

asongroup



## **Biannual Trip Origin Destination Report**

01 May 2021 – 31 October 2021

Moorebank Precinct East

16/12/2021

P1065r04

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## Document Control

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## APPENDICES

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### Appendix A. BTODR Framework Report

# Glossary

Acronym	Description
BTODR	Biannual Trip Origin Destination Report
GFA	Gross Floor Area
IMEX	IMEX (Import-Export) Intermodal Terminal
MLP	Moorebank Logistics Park
MPE	Moorebank Precinct East
OD	Origin - Destination
QUBE	Qube Property Management Services Pty Limited
RMS	Roads & Maritime Services
SSD	State Significant Development
TA	Transport Assessment
TEU	Twenty Foot Equivalent Units
TfNSW	Transport for New South Wales

## Reference Documents

Abbreviation	Document
BTODR Framework Report	Moorebank Precinct East -Biannual Trip Origin Destination Report Framework for Data Collection and Reporting, (Arcadis, August 2019)
BTODR Report May 2021	Biannual Trip Origin Destination Report, Moorebank Precinct East, Ref:1065r03v1 (Ason Group, May 2021)
MPE Stage 1 - TAIA	SIMTA Intermodal Terminal Facility Stage 1 Traffic & Accessibility Impact Assessment (Hyder Consulting, March 2015)
MPE Stage 2 - OTTIA	Moorebank Precinct East Stage 2 Proposal - Operational Traffic and Transport Impact Assessment (Arcadis, December 2016)
MPE Stage 2 – RtS	Moorebank Precinct East Stage 2 Proposal – Response to Submission - Appendix C3: Consolidated Traffic Table (Arcadis, July 2017)

# 1 Introduction

## 1.1 Introduction

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Ason Group has been commissioned by Qube Property Management Services Pty Limited to prepare an initial BTODR for MPE (including IMEX), as outlined within the development consents SSD 7628 and SSD 6766. This report has been prepared following Condition B28 of SSD 7628, which has been provided below;

*Condition B28. The Applicant is to prepare a Biannual Trip Origin and Destination Report each six months following commencement of any operation (in a format agreed with TfNSW and RMS) that advises:*

- a) *the number of actual and standard twenty-foot equivalent shipping containers despatched and received during the period;*
- b) *the number of days in the period that the truck gate was open for despatching trucks 24 hours a day, 7 days a week and detail any exceptions to this and advise actual hours of operation;*
- c) *records of vehicle numbers accessing the site; and*
- d) *representative vehicle origins and destinations, based on a cordon in the surrounding network.*

A framework for recording and reporting on the data required for the report, prepared to the satisfaction of TfNSW and RMS, is to be submitted to the Secretary three months prior to the commencement of operation.

The report is to be submitted within one month of its preparation throughout operation of the project, starting six months from the commencement of operation, unless otherwise agreed by the Secretary, TfNSW and RMS.

The cordon count at (d) above will:

- apply to all classes of vehicles; and
- cover the intermodal terminal, the warehousing facility, and any other uses such as the freight village.

As such, this report has been prepared on the basis of a review of the documentation provided and relevant publicly available documentation associated with the staged redevelopment of the MPE. Additionally, the reference BTODR Framework report (at **Appendix A**) forms the basis and format of this report and has been prepared to the satisfaction of Transport for NSW.

The BTODR is a document ultimately intended for when MPE is fully operational. Currently MPE has a mixture of lots where warehouses are operational or under construction; therefore, there are challenges to collect the full extent of data envisaged at this stage. Accordingly, this BTODR has been compiled on the basis of the data available at this time, with a view to achieving as best as possible the objectives of the BTODR.

## 1.2 Purpose

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This BTODR addresses the relevant requirements of the Project Approvals and other guidelines and standards applicable during operations of MPE. The BTODR is proposed to keep an accurate record of the shipping containers and vehicle arrivals / departures against approved volumes.

## 1.3 Scope

For the purpose of the BTODR, the scope of this report shall include:

- Review of the number of twenty-foot equivalent shipping containers dispatched and received.
- Review the number of days in the period that the truck gate was open for despatching trucks and detail any exceptions to the actual hours of operation.
- Record the number of vehicles accessing MPE.
- Outline the vehicle origin and destinations based on a cordon in the surrounding round network.
- Comment on the employee numbers at MPE.

This report has assumed selected OD cordons (as outlined within **Figure 1**) which will apply to all classes of vehicles (while also covering the IMEX, warehousing facilities and any other uses such as the freight village).

## 1.4 Period of Reporting

As mentioned above, the main objective of the BTODR is to report on traffic once MPE is completed and fully operational. At this stage, MPE is only partially operational and has a number of areas within the Site that are under construction.

**TABLE 1: BREAKDOWN OF OPERATIONAL STATUS WITHIN MPE**

Tenanted Area	Operational	
	1 Nov 2020 – 30 Apr 2021	1 May 2021 – 31 Oct 2021
IMEX	Yes - Partially	<b>Yes</b>
WH 1	Yes	<b>No</b>
WH 3A	Yes	Yes
WH 3B	Yes	Yes
WH 4A	Yes	Yes
WH 4B	Yes	Yes
WH 5	Yes	Yes
WH 6	No	No
WH 7	No	No
WH 8	No	No

*Note: Those in **bold** are the changes from the previous reporting period.*

The reporting periods assessed by this BTODR – based on available data – are outlined below:

- Shipping Container Transport: 1 May 2021 – 31 October 2021
- Truck Gate opening period: 1 May 2021 – 31 October 2021
- Traffic Volumes: 27 October 2021 – 2 November 2021
- Origin / Destination Numbers: 27 October 2021 – 2 November 2021
- Employee Numbers: 1 May 2021 – 31 October 2021

## 2 Shipping Container Transport

This section provides the total number of actual TEUs dispatched and received during the reporting period. The analysis is based on the operational data from logistical schedules.

The information outlined below has been sourced by Tactical, BMD, Qube Logistics, Knight Frank who are currently operating in some form within MPE. **Table 2** presents the total TEUs received and dispatched from the IMEX terminal.

**TABLE 2: SHIPPING CONTAINER TRANSPORT**

Reporting Period	Month	Total Containers Received / Dispatched	Cumulative Total for Period
Period 2	Nov-2020	2,768	2,768
	Dec-2020	1,916	4,684
	Jan-2021	1,636	6,320
	Feb-2021	2,230	8,550
	Mar-2021	1,662	10,212
	April-2021	708	10,920
Period 3	May-2021	918	918
	Jun-2021	1,192	2,110
	Jul-2021	840	2,950
	Aug-2021	950	3,900
	Sep-2021	924	4,824
	Oct-2021	736	5,560



## 3 Truck Gate Opening Periods

### 3.1 Period of Opening

The BTODR Framework requires reporting on the number of days in a specific period that the truck gate was operational. In response, the period of time where the gate was operational has been in **Table 3**.

**TABLE 3: BREAKDOWN OF OPERATIONAL STATUS WITHIN MPE**

Reporting Period	Period of Opening
Period 2	1 November 2020 – 30 April 2021
Period 3	1 May 2021 – 31 October 2021

### 3.2 Exceptions to Full Time Opening

Further to the above, the BTODR Framework requires reporting on any periods when the gates were not open. In response, **Table 4** outlines the timeframes and reasons for when no containers left IMEX by truck.

**TABLE 4: TRUCK GATE OPENING PERIOD EXCEPTIONS**

Reporting Period	Period of Closure	Reason for Closure
Period 2	No Closures during this period	-
Period 3	No Closures during this period	-

### 3.3 Actual Hours of Opening

At present, the general truck gate daily opening times are outlined below.

- Monday – Friday: 6:00am – 10:00pm
- Saturday & Sunday: Closed

These times remain unchanged from the previous period of reporting.

## 4 Traffic Volumes

### 4.1 MPE Main Access

Traffic data has been collected to identify the volumes of light and heavy vehicles accessing MPE from the current main access on Moorebank Avenue. Table 5 summarises the average daily volumes from the data collected.

**TABLE 5: AVERAGE DAILY TRAFFIC VOLUMES**

Reporting Period	Reporting Dates	Vehicles In		Vehicles Out	
		Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 2	19 Apr 2021 - 26 Apr 2021	518	193	512	197
Period 3	27 Oct 2021 - 2 Nov 2021	701	326	740	339

## 5 Origin-Destination Results

OD surveys have been undertaken to understand the distribution of MPE traffic on the surrounding road network. To meet the requirements of the BTODR, the OD surveys have recorded traffic volumes across a 24-hour period, with the locations of the survey and corresponding gate numbers presented on **Figure 1** and outlined below.

**TABLE 6: OD SURVEY GATES**

Gate Number	Gate Location
OD1	Moorebank Avenue, about 350 metres north of the M5 South Western Motorway
OD2	Westbound off-ramp of M5 Interchange
OD3	Eastbound on-ramp of M5 Interchange
OD4	Westbound on-ramp of M5 Interchange
OD5	Eastbound off-ramp of M5 Interchange
OD6	Moorebank Avenue, about 300 metres south of the M5 South Western Motorway
OD7	Anzac Road
OD8	Defence Joint Logistics Access
OD9	IMEX/MPE Main Access
OD10	Cambridge Avenue
OD11	Moorebank Avenue, south of Cambridge Avenue



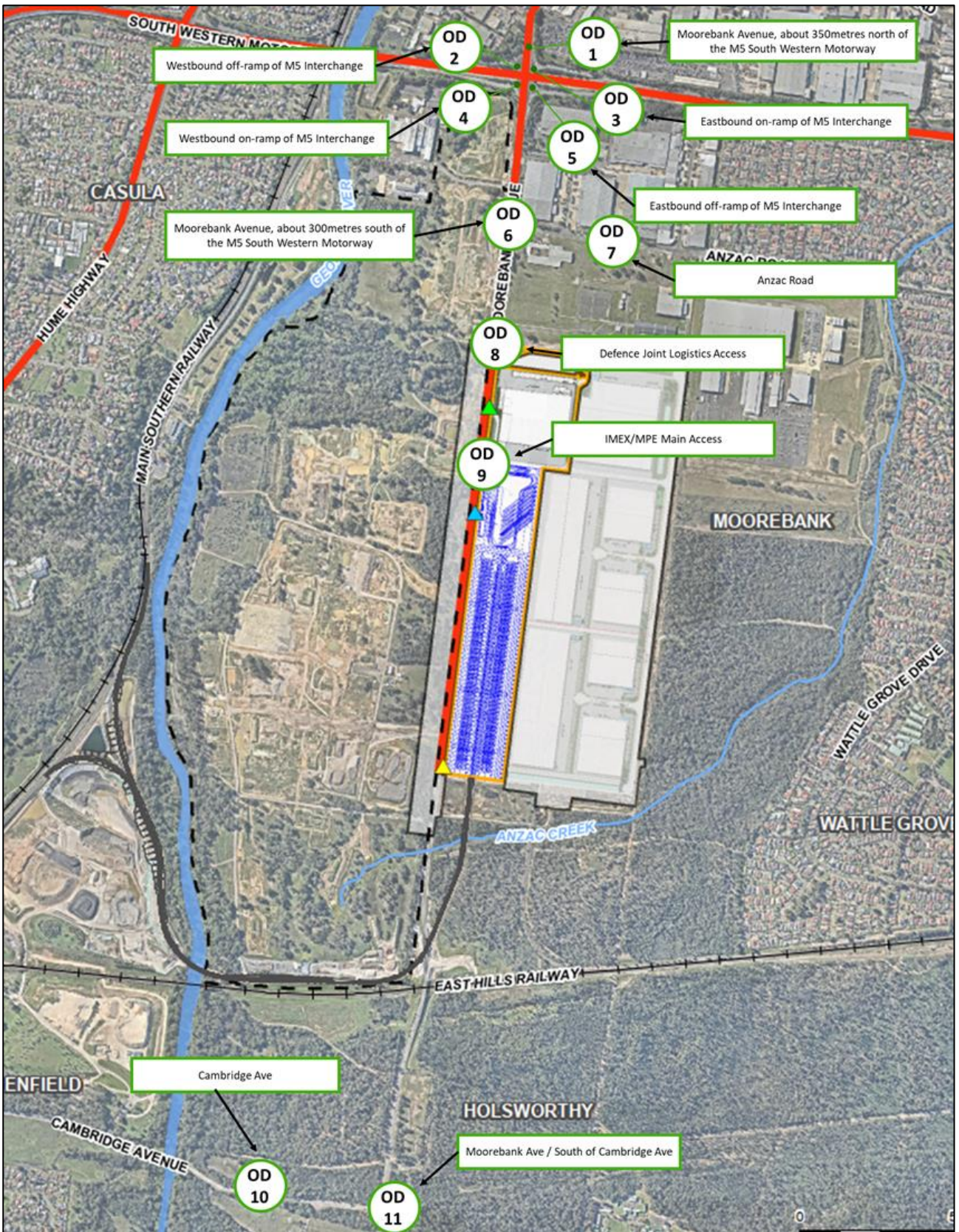


Figure 1: Origin-Destination Gates

The data of the OD surveys have been collated and is presented on the following tables for the relevant vehicle classes, as well as graphically on the following figures.



**TABLE 7: AVERAGE OD MOVEMENTS – ALL VEHICLES**

From Station	To Station											Total
	1	2	3	4	5	6	7	8	9	10	11	
1		0	514	9,325	0	2,688	935	31	134	1,290	42	14,961
2	7,555		0	310	0	4,391	1,549	102	354	1,908	121	16,289
3	0	0		0	0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0	0
5	1,617	0	1,617	0		2,803	867	44	152	1,290	54	8,444
6	2,710	0	2,799	3,835	0		3,621	270	815	4,654	295	19,000
7	816	0	750	1,190	0	2,740		0	80	1,991	0	7,566
8	12	0	72	116	0	200	33		6	123	0	563
9	160	0	331	455	0	924	0	0		99	0	1,969
10	696	0	2,145	1,482	0	4,309	1,959	109	82		437	11,219
11	28	0	122	155	0	305	27	0	0	471		1,108
<b>Total</b>	<b>13,594</b>	<b>0</b>	<b>8,351</b>	<b>16,869</b>	<b>0</b>	<b>18,361</b>	<b>8,992</b>	<b>556</b>	<b>1,622</b>	<b>11,826</b>	<b>950</b>	<b>81,119</b>

Below is a visual representation of the OD Movements within Table 713

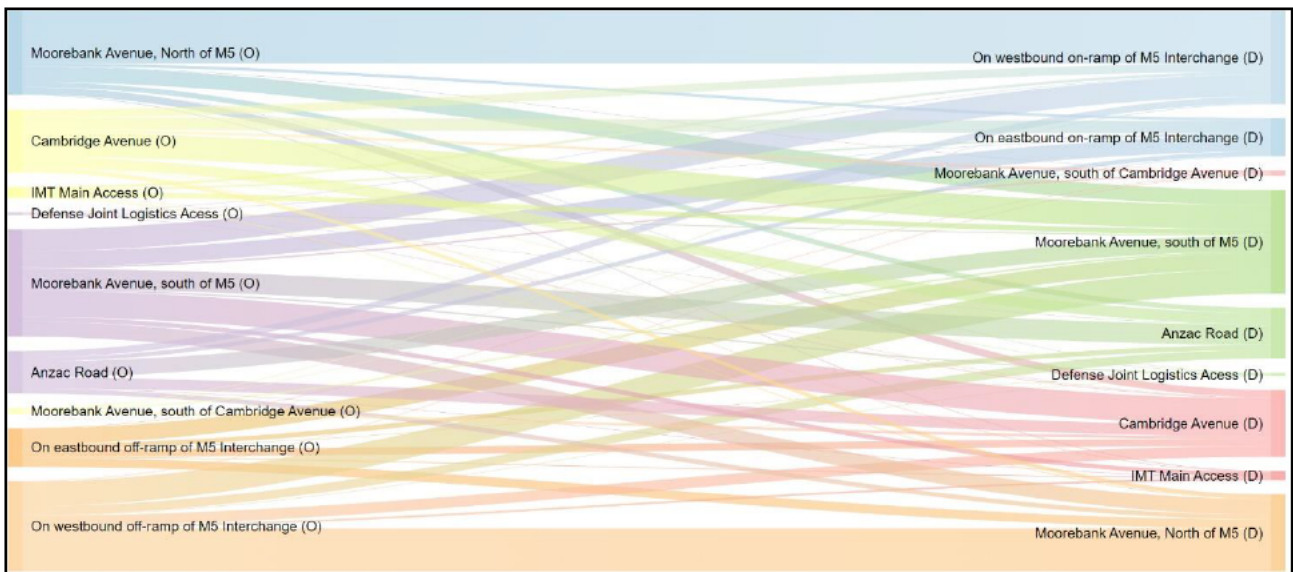


Figure 2: Visual of Average OD Movements - All Vehicles

**TABLE 8: AVERAGE OD MOVEMENTS –LIGHT VEHICLES**

From Station	To Station											Total
	1	2	3	4	5	6	7	8	9	10	11	
1		0	398	8,017	0	2,459	889	31	99	1,246	39	13,178
2	6,673		0	275	0	3,914	1,461	101	242	1,836	114	14,616
3	0	0		0	0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0	0
5	1,464	0	1,464	0		2,521	829	43	116	1,251	52	7,740
6	2,498	0	2,496	3,369	0		3,359	249	532	4,437	268	17,209
7	730	0	712	1,056	0	2,498		0	80	1,930	0	7,006
8	11	0	69	98	0	179	33		6	106	0	502
9	98	0	260	274	0	625	0	0		73	0	1,330
10	655	0	2,116	1,424	0	4,196	1,912	97	61		433	10,894
11	28	0	118	135	0	280	27	0	0	466		1,053
<b>Total</b>	<b>12,157</b>	<b>0</b>	<b>7,633</b>	<b>14,648</b>	<b>0</b>	<b>16,670</b>	<b>8,510</b>	<b>522</b>	<b>1,136</b>	<b>11,345</b>	<b>906</b>	<b>73,528</b>

Below is a visual representation of the OD Movements within Table 14.

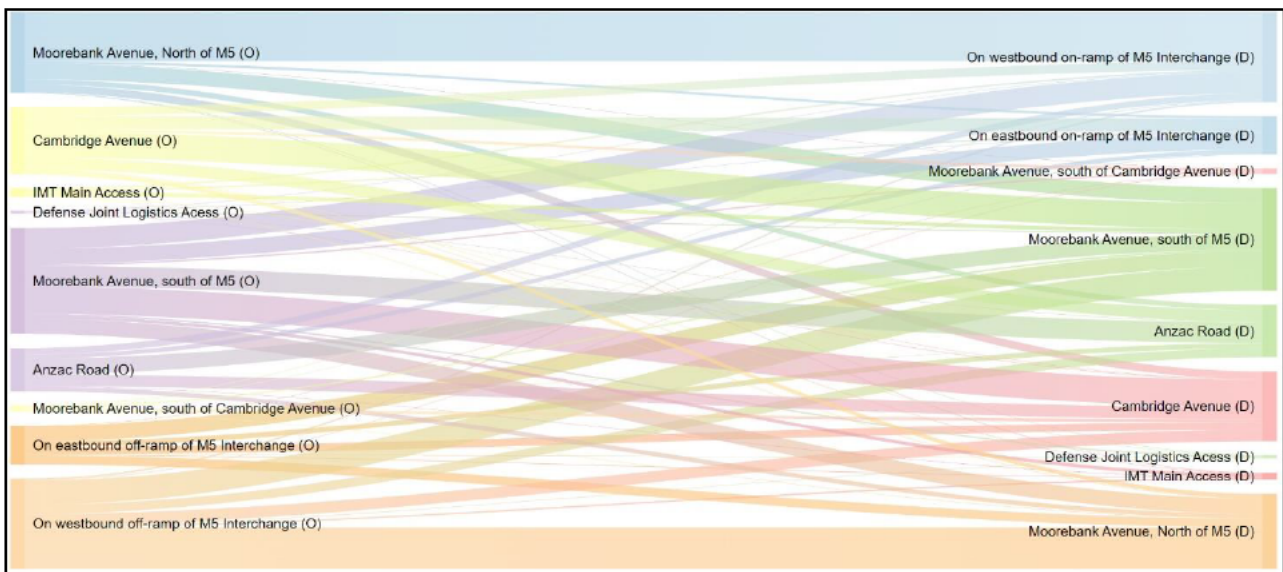


Figure 3: Visual of Average OD Movements - Light Vehicles

**TABLE 9: AVERAGE OD MOVEMENTS –HEAVY VEHICLES**

From Station	To Station											Total
	1	2	3	4	5	6	7	8	9	10	11	
1		0	94	816	0	199	46	0	27	44	3	1,229
2	556		0	24	0	265	64	0	44	65	7	1,024
3	0	0		0	0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0	0
5	112	0	112	0		158	33	0	17	32	2	467
6	187	0	182	264	0		209	17	145	200	28	1,232
7	78	0	35	103	0	205		0	0	57	0	477
8	0	0	3	15	0	18	0		0	16	0	53
9	44	0	38	79	0	151	0	0		26	0	338
10	39	0	27	53	0	105	44	12	19		4	303
11	0	0	5	18	0	23	0	0	0	5		52
<b>Total</b>	<b>1,017</b>	<b>0</b>	<b>495</b>	<b>1,372</b>	<b>0</b>	<b>1,126</b>	<b>396</b>	<b>29</b>	<b>253</b>	<b>444</b>	<b>43</b>	<b>5,174</b>

Below is a visual representation of the OD Movements within Table 15.

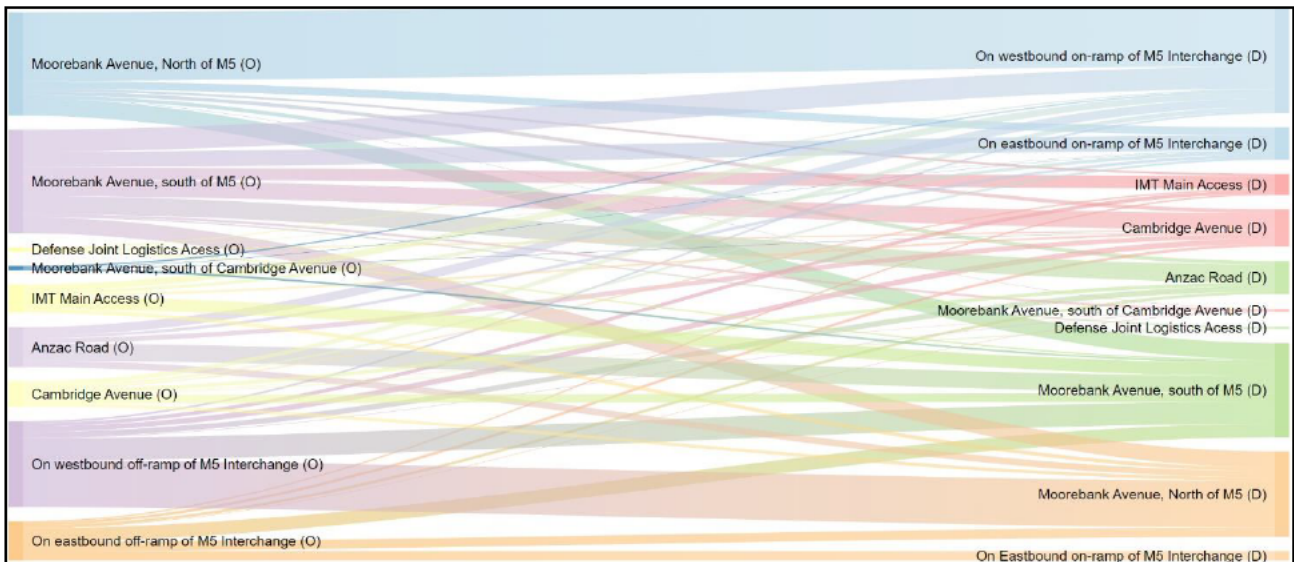


Figure 4: Visual of Average OD Movements - Heavy Vehicles

**TABLE 10: AVERAGE OD MOVEMENTS – ARTICULATED HEAVY VEHICLES**

From Station	To Station											Total
	1	2	3	4	5	6	7	8	9	10	11	
1		0	23	492	0	30	1	0	8	0	0	554
2	326		0	11	0	212	24	1	68	7	0	650
3	0	0		0	0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0	0
5	40	0	40	0		124	6	0	19	6	0	236
6	25	0	121	201	0		52	4	137	17	0	558
7	8	0	3	31	0	36		0	0	5	0	83
8	0	0	0	3	0	3	0		0	1	0	8
9	18	0	33	102	0	148	0	0		0	0	301
10	2	0	2	6	0	8	3	0	1		0	22
11	0	0	0	2	0	2	0	0	0	0		4
<b>Total</b>	<b>419</b>	<b>0</b>	<b>223</b>	<b>849</b>	<b>0</b>	<b>564</b>	<b>86</b>	<b>5</b>	<b>233</b>	<b>37</b>	<b>0</b>	<b>2,416</b>

Below is a visual representation of the OD Movements within Table 1016.

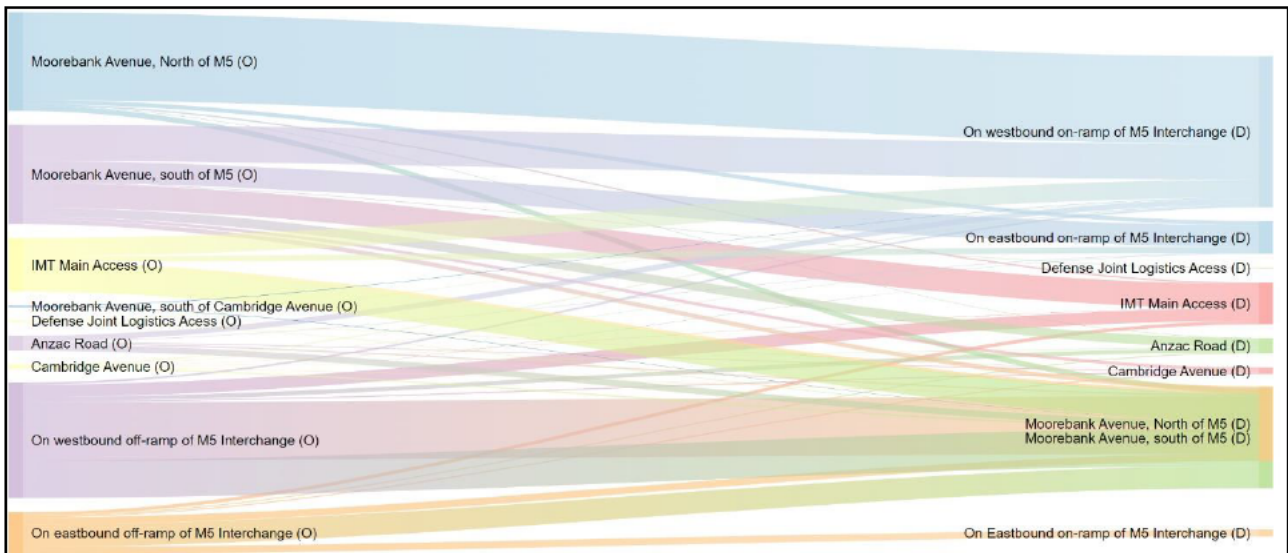


Figure 5: Visual of Average OD Movements – Articulated Heavy Vehicles



## 6 Employee Numbers

To corroborate data provided within the Workplace Travel Plan and minimise the need for additional reporting, Table 1117 presents relevant information on employee numbers for each of the sub-area's within MPE.

**TABLE 11: OD SURVEY GATES**

Reporting Periods	Month	IMEX	Rail Link	Tenanted Area	
Period 2	01-Nov 2020 - 30 Apr 2020	6	40	WH 1	2
				WH 3A	30
				WH 3B	14
				WH 4A	18
				WH 4B	24
				WH 5	12
Period 3	01-May-2021 - 31-Oct-2021	6	40	WH 1	2
				WH 3A	30
				WH 3B	14
				WH 4A	18
				WH 4B	24
				WH 5	12

# 7 Summary

The data provided within this report has been collected in accordance with the BTODR Framework report and enables a comparative assessment of traffic accessing the Site and future growth in operational activities.

All data is a fair and accurate representation of the operational traffic for MPE and its surrounding road network. This data has been collected for the reporting period between 1 May 2021 and 31 October 2021.

# Appendix A. BTODR Framework Report