

September 2022

Monthly Operations Report



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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 September 2022. Operationally, September 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

Over the last several months as more commuters use the transponders for either ExpressToll™ (AVI) or HOV travel, License Plate (LPT) transactions have consistently decreased as a percentage of total traffic volume. The total monthly gantry traffic volume for September 2022 in the I-25 Central and US 36 Managed Lanes was 244,157 and 1,134,524, 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 4:15pm – 5:45pm. 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 data will indicate far greater 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 (US-36)					
	AVI	LPT	HOV	Non-Rev	Total
Total Monthly Traffic	527,560	413,127	187,395	6,442	1,134,524
Maximum Weekday Traffic	26,596	19,188	8,741	344	51,760
Average Weekday Traffic	20,983	15,839	6,216	262	43,300
Average Hourly AM Peak Traffic	2,790	1,663	616	33	5,102
Average Hourly PM Peak Traffic	2,957	2,279	801	24	6,061

Traffic Summary (I-25C)					
	AVI	LPT	HOV	Non-Rev	Total
Total Monthly Traffic	61,133	136,003	44,563	2,458	244,157
Maximum Weekday Traffic	3,255	7,323	1,930	120	12,607
Average Weekday Traffic	2,559	5,666	1,668	97	9,893
Average Hourly AM Peak Traffic	378	878	229	7	1,485
Average Hourly PM Peak Traffic	305	596	185	9	1,086

Table 1 – Monthly Traffic Summaries

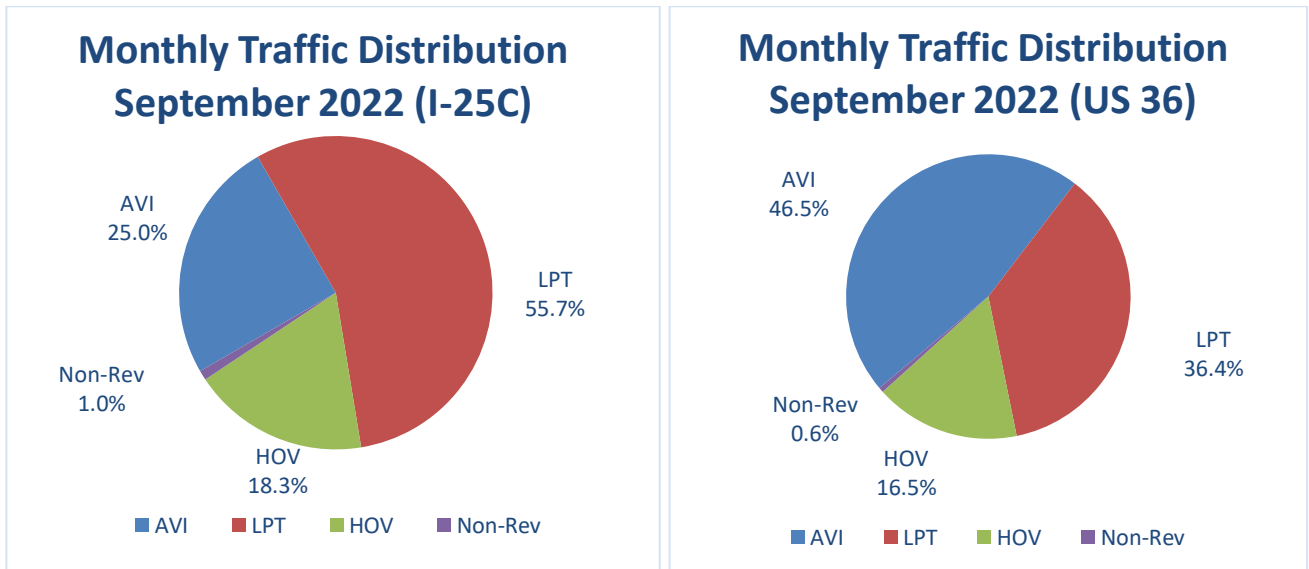
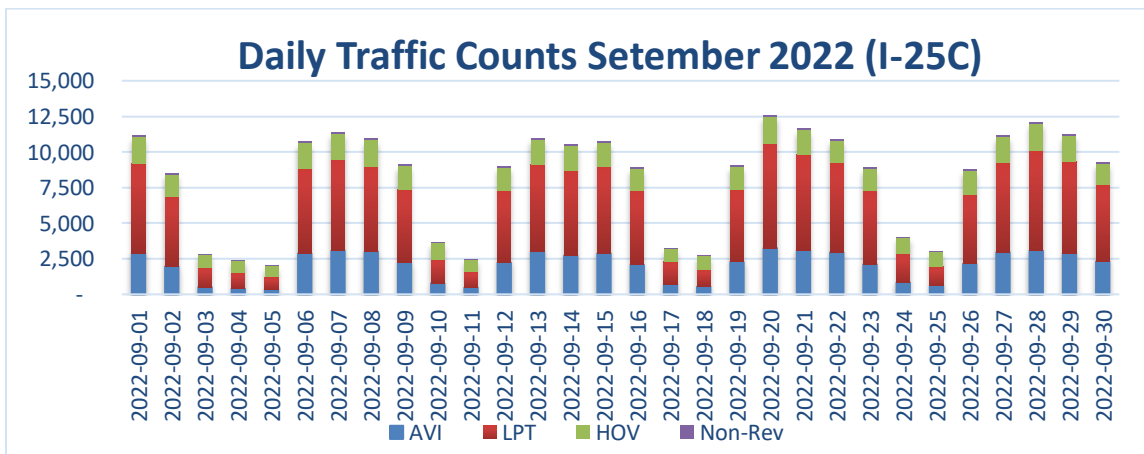


Figure 1 – Monthly Traffic Distribution



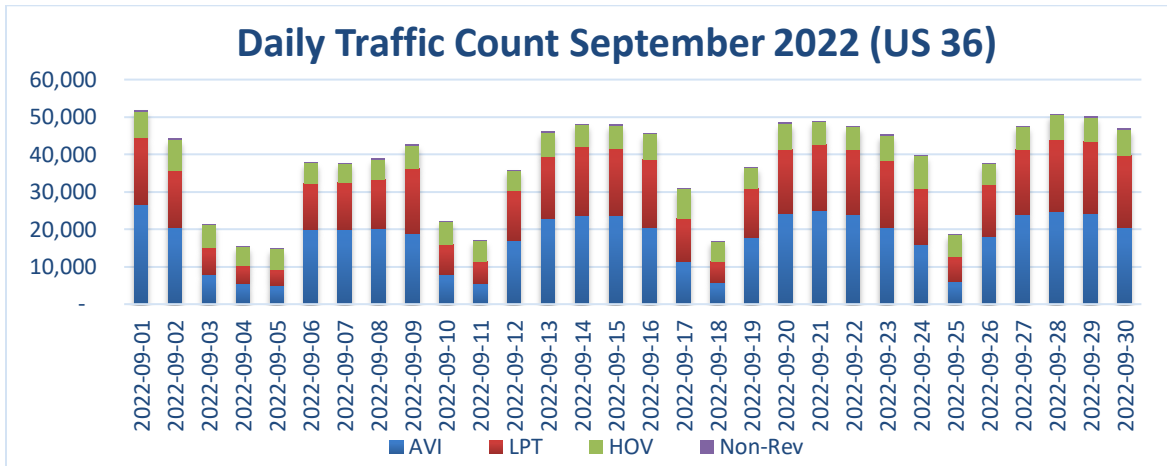


Figure 2 – Daily Traffic Counts

2.0 REVENUES

During the month of September 2022, PRD collected \$710,021 and \$813,979 from users of the I-25 Central and US36 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 routine debris removals, lighting incidents, guardrail incidents, sign incidents, and graffiti control during the month. The routine lighting, guardrail, roadway markings and sign incidents are all planned for repair within the allowable response period and several previously identified lighting incidents were repaired. All incidents were responded to and rectified within the allowable timeframes.

Date	Start	Stop	Duration
July 1, 2022	16:12	17:31	1:19
July 1, 2022	17:52	18:59	1:07
July 7, 2022	07:50	08:47	0:57
July 11, 2022	17:26	18:33	1:07
July 12, 2022	16:48	17:17	0:29
July 18, 2022	08:34	09:45	1:11

July 20, 2022	08:35	09:40	1:05
July 21, 2022	06:05	06:32	0:27
July 26, 2022	14:55	15:49	0:54
July 26, 2022	18:38	19:25	0:47
August 03, 2022	18:35	19:15	0:40
August 16, 2022	09:23	10:28	1:05
August 17, 2022	16:32	17:11	0:39
August 19, 2022	07:45	08:08	0:23
August 19, 2022	16:49	17:25	0:36
August 22, 2022	08:17	11:03	2:46
August 22, 2022	09:01	09:54	0:53
August 22, 2022	16:43	18:14	1:31
August 24, 2022	07:25	08:40	1:15
August 26, 2022	14:10	16:00	1:50
August 31, 2022	07:49	08:29	0:40
September 6, 2022	18:55	19:45	0:50
September 9, 2022	15:23	16:37	1:14
September 9, 2022	15:50	16:55	1:05
September 15, 2022	18:07	18:55	0:48
September 22, 2022	07:23	08:22	0:59
September 22, 2022	11:30	12:33	1:03
September 28, 2022	05:36	07:00	1:24
September 28, 2022	05:41	07:09	1:28
September 30, 2022	08:08	08:28	0:20
September 30, 2022	16:12	17:04	0:52
Total			31 hours 46 minutes
Remaining Closure Hours Available (Ref: CA 29.7)			0 hours 0 minutes

Table 2 – Managed Lanes Closures to Date

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

Element ID	Cat	Element	Performance Item	PRD Notified	Contractual Cure Period	Cure Achieved
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
None							

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 5 – Mean Time Between Failure & Mean Time To Repair

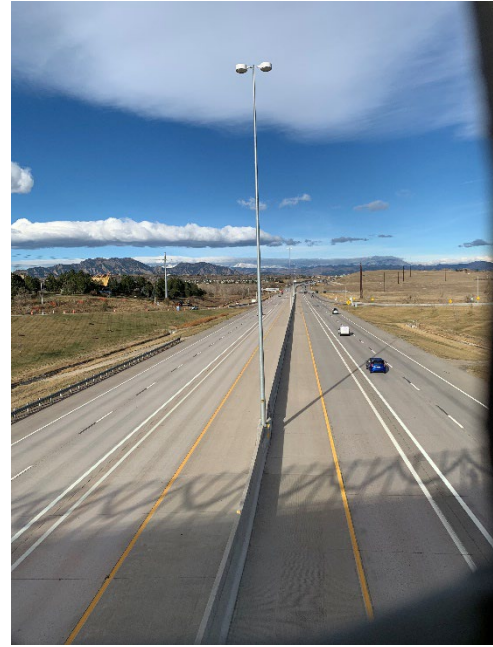
OPERATIONS AND
MAINTENANCE
MONTHLY REPORT
SEPTEMBER 2022

US 36 and I-25 Express
Lanes Project

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OPERATIONS AND MAINTENANCE – MONTHLY REPORT SEPTEMBER 2022 US 36 and I-25 Express Lanes Project

Revision	Date	Approved
Rev. 0	10/15/2022	<i>Nick Reinsvold</i>

This report titled *Operations and Maintenance Monthly Report, September 2022* has been prepared by Ferrovial Services 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 Ferrovial Services.

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 Ferrovial Services 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 Ferrovial Services, 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 month. Ferrovial Services continues ongoing and preventive maintenance activities for the I-25 and US36 Managed Lanes Project.

Ferrovial Services Commitment to Safety

Ferrovial Services conducted weekly toolbox talk meetings during the month. The purpose of the toolbox talks is to cover important safety items that relate to the project such as near misses, “better ways” as to how safety is conducted for the Project, and discussion on safety procedures for maintenance activities. In addition to the toolbox talks, Ferrovial Services conducts a weekly progress meeting. This is a forum for feedback from staff on Operations, Incident Response, and Maintenance activities.

Toolbox Talks this month included:

- Visibility & Reflectivity .
- Unpredictable Weather.
- Re-Focus.
- Hurricane Preparedness.

A. Summary of the Planned Maintenance Activities for the Upcoming Month

Ferrovial Services has identified the upcoming planned maintenance activities as described in Table 1.7.1.3 of The Maintenance Management Plan. These activities include preventative and routine maintenance in order to successfully operate and maintain the Project. A listing of the planned maintenance activities for the month are included below.

Fig. A-1 Planned Maintenance Activities for the Upcoming Month

X – Indicates the day the task is planned.

Performance Standard Identification Number (Table 6.1)	Work Activity-Description	Frequency	Oct-22																														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
			S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M
ML-1	MAINTENANCE PATROL	Daily			X	X	X	X	X			X	X	X	X	X			X	X	X	X	X			X	X	X	X	X			X
ML-1	FLEXIBLE PAVEMENT OBSERVATION / REPAIR	F-52			X						X							X							X							X	
ML-1	RIGID PAVEMENT OBSERVATION / REPAIR	F-52			X						X							X							X							X	
ML-2	DRAINAGE (INLET) OBSERVE/ CLEAN / REPAIR	F-12																															
ML-2	DRAINAGE (PIPE/CULVERT) OBSERVE / CLEAN / RPR	F-12						X																									
ML-4	DELINEATORS & MARKERS OBSERVE / CLEAN / REPAIR	F-12												X																			
ML-5	GUARDRAIL, SAFETY BARRIER	F-12						X																									
ML-6	SIGN OBSERVATION / REPAIR	F-52				X						X								X							X			X			
ML-8	STREET LIGHTING OBSERVATION / REPAIR	F-52					X					X									X							X		X			
ML-8	ELECTRICAL SUPPLY INSPECTION / REPAIR	F-12																															
ML-8	ACCESS PANEL OBSERVATION / REPAIR	F-12																															
ML-10	HERBICIDE & WEED CONTROL MAINTENANCE	F-52						X				X								X						X							
ML-12	GRAFFITI OBSERVATION / REMOVAL	F-52				X						X							X							X			X			X	
ML-14	MECHANICAL ROAD SWEEPING	F-12			X	X	X	X	X																								
ML-14	LITTER OBSERVATION / REMOVAL	Daily			X	X	X	X	X		X	X	X	X	X				X	X	X	X	X			X	X	X	X	X		X	
ML-15	NODE BUILDING 2 MAINTENANCE	F-1						X																									
ML-15	SAND STORAGE DOME MAINTENANCE	F-1						X																									
ML-15	LIQUID STORAGE FACILITY MAINTENANCE	F-1						X																									
	REVERSIBLE LANE OPERATIONS	Daily			X	X	X	X	X		X	X	X	X	X				X	X	X	X	X			X	X	X	X	X		X	

Frequency of Activity:

Daily – Daily Activity

F-4 – Quarterly Activity

F-52 – Weekly Activity

F-2 – Semi-Annual Activity

F-12 – Monthly Activity

F-1 – Annual Activity



B. Summary of Performed and Completed Maintenance Activities

Fig. B-1 Performed and Complete Maintenance Activities for Prior Month

Performance Standard Identification Number (Table 6.1)	Work Activity-Description	Frequency	Sep-22																													
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
			T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F
ML-1	MAINTENANCE PATROL	Daily	X	X			X	X	X	X	X			X	X	X	X	X			X	X	X	X	X			X	X	X	X	X
ML-1	FLEXIBLE PAVEMENT OBSERVATION / REPAIR	F-52													X	X						X	X									
ML-1	RIGID PAVEMENT OBSERVATION / REPAIR	F-52	X	X				X	X															X			X		X			
ML-2	DRAINAGE (INLET) OBSERVE/ CLEAN / REPAIR	F-12																					X									
ML-2	DRAINAGE (PIPE/CULVERT) OBSERVE / CLEAN / RPR	F-12								X																						
ML-4	DELINEATORS & MARKERS OBSERVE / CLEAN / REPAIR	F-12						X	X							X																
ML-5	GUARDRAIL, SAFETY BARRIER	F-12													X	X	X	X										X			X	
ML-6	SIGN OBSERVATION / REPAIR	F-52					X																	X	X			X				
ML-8	STREET LIGHTING OBSERVATION /REPAIR	F-52							X							X							X							X		
ML-8	ELECTRICAL SUPPLY INSPECTION / REPAIR	F-12	X																													
ML-8	ACCESS PANEL OBSERVATION / REPAIR	F-12	X																													
ML-10	HERBICIDE & WEED CONTROL MAINTENANCE	F-52											X	X									X					X				
ML-12	GRAFFITI OBSERVATION / REMOVAL	F-52						X			X			X	X								X					X				
ML-14	MECHANICAL ROAD SWEEPING	F-12	X													X						X	X		X							
ML-14	LITTER OBSERVATION / REMOVAL	Daily	X	X			X	X	X	X	X			X	X	X	X	X				X	X	X	X	X		X	X	X	X	X
ML-15	NODE BUILDING 2 MAINTENANCE	F-1								X																						
ML-15	SAND STORAGE DOME MAINTENANCE	F-1								X																						
ML-15	LIQUID STORAGE FACILITY MAINTENANCE	F-1								X																						
	REVERSIBLE LANE OPERATIONS	Daily	X	X			X	X	X	X	X			X	X	X	X	X				X	X	X	X	X		X	X	X	X	X

X Indicates the day of the month that the task was completed.



Fig. B-2 Work Accomplished This Month

TASK,CNCRTE,BARRIER,MAINT,307.00,CDOT,FT	45,359
TASK,COURTESY,ASSISTANCE,329.00,CDOT,HR	480.0
TASK,DELINEATOR,MAINT,304.00,CDOT,EA	70
TASK,FENCE,GATE,MAINT,216.00,CDOT,LF	245
TASK,FLEX,PAVEMT,PATCH,152.00,CDOT,YD2	5
TASK,GRAFFITI,REMOVE,218.98,CDOT,FT2	118
TASK,LITTER,TRASH,CLEAN,218.00,CDOT,YD3	47
TASK,METAL,GRDRAIL,MAINT,306.00,CDOT,FT	62
TASK,MINOR,DRAINSTR,MAINT,202.00,CDOT,EA	20
TASK,RESPONSE,INCIDENT,329.99,CDOT,HR	1.5
TASK,RIGID,PAVEMT,PATCH,152.10,CDOT,YD2	64
TASK,ROADWAY,DEBRIS,HAZD,218.99,CDOT,YD3	8
TASK,ROADWY,SIGN,LIGHTING,312.00,CDOT,EA	29
TASK,SIGN,SSGLPOST,MAINT,302.00,CDOT,EA	60
TASK,STRCT,SUBSTRCT,MAINT,358.00,CDOT,EA	1
TASK,STRCT,SUPERSTR,MAINT,354.00,CDOT,EA	2
TASK,SWEEPING,HAND,222.00,CDOT,HR	24.0
TASK,SWEEPING,MACHINE,220.00,CDOT,MI	169.0
TASK,TRAFFIC,TOLL,MAINT,314.98,CDOT,EA	1
TASK,TRAINING,MEETING,103.00,CDOT,HR	23.0
TASK,VEG,CTRL,DRYLAND,252.00,CDOT,MI	19.0
TASK,VEG,CTRL,PESTICD,256.00,CDOT,AC	20

C. Summary of Planned Maintenance that was Not Completed for the Month

Ferrovial Services completed all scheduled maintenance activities for the month. Frequencies and/or actual date of the month of some activities may have been adjusted based on actual conditions.

D. Summary of the Maintenance Activities and Results Performed for the Month Beyond Planned Maintenance

A summary of unplanned maintenance activities provided below:

Snow and Ice Control: None

Courtesy Patrol: None

Hazardous Materials Incidents: None

E. Operating Contractor’s Incident Response Logs Related to Maintenance Activities

This section provides a summary of Ferrovial Services performance related to the Performance and Measurement Criteria listed in Appendix 6-1.1 of the Operating Contract.

The table below provides a listing of items recorded this month:

Element Category	Description	Location	Notified	Response to Defects		
				Category 1		Category 2
				Hazard Mitigation	Permanent Remedy	Permanent Repair
GP1.1	DEBRIS (Debris Removed From Lanes)	MP 43.0 EB	9/24/2022 14:50:00	Reqd: 1 Hours Resp: 9/24/2022 15:40 Actual: 0.83 Hours	N/A	N/A
GP1.2	POTHOLE	MP 48.2 EB	9/28/2022 09:25:00	N/A	N/A	Reqd: 6 Months Resp: 9/28/2022 19:00 Actual: 0.01 Months
GP1.1	DEBRIS (Debris Removed From Lanes)	MP 56.2 WB	9/21/2022 13:10:00	Reqd: 1 Hours Resp: 9/21/2022 13:50 Actual: 0.66 Hours	N/A	N/A
GP1.1	DEBRIS (Debris Removed From Lanes)	MP 57.6 WB	9/19/2022 14:18:00	Reqd: 1 Hours Resp: 9/19/2022 14:52 Actual: 0.56 Hours	N/A	N/A
ML6.1	SIGN (Sign Down)	MP 216.8 SB	9/22/2022 15:40:00	N/A	N/A	Reqd: 6 Months Resp: 9/23/2022 11:30 Actual: 0.02 Months
ML1.1	DEBRIS (Debris Removed From Lanes)	MP 212.8 NB	9/11/2022 14:20:00	Reqd: 1 Hours Resp: 9/11/2022 14:42 Actual: 0.36 Hours	N/A	N/A
GP12.1	GRAFFITI	MP 55.7 EB	9/22/2022 20:00:00	N/A	Reqd: 10 Days Resp: 9/27/2022 22:00 Actual: 5.08 Days	N/A
GP1.2	POTHOLE	MP 47.7 WB	9/2/2022 16:23:00	N/A	N/A	Reqd: 6 Months Resp: 9/9/2022 02:00 Actual: 0.21 Months
GP1.2	POTHOLE	MP 49.0	9/2/2022 16:18:00	N/A	N/A	Reqd: 6 Months Resp: 9/7/2022 23:00 Actual: 0.17 Months
GP1.1	DEBRIS (Animal Carcass Removed from Shoulder)	MP 38.2 EB	9/28/2022 09:19:00	Reqd: 1 Hours Resp: 9/28/2022 10:00 Actual: 0.68 Hours	N/A	N/A
GP1.1	DEBRIS (Debris Removed From Lanes)	MP 50.0 WB	9/12/2022 13:30:00	Reqd: 1 Hours Resp: 9/12/2022 13:50 Actual: 0.33 Hours	N/A	N/A
GP1.2	POTHOLE	MP 53.9 WB	9/28/2022 09:00:00	N/A	N/A	Reqd: 6 Months Resp: 9/28/2022 21:00 Actual: 0.01 Months
GP5.1	BARRIER WALL (Impact Damage)	MP 38.8 EB	9/14/2022 13:34:00	N/A	N/A	Reqd: 6 Months Resp: 9/14/2022 16:30 Actual: 0.01 Months
GP12.1	GRAFFITI	MP 39.10 EB	9/2/2022 16:39:00	N/A	Reqd: 10 Days Resp: 9/6/2022 13:30 Actual: 3.86 Days	N/A
GP12.1	GRAFFITI	MP 37.6 EB	9/2/2022 16:43:00	N/A	Reqd: 10 Days Resp: 9/6/2022 09:00 Actual: 3.67 Days	N/A
GP1.2	POTHOLE	MP 45.4 EB	9/20/2022 17:58:00	N/A	N/A	Reqd: 6 Months Resp: 9/21/2022 14:00 Actual: 0.02 Months
GP1.1	DEBRIS (Debris Removed from Lanes)	MP 43.4 EB	9/24/2022 18:21:00	Reqd: 1 Hours Resp: 9/24/2022 19:15 Actual: 0.90 Hours	N/A	N/A
GP6.1	SIGN (Sign Down)	MP 38.8 WB	9/19/2022 17:00:00	N/A	N/A	Reqd: 6 Months Resp: 9/26/2022 20:00 Actual: 0.23 Months

All items were completed within the required response time. Items that are *In Progress* are still within the allowed response time.

F. Detailed Results of All Inspections, Assessments, and Testing Activities

During this reporting period there were no special inspections, assessments, or testing results outside normal operating condition.

G. Monthly Toll System Performance Reports

Toll system operated within proposed parameters per Ferrovial Services observations.

H. Preventative Maintenance Plan and Progress

Preventative Maintenance work is contingent on Initial Works Package implementation.

I, J. Mean Time between Failure (MTBF), Mean Time to Repair (MTTR)

No Maintained Elements experienced a failure type breakdown this month. Ferrovial Services considers a breakdown to be a failure when the element cannot be used for its intended purpose until repaired.