrete barrier.  Time: 6:29 AM Date: 7/23/2016 Location: US36, MP 56.2 W.B.	Unknown	No assistance from Broadspectrum requested.
#	Nature of Incident	Parties Involved	Actions
16	Vehicle #1 was E/B on US36 in the #2 lane. Vehicle #2 was E/B on US36 in the #1 lane. Vehicle #1 began to drift into Vehicle #2 and the driver of Vehicle #2 attempted to avoid a collision and struck the center concrete barrier. After impact, Vehicle #2 crossed the highway and struck the right concrete barrier.  Time: 12:36 AM  Date: 7/25/2016  Location: US36, MP 56.2 E.B.	Unknown	No assistance from Broadspectrum requested.





#	Nature of Incident	Parties Involved	Actions
17	Vehicle #1 was traveling W/B on the entrance ramp to US36 from S/B I25. Vehicle #2 was traveling W/B on US36 from N/B I25. Vehicle #1 collided with the concrete barrier. Vehicle #1 then traveled southeast across the median and collided its front end with the concrete barrier on US36. Debris from the concrete barrier traveled into W/B lanes of US36 and collided with Vehicle #2. Vehicle #1 came to rest on the driver side on top of the concrete barrier.  Time: 8:28 AM  Date: 9/24/2016  Location: US36, MP 57.0 W.B.	Unknown	No assistance from Broadspectrum requested.

The number of incidents shown is reflective of what was either observed by Broadspectrum or was reported to Broadspectrum at the time of preparing this report. Broadspectrum has requested that local response agencies notify Broadspectrum of any serious incidents within the lanes. The information presented for each incident is either from agency accident reports or from Broadspectrum's observations. The information shown is not intended to be official documentation of the incident but rather just to provide a briefing of qualifying occurrences as listed in the Contract.





# C. Non-Compliance Reports

All repairs and responses related to the Performance and Measurement Criteria listed in Appendix 6-1 of the Operating Contract were made within the allowed response time. Items that have repairs in progress are still within the allowed response time.

# D. Customer Relations Activities

Below is a summary of the customer relations activities for this quarter:

#	Description	Parties Involved	Response
1	A resident living near US36 and Pecos notified CDOT of graffiti on a sound wall facing her apartment complex and requested it be removed.  Method: Call to CDOT Time: 12:14 PM Date: 7/11/2016 Location: US36	Clara (resident)	Broadspectrum crews cleaned up the graffiti and followed up with the resident to make sure her expectations were met.

# E. Traffic Reports

Intentionally deleted, please see PRD's Report Section E.

# F. Quality Conformance Summary

Representatives of HPTE, Broadspectrum, and Plenary have conducted site visits of the Managed and General Purpose Lanes throughout the quarter. During the site visits, broad visual inspections of the Maintained Elements were conducted. However, given that this portion of the project is still pending work related to the Initial Work Package, an Asset Condition Score could not be assessed. The following was concluded from the visits:

- Items pending the Initial Work Package are being maintained to the same or higher level as when the project commenced.
- Items that are not pending the Initial Work Package are being maintained per the performance criteria listed in Appendix 6-1 of the Operating Contract.





# G. Environmental Monitoring Activities

### Water

Broadspectrum observed no abnormal activities in the Managed or General Purpose Lanes that would have an impact on water quality. Broadspectrum sweeps the lanes periodically to help reduce the potential for particulate matter getting into the water.

#### Air

Broadspectrum observed no abnormal activities in the Managed or General Purpose Lanes that would have an impact on air quality this quarter. Broadspectrum sweeps the lanes periodically to help reduce the potential for particulate matter getting into the air.

### **Noise**

Broadspectrum observed no abnormal activities in the Managed or General Purpose Lanes that would have an impact on noise levels this quarter. Maintenance activities typically meet the criteria for a Type III project as established in 23CFR772 and therefore no analysis for highway traffic noise impacts is necessary.

### Wildlife

Broadspectrum observed no abnormal activities in the Managed or General Purpose Lanes that would have an impact on wildlife this quarter.

### Paleontology and Archaeology

Broadspectrum observed no abnormal activities in the Managed or General Purpose Lanes that would have an impact on prehistoric plant, animal, or human artifacts.

# H. TIFIA Performance Measure

Intentionally deleted, please see PRD's Report Section H.