# December 2019 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 December 2019. Operationally, December 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 December 2019 in the I-25 Central and US 36 Managed Lanes was 268,990 and 1,329,546, 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.

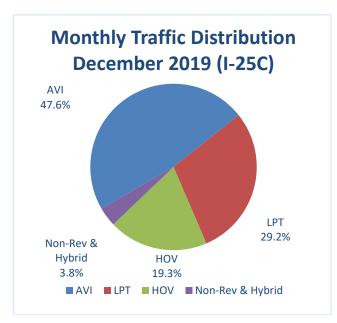
	Traffic	Summary (	(US 36)			
	AVI	LPT	HOV	Non-Rev & Hybrid	Total	Hybrid
Total Monthly Traffic	725,929	332,900	234,722	35,995	1,329,546	2,253
Maximum Weekday Traffic	44,722	19,761	10,027	1,823	75,700	163
Average Weekday Traffic	30,414	13,394	8,221	1,504	53,533	90
Average Hourly AM Peak Traffic	4,050	1,531	846	185	6,612	N/A
Average Hourly PM Peak Traffic	4,659	1,908	1,126	182	7,875	N/A





	Traffi	ic Summary (	(I-25C)			
	AVI	LPT	HOV	Non-Rev & Hybrid	Total	Hybrid
Total Monthly Traffic	128,162	78,626	52,005	10,197	268,990	551
Maximum Weekday Traffic	7,498	4,565	2,345	495	14,867	37
Average Weekday Traffic	5,399	3,291	1,966	425	10,656	23
Average Hourly AM Peak Traffic	651	452	245	56	1,348	N/A
Average Hourly PM Peak Traffic	677	417	233	56	1,327	N/A

Table 1 - Monthly Traffic Summaries



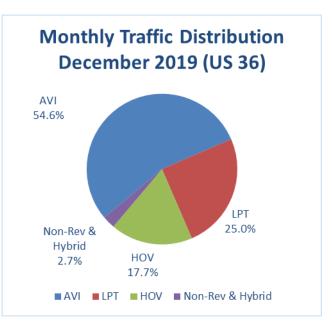
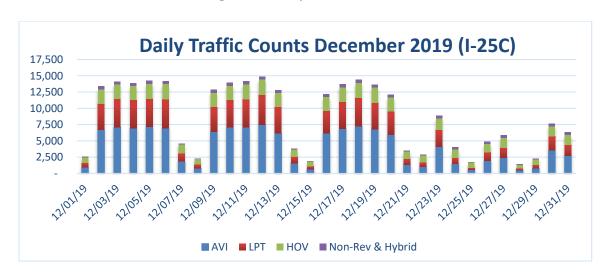


Figure 1 – Monthly Traffic Distribution







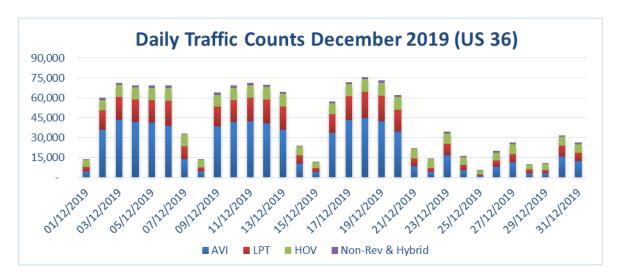


Figure 2 - Daily Traffic Counts

### 2.0 REVENUES

During the month of December 2019, PRD collected \$690,827 and \$766,115 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 5, 2019	15:42	16:27	0:45
July 9, 2019	17:30	18:15	0:45
July 10, 2019	13:35	14:32	0:57
July 12, 2019 - October 4,	19:15	05:00	2,145:45
2019			(89 Days 9 Hours and 45
			Minutes)
July 25, 2019	08:57	10:10	1:13





August 1, 2019	15:42	16:55	1:13
August 12, 2019	08:02	08:54	0:52
August 12, 2019	18:36	19:01	0:25
August 15, 2019	15:46	16:17	0:31
August 16, 2019	05:46	07:36	1:50
August 23, 2019	08:22	09:21	0:59
August 26, 2019	15:50	16:32	0:42
September 3, 2019	07:46	08:17	0:32
September 13, 2019	15:48	16:30	0:42
September 16, 2019	12:50	13:27	0:37
October 3, 2019	06:48	07:21	0:33
October 4, 2019	07:40	08:14	0:34
October 10, 2019	10:00	11:48	1:48
October 10, 2019	10:33	11:18	0:45
October 15, 2019	09:06	09:43	0:37
October 21, 2019	16:03	17:39	1:36
October 21, 2019	16:46	18:14	1:28
October 28, 2019	06:00	06:45	0:45
October 30, 2019	09:41	10:25	0:44
October 31, 2019	16:03	17:39	1:36
November 4, 2019	18:32	19:27	0:55
November 6, 2019	07:19	08:00	0:41
November 22, 2019	05:35	06:43	1:08
November 22, 2019	17:41	18:50	1:09
November 26, 2019	12:35	15:48	3:13
December 4, 2019	18:26	19:24	0:58
December 11, 2019	18:41	19:26	0:45
December 12, 2019	11:45	12:23	0:38
December 12, 2019	14:31	15:55	1:24
December 16, 2019	15:52	17:20	1:28
December 16, 2019	18:26	19:23	0:57
December 17, 2019	15:56	16:21	0:25
December 17, 2019	18:06	19:06	1:00
December 18, 2019	18:25	19:13	0:48
·	·	· · · · · · · · · · · · · · · · · · ·	·





Total		2,183 hours 43 minutes
Remaining Closure Hours		0 hours 0 minutes
Available (Ref: CA 29.7)		

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





#### 5.0 HYBRID UTILIZATION

Total Hybrid Trips										
I-25 Central	551									
US 36	2,253									

Table 6 – 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.





# OPERATIONS AND MAINTENANCE MONTHLY REPORT DECEMBER 2019

US 36 and I-25 Express Lanes Project



Plenary Roads Denver, LLC 1700 Lincoln Street, Suite 3000 Denver, CO 80203

Attention: Mr. Christian Guevara, PE



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# OPERATIONS AND MAINTENANCE — MONTHLY REPORT DECEMBER 2019 US 36 and I-25 Express Lanes Project

Revision	Date	Approved
Rev. 0	01/08/2020	Just De

This report titled *Operations and Maintenance Monthly Report, December 2019* 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 of December 2019. 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:

- Winter PPE
- Working From Heights
- Proper Lighting

# A. Summary of the Planned Maintenance Activities for the Upcoming Month – January 2020

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 of January 2020 is included below.





# FIG. A-1 Planned Maintenance Activities for January 2020

*X* – *Indicates the day the task is planned.* 

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

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 December 2019

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

Performance Standard Identification Description  Performance Work Activity- Description		Frequency																															
Number (Table	Description		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	_	30	31
6.1)			S	M	Т	W	Т	F	S	s	M	T	W	Т	F	S	S	M	T	W	T	F	S	S	М	Т	W	T	F	S	s	M	T
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
N/I - 1	FLEXIBLE PAVEMENT OBSERVATION / REPAIR	F-52		x							x							X							X							x	
	RIGID PAVEMENT OBSERVATION / REPAIR	F-52		x							X							X							X							x	
ML-4	DELINEATORS & MARKERS OBSERVE / CLEAN / REPAIR	F-12					X					X							X														
	DRAINAGE STRUCTURE (INLET) INSPECTION	F-1					x																										
IVIL-2	DRAINAGE (INLET) OBSERVE/ CLEAN / REPAIR	F-12					X																										
	DRAINAGE (PIPE/CULVERT) OBSERVE / CLEAN / RPR	F-12					x																										
I MI-5 1	GUARDRAIL, SAFETY BARRIER										X	X						X	X														
ML 5.2	IMPACT ATTENUATORS										x	x																					
ML-6	SIGN OBSERVATION / REPAIR	F-52		x	X						X	X						X							X								
	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	
	LITTER OBSERVATION / REMOVAL	Daily		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																		
	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
	GATE MAINTENANCE & REPAIR										X							X							X							X	







\_\_\_\_\_

Fig. B-2 Work Accomplished This Month

Activity	Actual Work
102 Patrolling and Inspect (HR)	9
152 Flex Patch /Minor Repairs (SY)	11
153 Concrete Pave Surface Rpr (SY)	4
216 Fence Maint (LF)	700
218 Litter Removal (CY)	30
218 Debris in Roadway (HR)	7
221 Sweeping Disposal (TON)	42
222 Sweeping (MI)	116
301 Sign Maintenance (EA)	16
302 Sign Replacement/Repair (EA)	2
304 Del Post Maint (EA)	193
306 Metal Guardrail Maint (LF)	188
311 Lighting/Assist Trf Ctrl (HR)	18
312 Lighting Repairs/Maint (EA)	49
314 Reversible Lane Operations	325
316 Attenuator Mtn (EA)	3
329 Courtesy Assist (HR)	390
540 Graffiti Removal (SF)	67

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

Ferrovial Services completed all scheduled maintenance activities for the period of December. 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:

Precipitation Event Start		Equipment	: Deployed	Precipitation	on Event End	Service L Achieve		Service Le Achieved	_
12/28/2019	2:55	12/28/2019	0:30	12/29/2019	8:50	12/28/2019	10:20	12/28/2019	10:20

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	Description	Location	Notified	Response to Defects						
Category				Cate	Category 2					
				Hazard Mitigation	Permanent Remedy	Permanent Repair				
GP5.1	GUARDRAIL (Impact Damage)	MP 54.4 WB	7/17/2019 00:30:00	N/A	N/A	Reqd: 6 Months Respd: 12/5/2019 22:00 Actual: 4.72 Months				
ML8.1	LIGHTING (W Out)	040-U36-LHT-0210, MP 56.6	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 13:00 Actual: 3.92 Months				
ML8.1	LIGHTING (All Out)	040-U36-LHT-0090, MP 55.9	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 13:50 Actual: 3.92 Months				
ML8.1	LIGHTING (S Out)	040-U36-LHT-0230, MP 56.7	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 14:10 Actual: 3.92 Months				
ML8.1	LIGHTING (All Out)	040-U36-LHT-0080, MP 55.8	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 13:45 Actual: 3.92 Months				
ML8.1	LIGHTING (All Out)	040-U36-LHT-0070, MP 55.8	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 13:30 Actual: 3.92 Months				
ML8.1	LIGHTING (All Out)	040-U36-LHT-0060, MP 55.7	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 15:00 Actual: 3.92 Months				
ML8.1	LIGHTING (All Out)	040-U36-LHT-0050, MP 55.6	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 16:00 Actual: 3.92 Months				
ML8.1	LIGHTING (All Out)	040-U36-LHT-0150, MP 56.2	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 15:30 Actual: 3.92 Months				
ML8.1	LIGHTING (All Out)	040-l25-LHT-0110, MP 215.1	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 11:00 Actual: 3.92 Months				
ML8.1	LIGHTING (SE Out)	040-l25-LHT-0070, MP 214.8	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 14:30 Actual: 3.92 Months				
ML8.1	LIGHTING (N Out)	040-U36-LHT-0240, MP 56.8	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 14:00 Actual: 3.92 Months				
ML8.1	LIGHTING (E Out)	040-U36-LHT-0190, MP 56.5	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 13:00 Actual: 3.92 Months				
ML8.1	LIGHTING (All Out)	040-U36-LHT-0130, MP 56.1	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 12:00 Actual: 3.92 Months				
ML8.1	LIGHTING (EW Out)	040-U36-LHT-0180, MP 56.4	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 15:20 Actual: 3.92 Months				
ML8.1	LIGHTING (All Out)	040-U36-LHT-0140, MP 56.2	9/3/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 16:00 Actual: 3.92 Months				
ML8.2	LIGHTING (Out)	040-20S-LHT-0005- SGN_LHT-03, MP 0.5	9/4/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 13:00 Actual: 3.92 Months				
ML8.2	LIGHTING (Out)	040-20S-LHT-0005- SGN_LHT-02, MP 0.5	9/4/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 14:00 Actual: 3.92 Months				
GP8.2	LIGHTING (Out)	040-U36-LHT-0550- SGN_LHT-03, MP 55.0	9/4/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 15:25 Actual: 3.92 Months				
GP8.2	LIGHTING (Out)	040-U36-LHT-0550- SGN_LHT-02, MP 55.0	9/4/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 13:50 Actual: 3.92 Months				





Element Category	Description	Location	Notified	Response to Defects						
Category				Categ Hazard Mitigation	Category 2 Permanent Repair					
GP8.2 LIGHTING (Out) S		040-U36-LHT-0550- SGN_LHT-01, MP 56.0	9/4/2019 21:00:00	N/A	Permanent Remedy N/A	Reqd: 6 Months Respd: 12/31/2019 13:15 Actual: 3.92 Months				
GP8.2	LIGHTING (Out)	040-U36-LHT-0569- SGN_LHT-02, MP 56.9	9/4/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 10:50 Actual: 3.92 Months				
ML8.2	LIGHTING (Out)	040-20S-LHT-0005- SGN_LHT-01, MP 0.5	9/4/2019 21:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 14:20 Actual: 3.92 Months				
GP6.1	SIGN (Impact Damage)	MP 49.1 WB	10/27/2019 02:41:00	N/A	N/A	Reqd: 6 Months Respd: 12/3/2019 12:30 Actual: 1.24 Months				
GP5.1	GUARDRAIL (Impact Damage)	MP 44.2 WB	10/30/2019 00:42:00	N/A	N/A	Reqd: 6 Months Respd: Actual: In Progress				
GP5.1	GUARDRAIL (Impact Damage)	MP 55.8 EB	11/14/2019 05:31:00	N/A	N/A	Reqd: 6 Months Respd: Actual: In Progress				
GP5.1	GUARDRAIL (Impact Damage)	MP 216.6 SB	11/18/2019 17:05:00	N/A	N/A	Reqd: 6 Months Respd: 12/11/2019 22:00 Actual: 0.77 Months				
GP5.1	GUARDRAIL (Impact Damage)	MP 216.94 SB	11/18/2019 17:05:00	N/A	N/A	Reqd: 6 Months Respd: 12/11/2019 22:00 Actual: 0.77 Months				
GP8.1	LIGHT POLE (Impact Damage)	36/MP 39.4 EB	11/18/2019 12:52:00	N/A	N/A	Reqd: 6 Months Respd: 12/13/2019 12:30 Actual: 0.83 Months				
GP1.1	DEBRIS (Cleared Debris From Lanes)	MP 56.0 EB	12/21/2019 16:31:00	Reqd: 1 Hours Respd: 12/21/2019 17:28 Actual: 0.94 Hours	N/A	N/A				
ML12.1	GRAFFITI (Removed Graffiti)	MP 57.1 WB	12/20/2019 01:05:00	N/A	Reqd: 10 Days Respd: 12/20/2019 02:03 Actual: 0.04 Days	N/A				
GP5.2	ATTENUATOR (Impact Damage)	MP 57.1 WB	12/19/2019 23:56:00	N/A	N/A	Reqd: 6 Months Respd: Actual: In Progress				
GP5.1	GUARDRAIL (Impact Damage)	MP 37.5 EB	12/18/2019 15:32:00	N/A	N/A	Reqd: 6 Months Respd: Actual: In Progress				
GP6.1	SIGN (Impact Damage)	MP 48.2 EB	12/30/2019 23:16:00	N/A	N/A	Reqd: 6 Months Respd: 12/31/2019 00:13 Actual: 0.01 Months				
GP6.1	SIGN (Impact Damage)	MP 53.3 WB	12/30/2019 17:00:00	N/A	N/A	Reqd: 6 Months Respd: 12/30/2019 22:29 Actual: 0.01 Months				
GP5.1	GUARDRAIL (Impact Damage)	MP 37.6 EB	12/30/2019 10:22:00	N/A	N/A	Reqd: 6 Months Respd: Actual: In Progress				
GP6.1	SIGN (Impact Damage)	MP 43.3 EB	12/27/2019 13:36:00	N/A	N/A	Reqd: 6 Months Respd: Actual: In Progress				
GP6.1	SIGN (Impact Damage)	MP 57.3 WB	12/26/2019 20:13:00	N/A	N/A	Reqd: 6 Months Respd: 12/27/2019 13:00 Actual: 0.02 Months				
GP6.1	SIGN (Impact Damage)	MP 50.4 WB	12/23/2019 09:20:00	N/A	N/A	Reqd: 6 Months Respd: 12/23/2019 10:20 Actual: 0.01 Months				
GP10.2	LITTER (Litter in Infield)	MP 217.1 NB	12/13/2019 12:16:00	N/A	N/A	Reqd: 28 Days Respd: Actual: In Progress				
GP12.1	GRAFFITI (Removed Graffiti)	MP 48.1 WB	12/12/2019 15:39:00	N/A	Reqd: 10 Days Respd: 12/12/2019 16:00 Actual: 0.01 Days	N/A				
GP6.1	SIGN (Impact Damage)	MP 49.1 WB	12/17/2019 06:25:00	N/A	N/A	Reqd: 6 Months Respd: 12/18/2019 01:30 Actual: 0.02 Months				
GP5.1	GUARDRAIL (Impact Damage)	MP 39.3 EB	12/13/2019 09:00:00	N/A	N/A	Reqd: 6 Months Respd: Actual: In Progress				





Element Category	Description	Location	Notified	Response to Defects						
Category				Categ	Category 2					
				Hazard Mitigation	Permanent Remedy	Permanent Repair				
GP5.1	GUARDRAIL (Impact Damage)	MP 37.4 EB	12/17/2019 13:31:00	N/A	N/A	Reqd: 6 Months Respd: Actual: In Progress				
GP6.1	SIGN (Impact Damage)	MP 57.2 WB	12/10/2019 12:46:00	N/A	N/A	Reqd: 6 Months Respd: 12/11/2019 16:30 Actual: 0.03 Months				
GP12.1	GRAFFITI (Removed Graffiti)	MP 37.5 WB	12/17/2019 13:38:00	N/A	Reqd: 10 Days Respd: 12/17/2019 16:00 Actual: 0.09 Days	N/A				
GP1.1	DEBRIS (Cleared Debris From Lanes)	MP 37.4 EB	12/19/2019 18:52:00	Reqd: 1 Hours Respd: 12/19/2019 19:19 Actual: 0.44 Hours	N/A	N/A				
GP6.1	SIGN (Impact Damage)	MP 50.71 WB	12/4/2019 08:49:00	N/A	N/A	Reqd: 6 Months Respd: 12/9/2019 19:00 Actual: 0.18 Months				
GP6.1	SIGN (Impact Damage)	MP 47.55 EB	12/9/2019 19:01:00	N/A	N/A	Reqd: 6 Months Respd: 12/9/2019 19:32 Actual: 0.01 Months				
GP5.2	ATTENUATOR (Impact Damage)	MP 39.4 WB	11/29/2019 15:30:00	N/A	N/A	Reqd: 6 Months  Respd: 12/10/2019 12:30  Actual: 0.36 Months				
GP1.1	DEBRIS (Cleared Debris From Lanes)	MP 48.0 WB	12/2/2019 07:00:00	Reqd: 1 Hours Respd: 12/2/2019 07:50 Actual: 0.83 Hours	N/A	N/A				
GP6.1	SIGN (Impact Damage)	MP 48.0 EB	12/10/2019 14:16:00	N/A	N/A	Reqd: 6 Months Respd: 12/18/2019 16:00 Actual: 0.26 Months				
GP9.1	FENCE (Impact Damage)	MP 51.2 WB	12/9/2019 20:41:00	N/A	N/A	Regd: 6 Months Respd: 12/11/2019 14:30 Actual: 0.05 Months				
GP6.1	SIGN (Impact Damage)	MP 54.8 EB	12/4/2019 11:05:00	N/A	N/A	Regd: 6 Months Respd: 12/10/2019 00:00 Actual: 0.18 Months				
GP6.1	SIGN (Impact Damage)	MP50.71 WB	12/9/2019 18:15:00	N/A	N/A	Reqd: 6 Months Respd: 12/9/2019 18:42 Actual: 0.01 Months				
GP9.1	FENCE (Impact Damage)	MP 39.95 WB	12/9/2019 18:01:00	N/A	N/A	Reqd: 6 Months Respd: Actual: In Progress				
GP9.1	FENCE (Impact Damage)	MP 41.0 EB	12/9/2019 18:45:00	N/A	N/A	Reqd: 6 Months Respd: 12/9/2019 19:47 Actual: 0.01 Months				
GP12.1	GRAFFITI (Removed Graffiti)	MP 41.8 WB	12/9/2019 18:23:00	N/A	Reqd: 10 Days Respd: 12/9/2019 18:29 Actual: 0.01 Days	N/A				
GP1.1	DEBRIS (Cleared Debris From Lanes)	MP 54.6 WB	12/7/2019 17:19:00	Reqd: 1 Hours Respd: 12/7/2019 18:09 Actual: 0.83 Hours	N/A	N/A				
GP6.1	SIGN (Impact Damage)	MP 38.8 WB	12/9/2019 16:15:00	N/A	N/A	Reqd: 6 Months Respd: 12/10/2019 14:30 Actual: 0.03 Months				
GP1.1	DEBRIS (Cleared Debris From Lanes)	MP 46.2 EB	12/10/2019 14:34:00	Reqd: 1 Hours Respd: 12/10/2019 14:48 Actual: 0.23 Hours	N/A	N/A				
GP5.1	ATTENUATOR (Impact Damage)	MP 57.0 EB	12/2/2019 15:35:00	N/A	N/A	Reqd: 6 Months Respd: 12/10/2019 02:00 Actual: 0.24 Months				
GP1.1	DEBRIS (Removed Chair From Lanes)	MP 53.0 EB	12/2/2019 09:23:00	Reqd: 1 Hours Respd: 12/2/2019 09:50 Actual: 0.44 Hours	N/A	N/A				
GP5.2	ATTENUATOR (Impact Damage)	MP39.45 WB	11/28/2019 03:35:00	N/A	N/A	Reqd: 6 Months Respd: 12/10/2019 11:35 Actual: 0.41 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.