



MetroWest+

Portishead Branch Line (MetroWest Phase 1)

TR040011

Applicant: North Somerset District Council

**6.25, Environmental Statement, Volume 4, Technical Appendices, Appendix 16.1:
Transport Assessment (Part 11 of 18) – Appendix G, Distribution and Assignment
The Infrastructure Planning (Applications: Prescribed Forms and Procedure)
Regulations 2009, Regulation 5(2)(a)
Planning Act 2008**

Author: CH2M

Date: November 2019



PORTISHEAD BRANCH LINE DCO SCHEME
(METROWEST PHASE 1)
ENVIRONMENTAL IMPACT ASSESSMENT

Transport Assessment Appendix G Distribution and Assignment

Prepared for

West of England Councils

June 2018



1 The Square
Temple Quay
Bristol
BS1 6DG



Document History

Portishead Branch Line DCO Scheme (MetroWest Phase 1) Transport Assessment Appendix G: Distribution and Assignment

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Client Name: West of England Councils

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01	February 2016	Draft 1	JE	HS	HS
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04	June 2018	Final	JE	HS	HS

Contents

Portishead

- 2031 Flows with Scheme
- 2031 Flows
- 2021 Flows with Scheme
- 2021 Flows
- 2015 Base Flows
- 2031 Scheme – Distribution and assignment of drop off and pick up trips
- 2021 Scheme – Distribution and assignment of drop off and pick up trips
- 2031 Scheme – Distribution and assignment of driver only trips
- 2021 Scheme – Distribution and assignment of driver only trips
- Trip generation
- Development distribution of drop off and pick up trips
- Development distribution of driver only trips

Pill

- 2031 Flows with Scheme
- 2031 Flows
- 2021 Flows with Scheme
- 2021 Flows
- 2015 Base Flows
- Trip generation
- Development distribution of drop off and pick up trips
- Development distribution of driver only trips

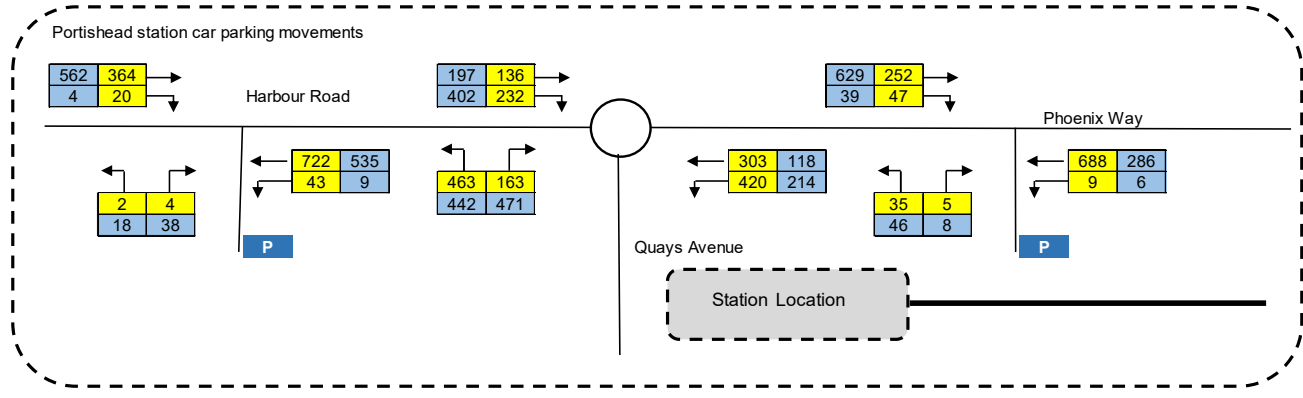
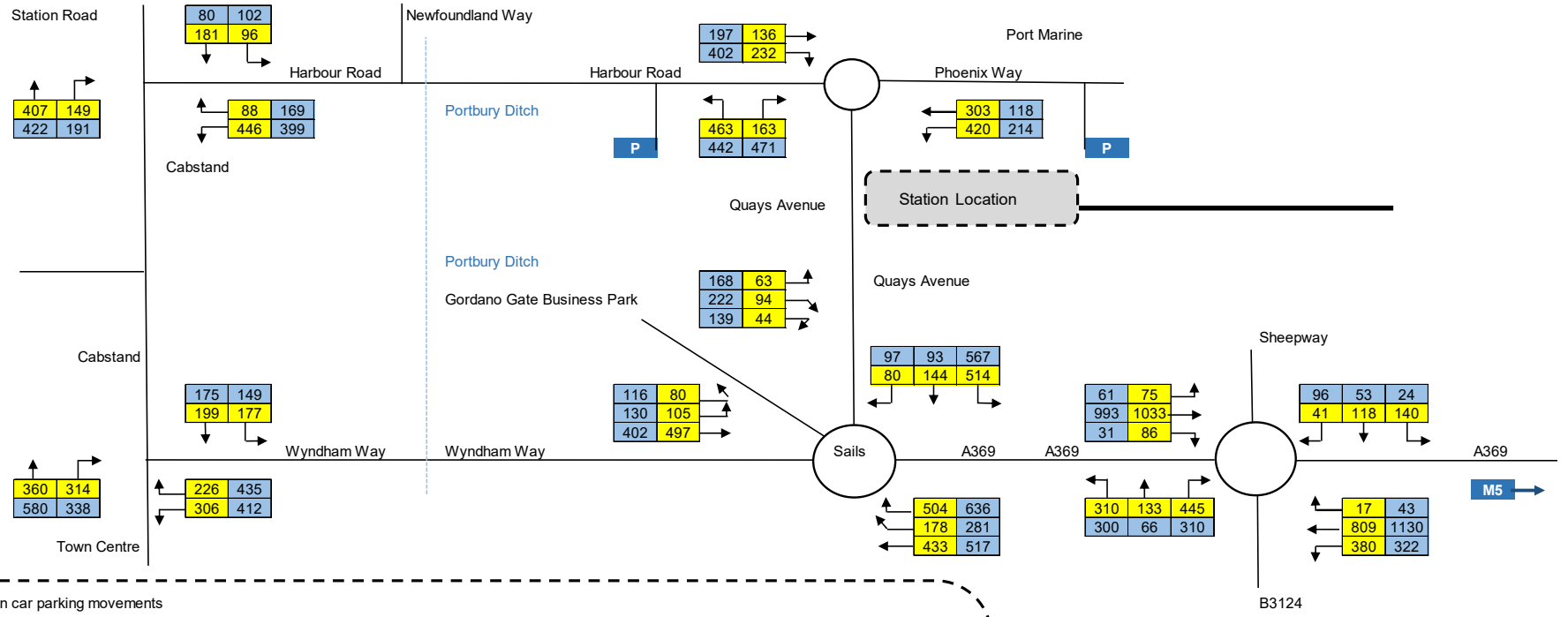
General

- Summary of turning counts recorded

Portishead: 2031 Flows with Scheme

MetroWest Phase I: Portishead
2031 Horizon Year with Scheme
PCUs

Key
 08-00 to 09-00
 17-00 to 18-00

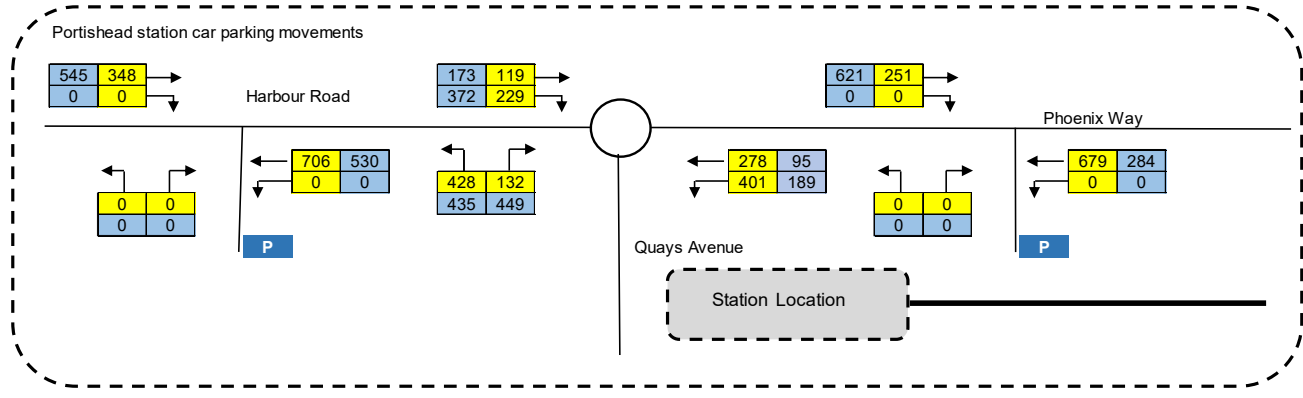
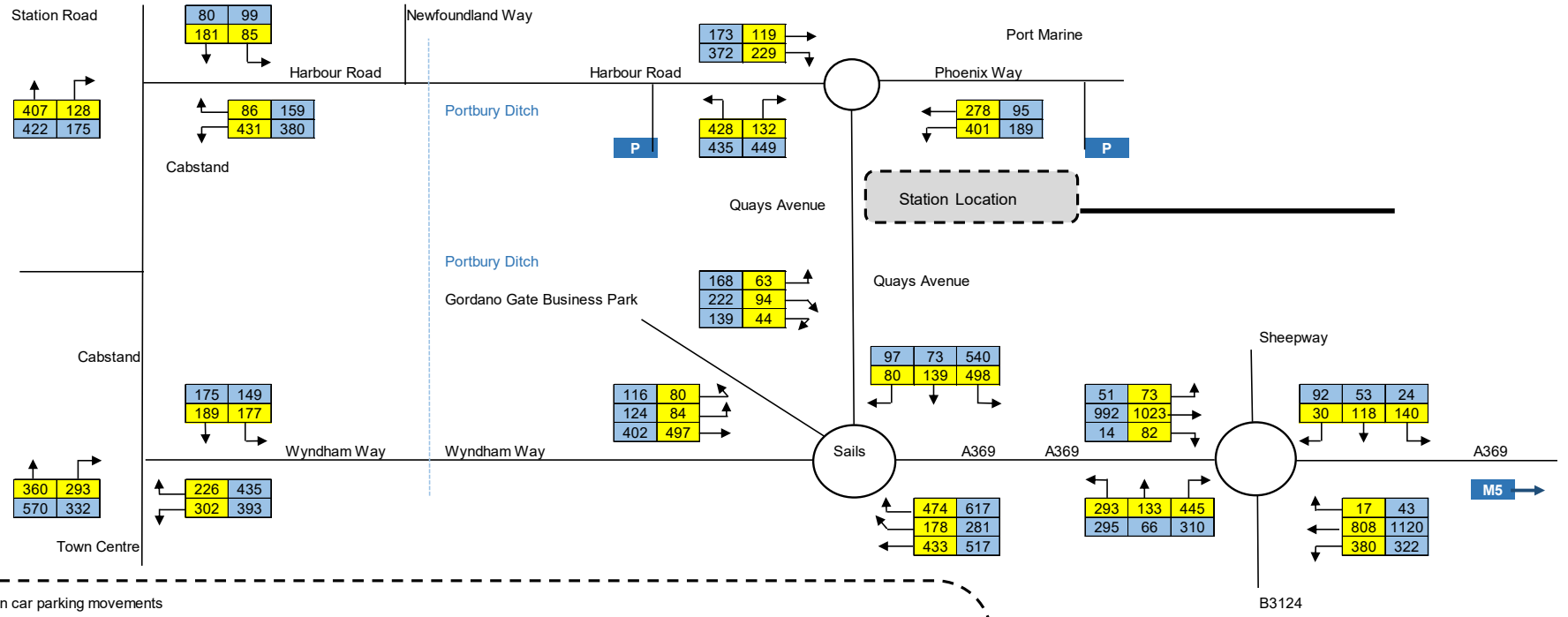


Portishead: 2031 Flows

MetroWest Phase I: Portishead
2031 Horizon year without development
PCUs

Key
 08-00 to 09-00
 17-00 to 18-00

Growth Rates
 AM 1.12
 PM 1.11

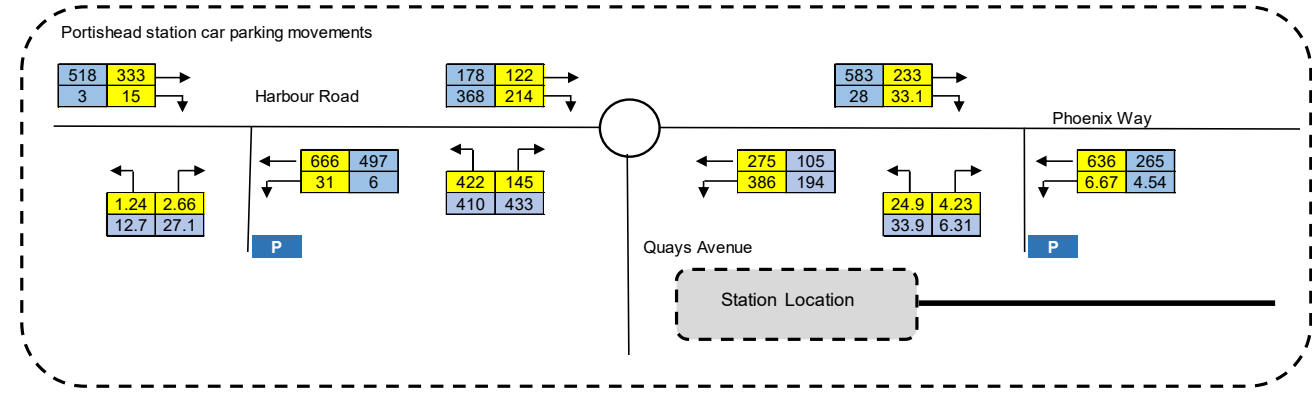
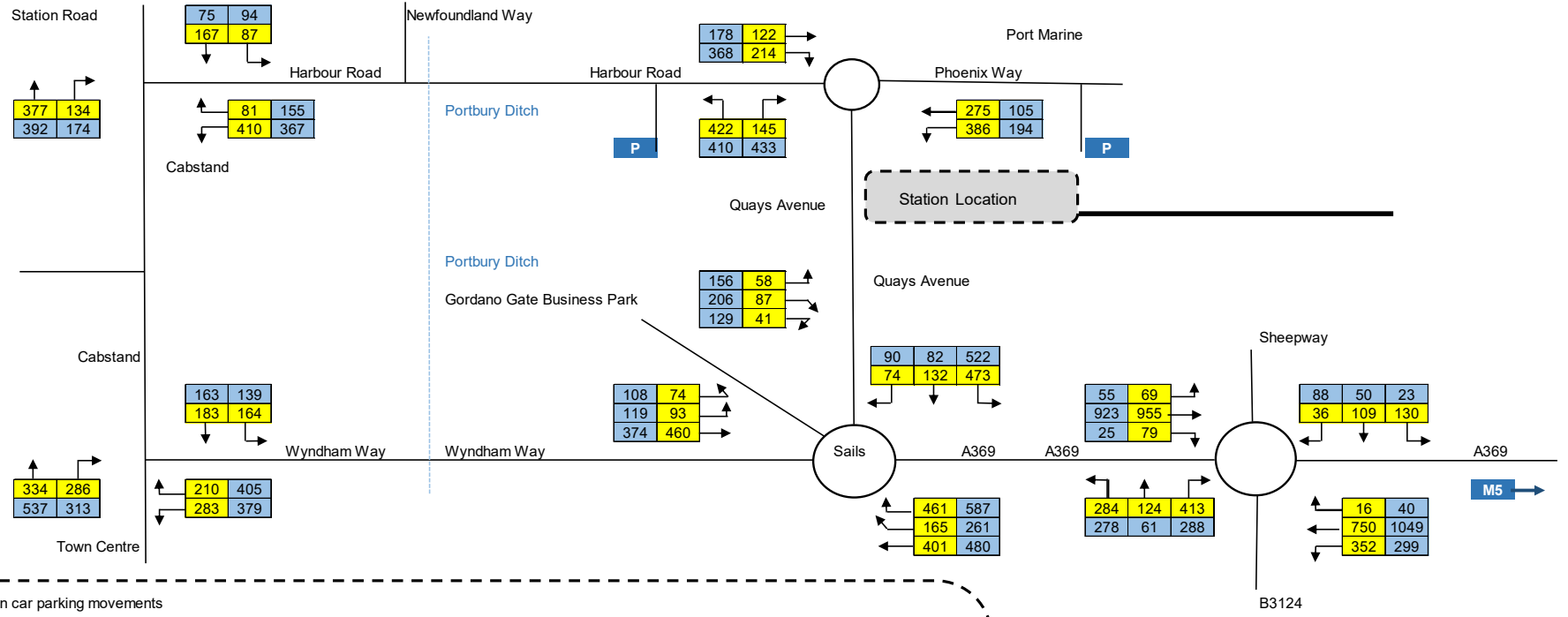


Portishead: 2021 Flows with Scheme

MetroWest Phase I: Portishead 2021 Opening Year and Development PCUs

Key

08-00 to 09-00
17-00 to 18-00

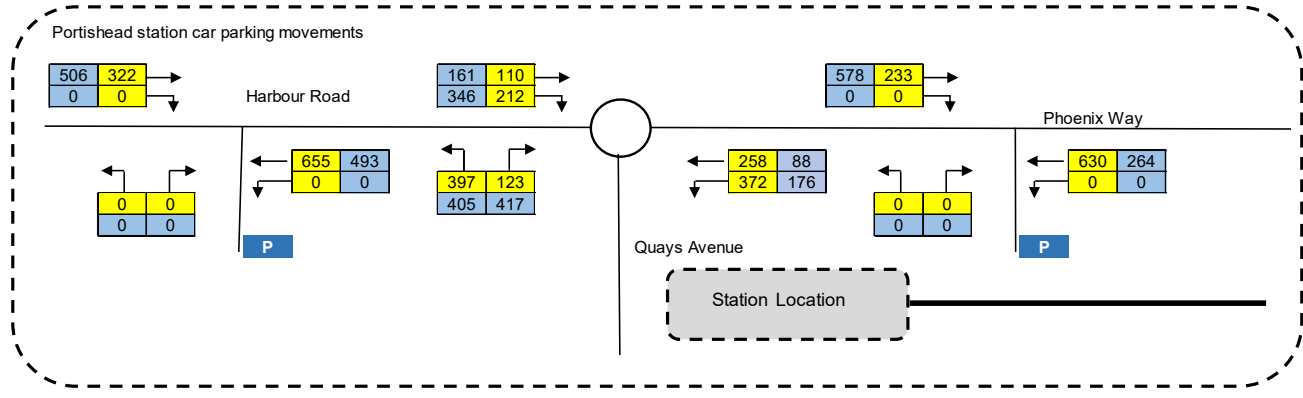
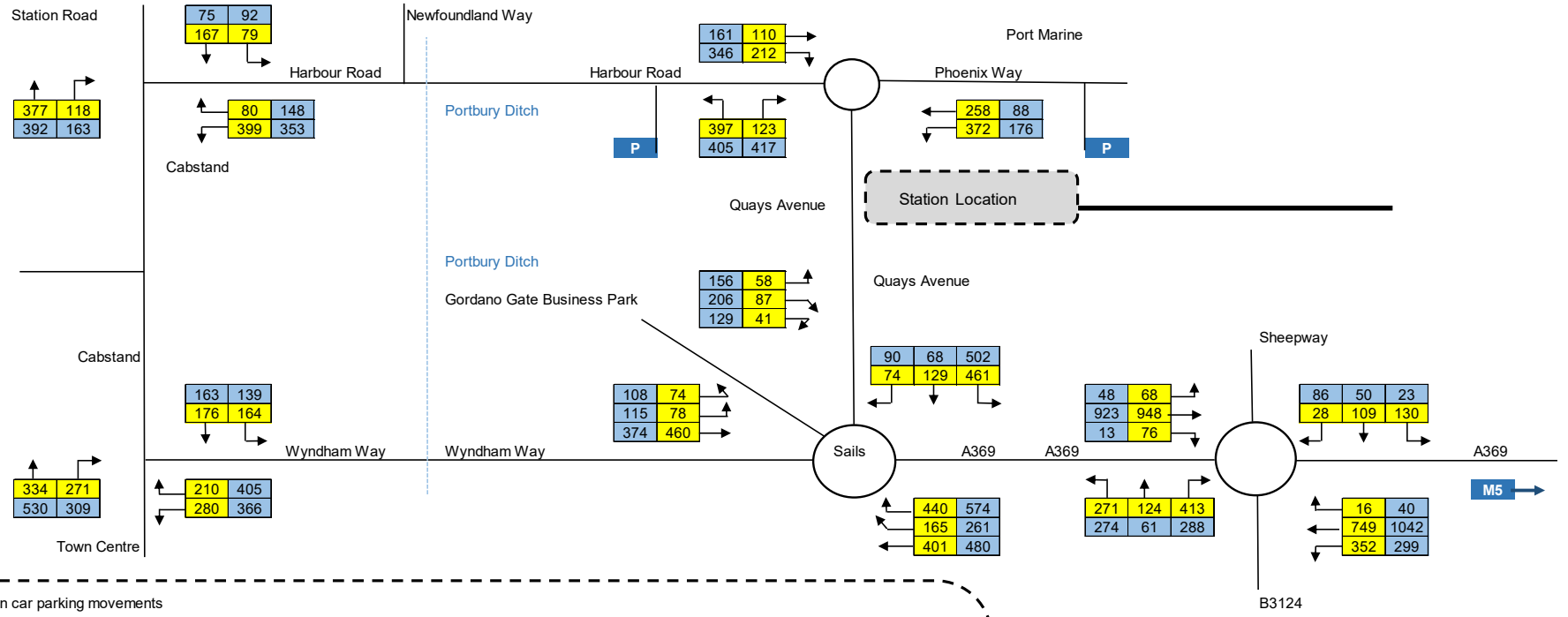


Portishead: 2021 Flows

MetroWest Phase I: Portishead
2021 opening year baseflows without development
PCUs

Key
 08-00 to 09-00
 17-00 to 18-00

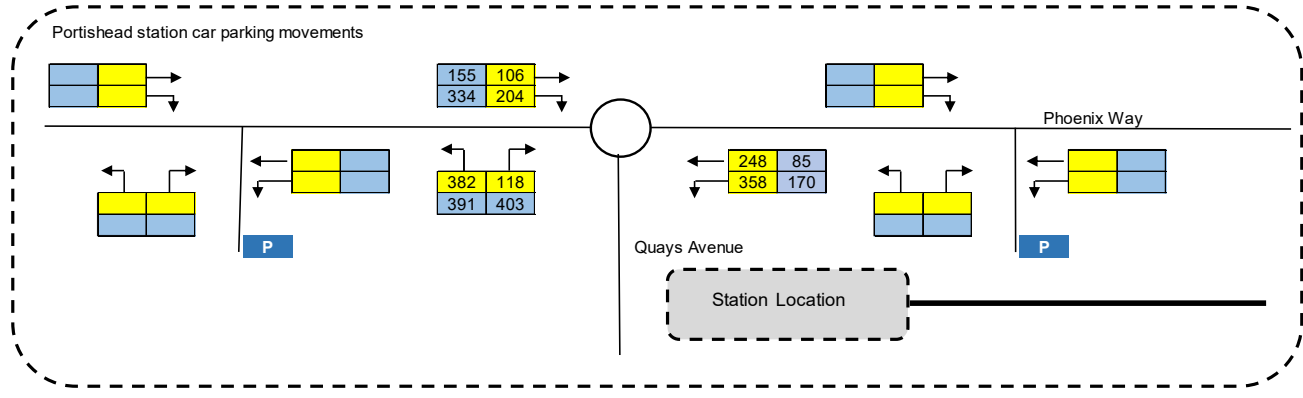
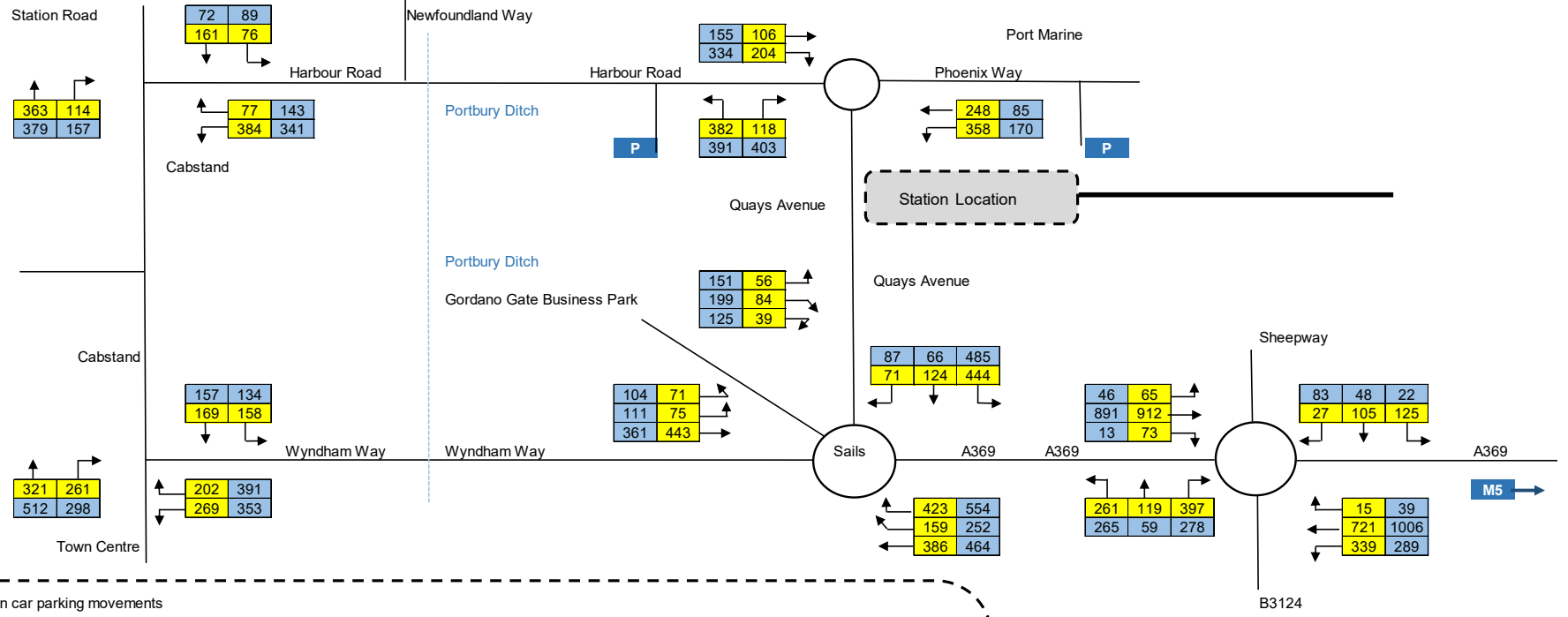
Growth Rates
 AM 1.04
 PM 1.04



Portishead: 2015 Base Flows

MetroWest Phase I: Portishead
Baseline flows - February 2015
PCUs

Key
 08-00 to 09-00
 17-00 to 18-00

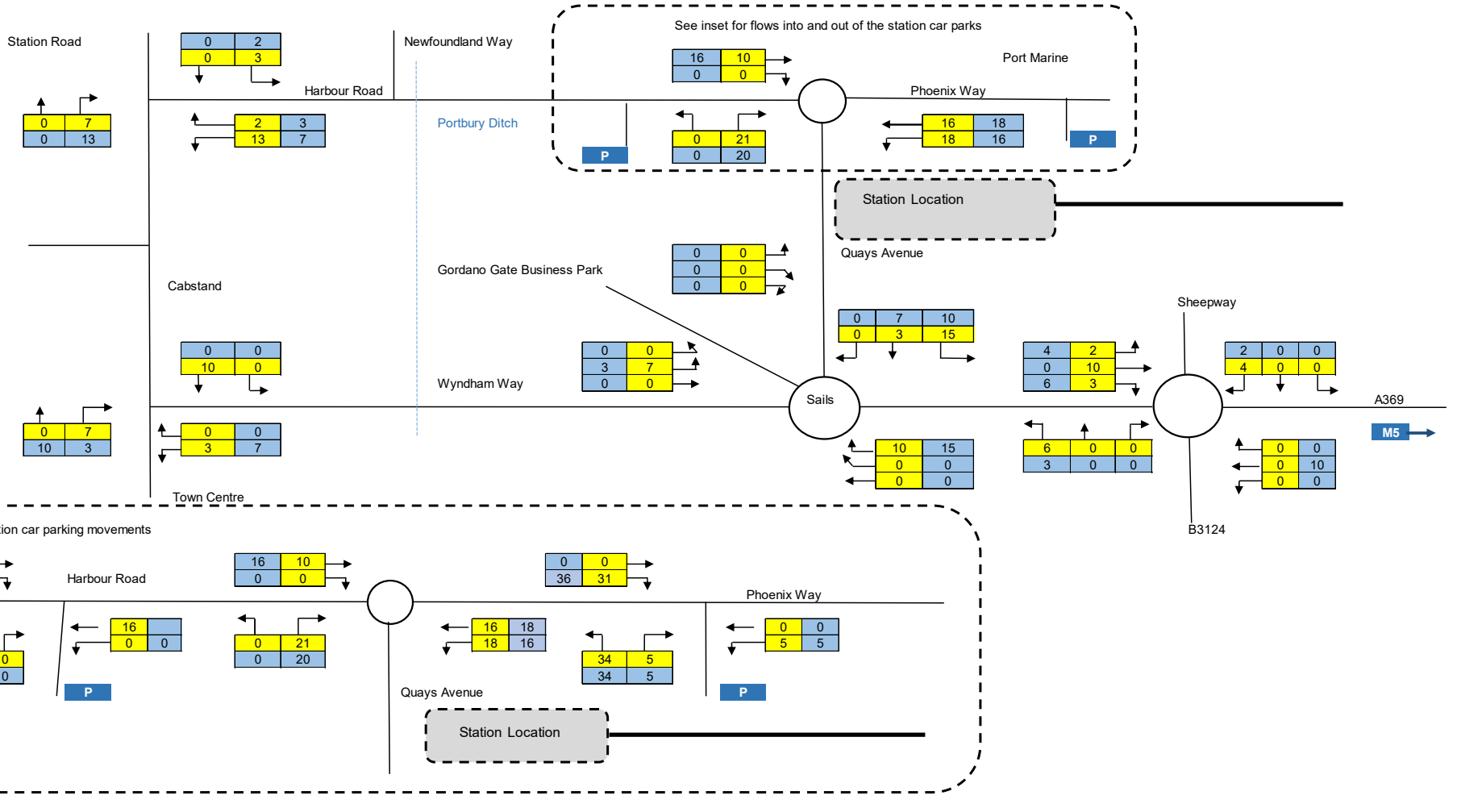


Portishead: 2031 Scheme – Distribution and assignment of drop off and pick up trips

MetroWest Phase I: Portishead
2031 Drop off and Pick Up

Key
 08-00 to 09-00
 17-00 to 18-00

To/from the station
 AM PCUs 39
 PM PCUs 39



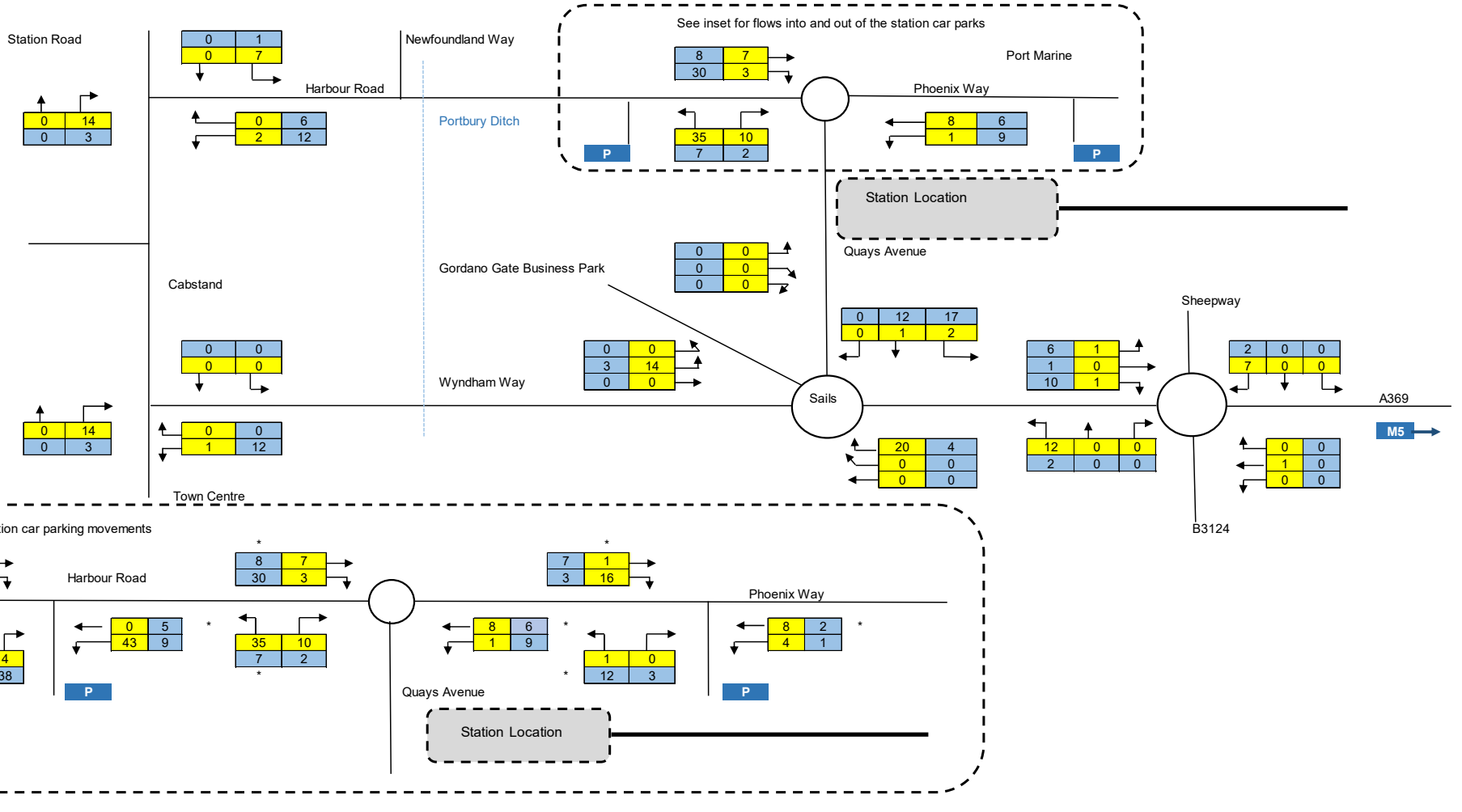
Portishead: 2031 Scheme – Distribution and assignment of driver only trips

MetroWest Phase I: Portishead 2031 Trips to the station Drivers Only

Key
 08-00 to 09-00
 17-00 to 18-00

To the station
 AM PCUs 81
 PM PCUs 17

From the station
 AM PCUs 7
 PM PCUs 71



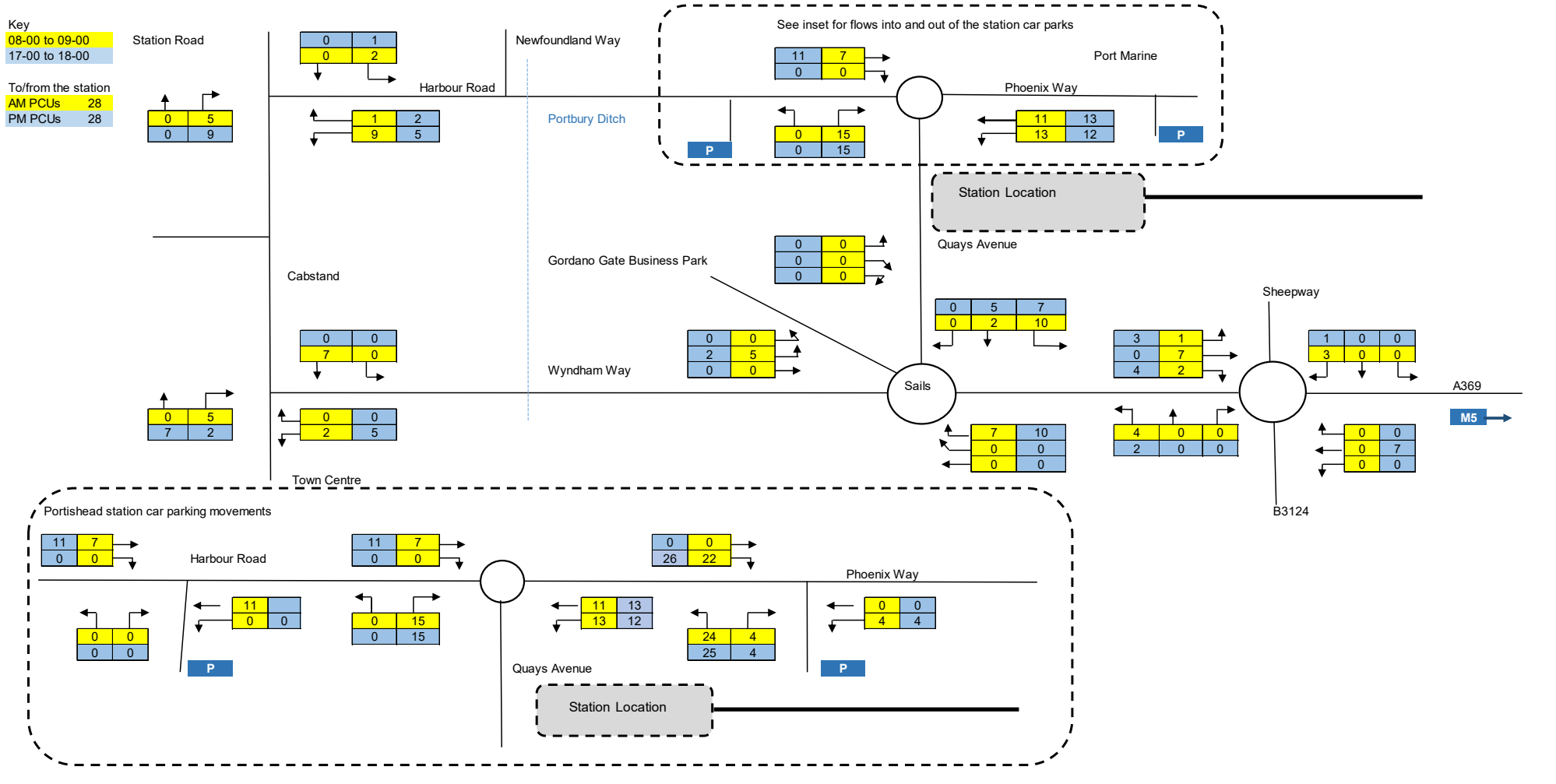
Portishead: 2021 Scheme – Distribution and assignment of drop off and pick up trips

MetroWest Phase I: Portishead 2021 Drop off and Pick Up

Key

08-00 to 09-00
17-00 to 18-00

To/from the station
AM PCUs 28
PM PCUs 28



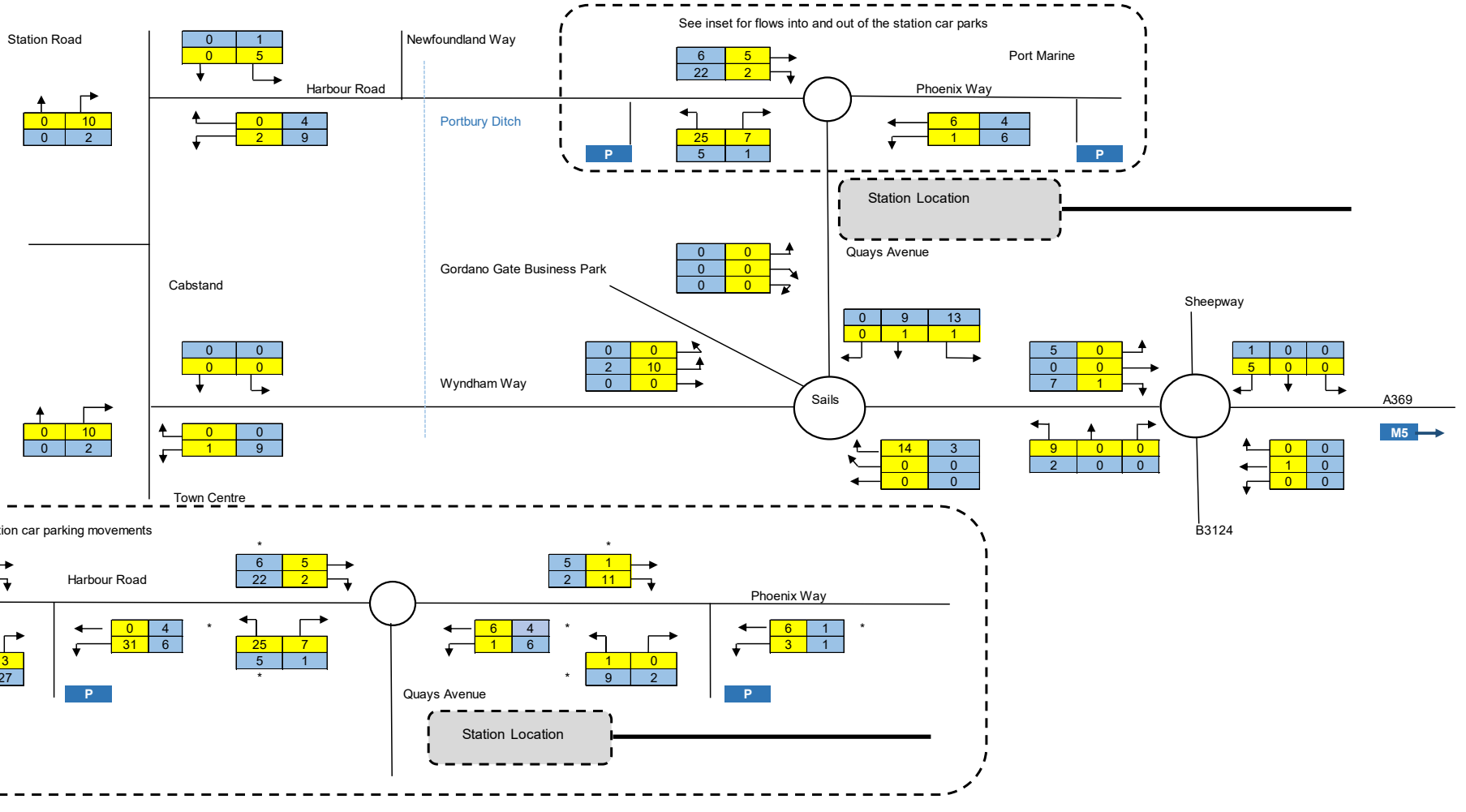
Portishead: 2021 Scheme – Distribution and assignment of driver only trips

MetroWest Phase I: Portishead 2021 Trips to the station Drivers Only

Key
08-00 to 09-00
17-00 to 18-00

To the station
AM PCUs 59
PM PCUs 12

From the station
AM PCUs 5
PM PCUs 51



Portishead: Trip generation

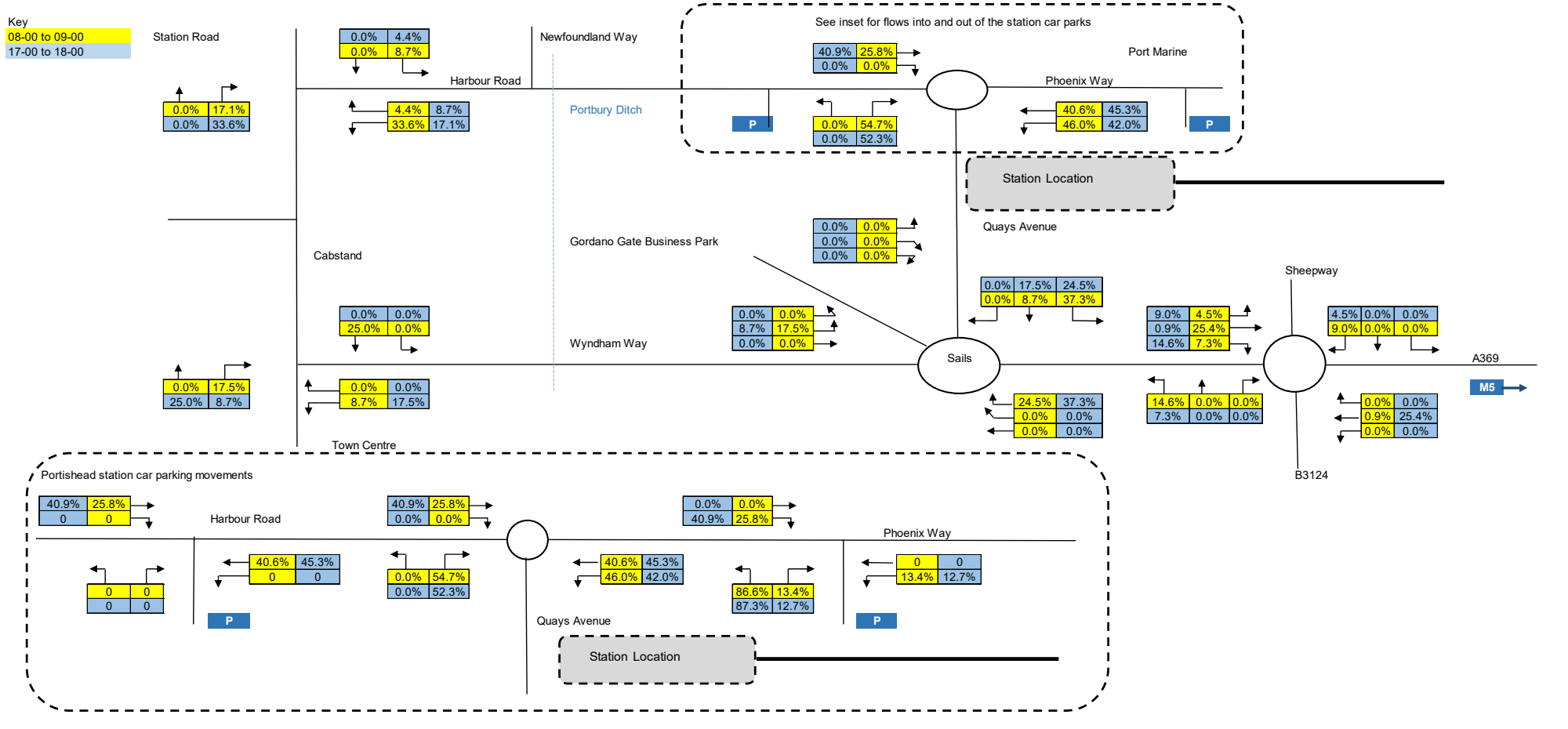
Portishead Trip Generation Figures

2021	Entry	Exit	Car%	Drop off %	Car Entry	Car Exit	Drop off
0800 to 0900	182	16	0.324	0.143	59	5	28
1700 to 1800	38	158	0.324	0.143	12	51	28
2031	Entry	Exit	Car%	Drop off %	Car Entry	Car Exit	Drop off
0800 to 0900	251	22	0.324	0.143	81	7	39
1700 to 1800	53	218	0.324	0.143	17	71	39

Portishead: Development distribution of drop off and pick up trips

MetroWest Phase I: Portishead
Development Distribution - Drop Off and Pick Up

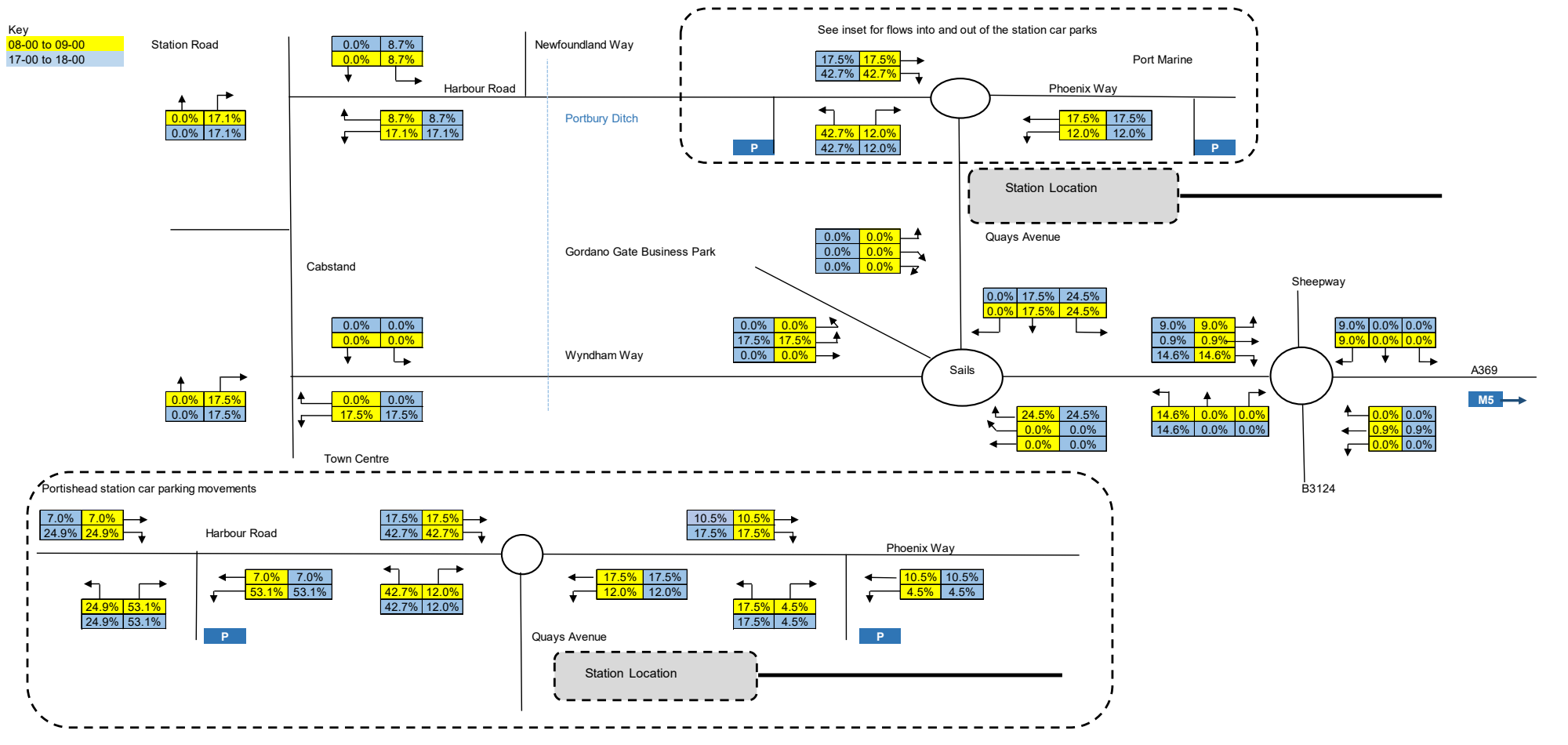
Key
08-00 to 09-00
17-00 to 18-00



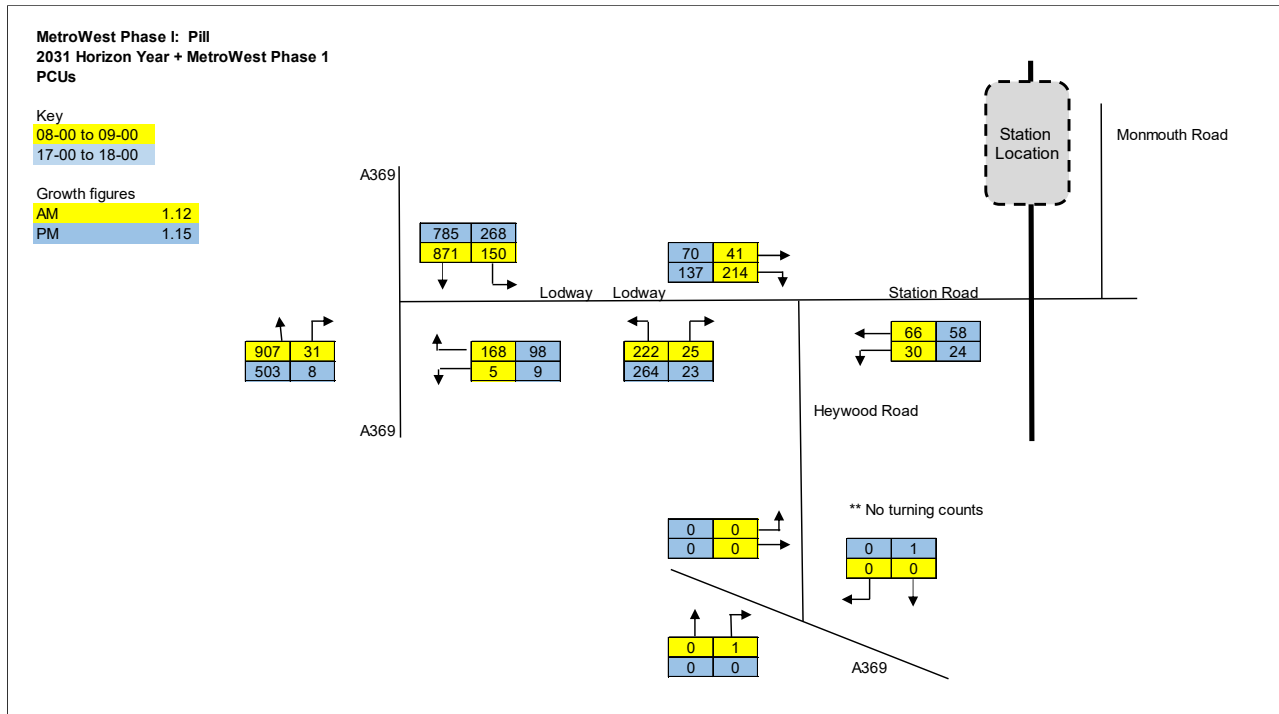
Portishead: Development distribution of driver only trips

MetroWest Phase I: Portishead Development Distribution - Drivers Only

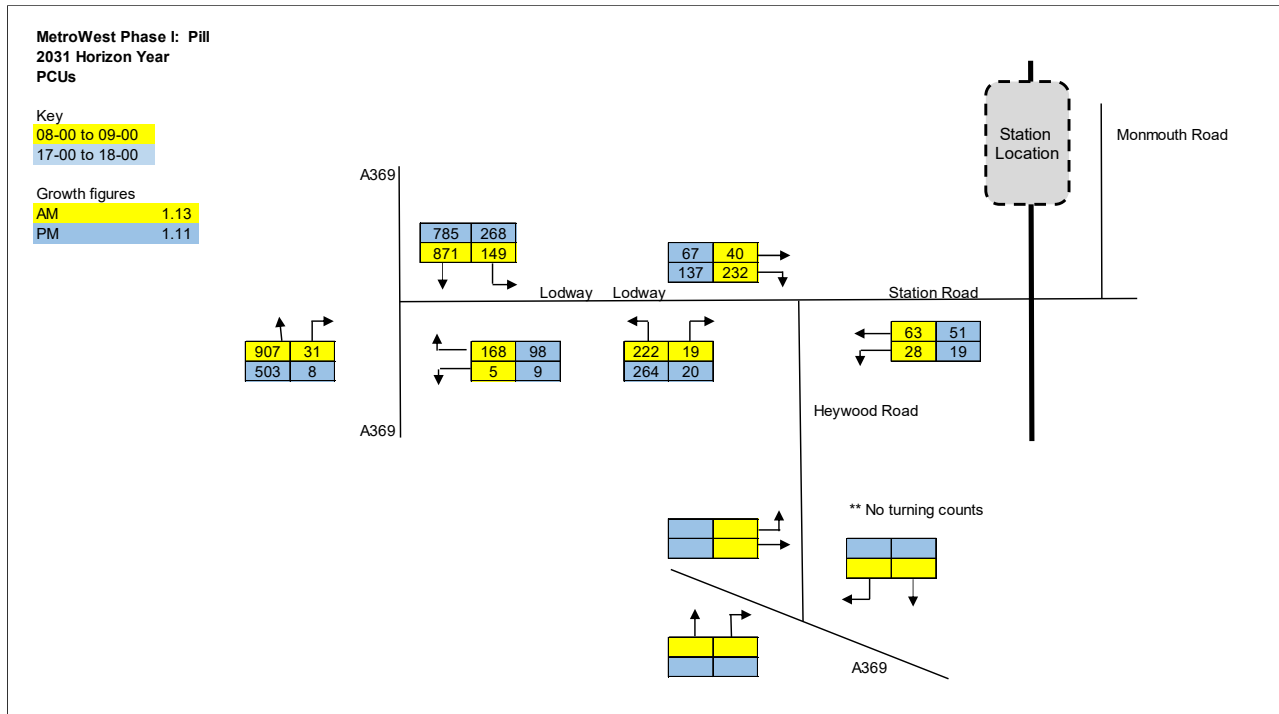
Key
 08-00 to 09-00
 17-00 to 18-00



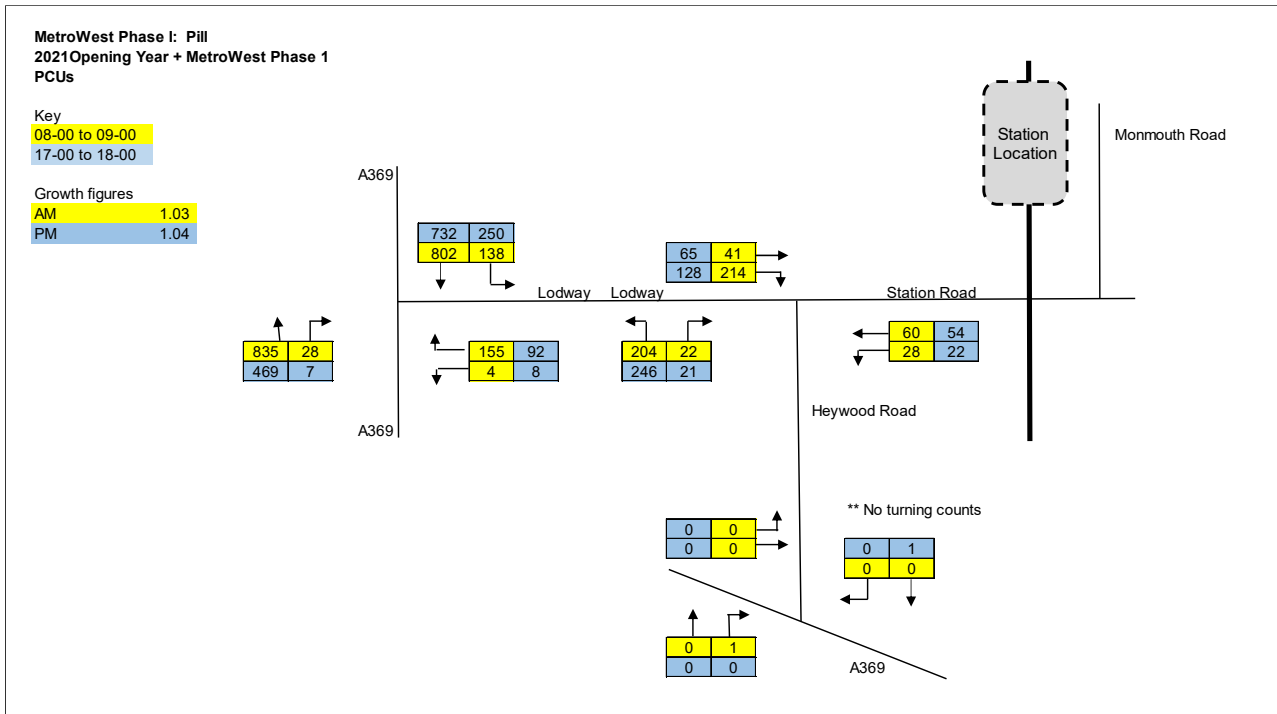
Pill: 2031 Flows with Scheme



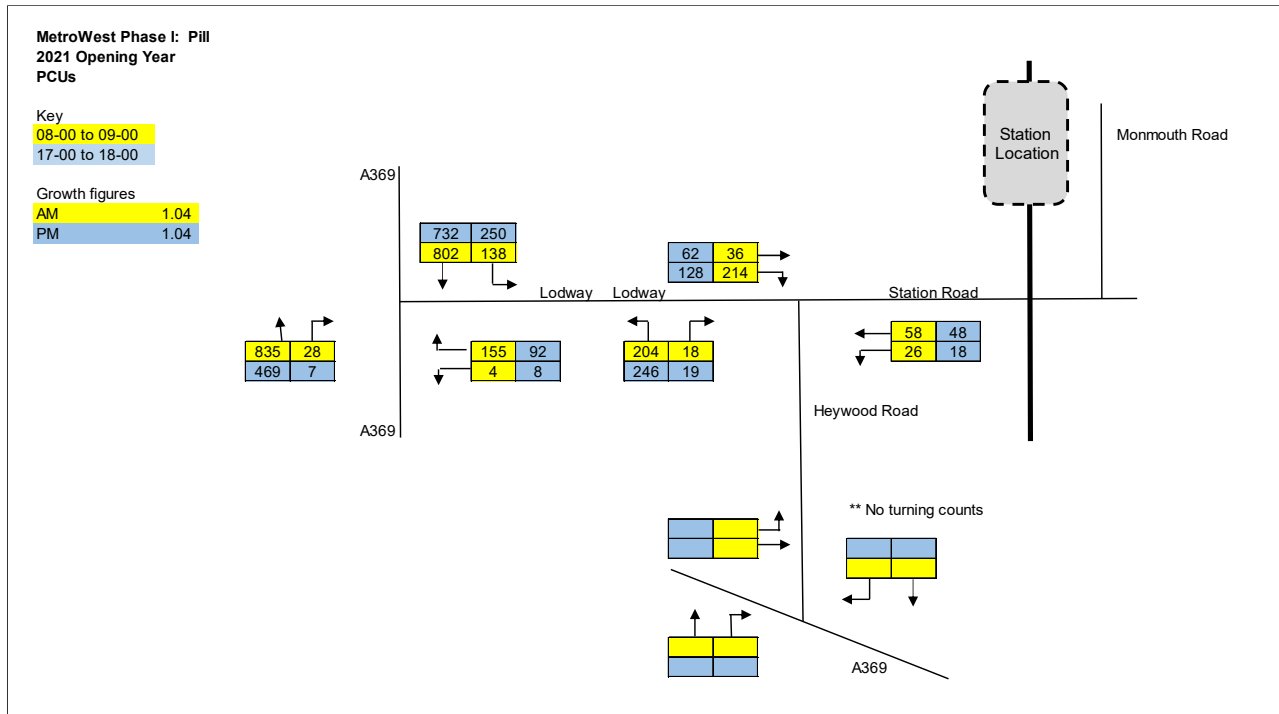
Pill: 2031 Flows



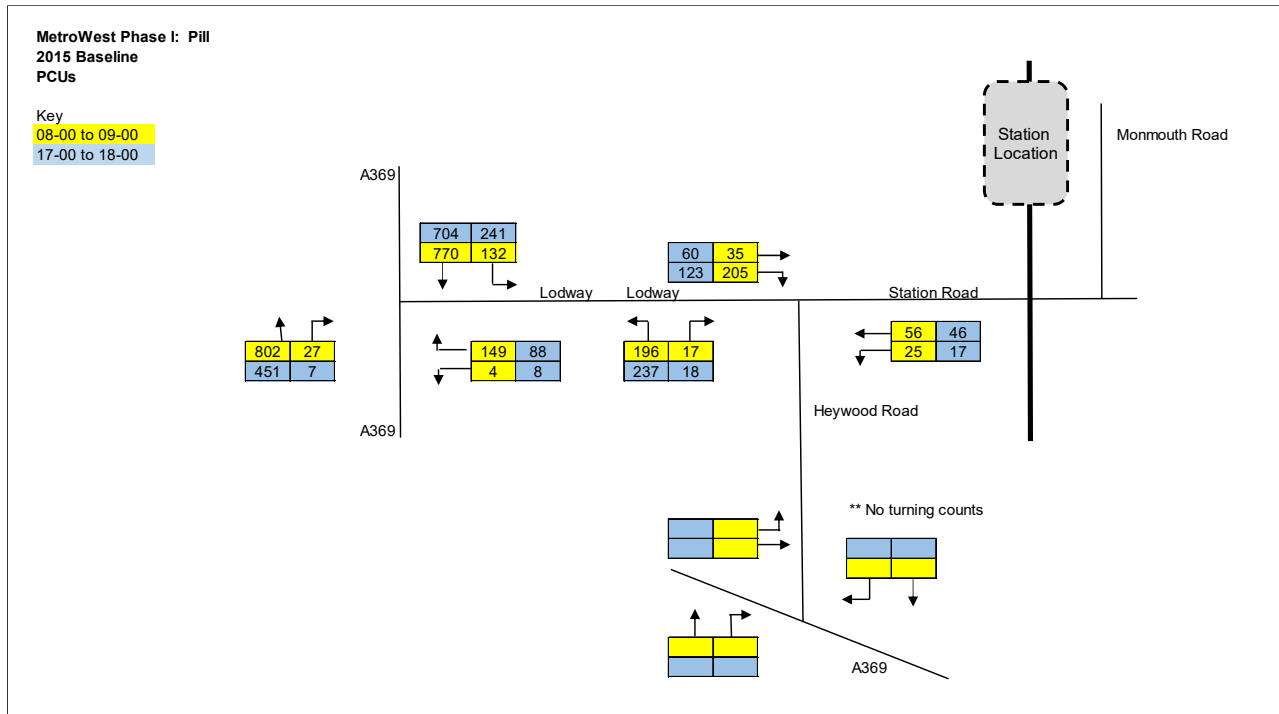
Pill: 2021 Flows with Scheme



Pill: 2021 Flows



Pill: 2015 Base Flows

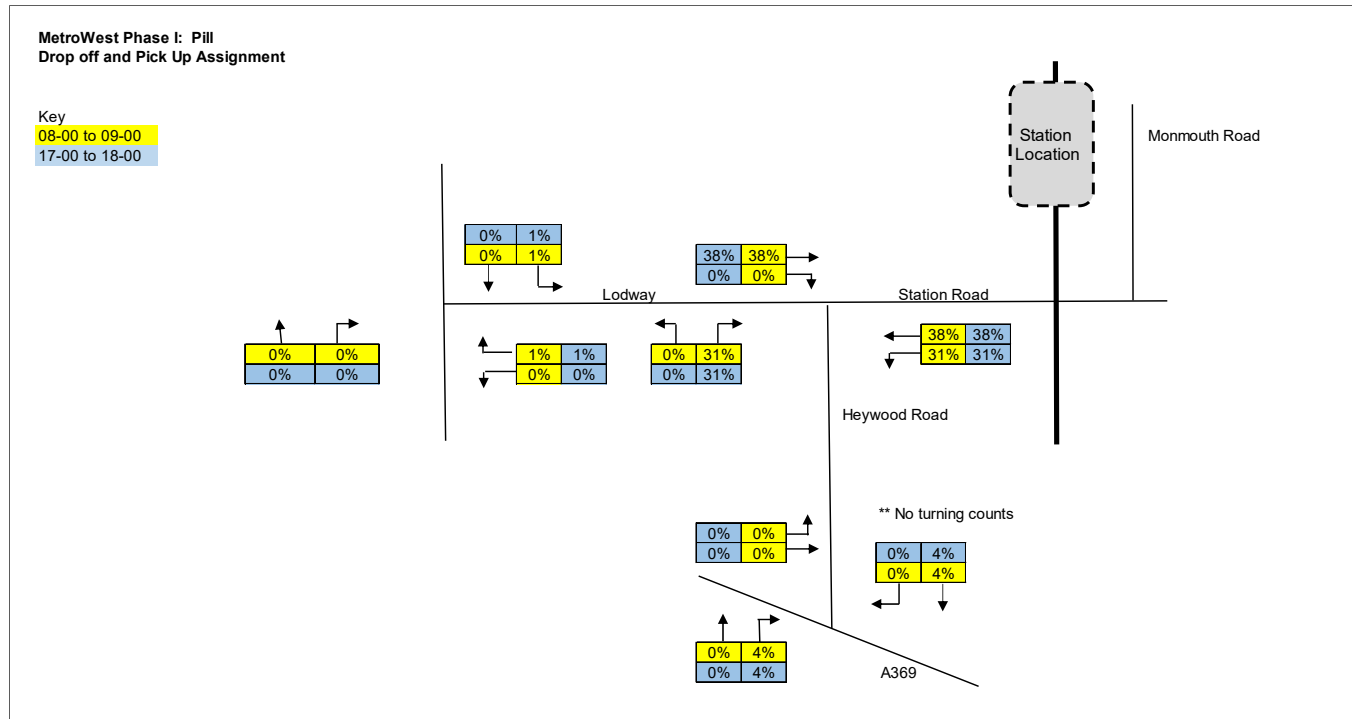


Pill: Trip generation

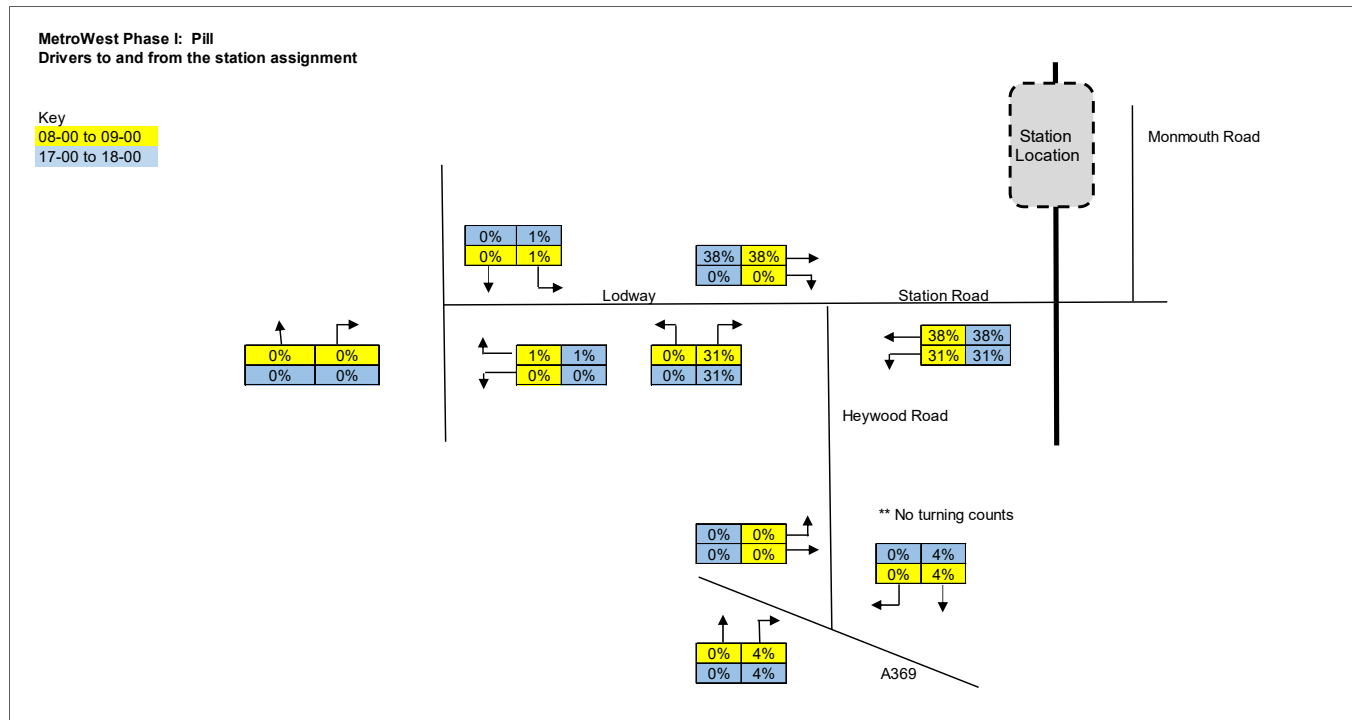
Pill Trip Generation Figures

2021	Entry	Exit	Car%	Drop off %	Car Entry	Car Exit	Drop off
0800 to 0900	30.3	2.6	0.303	0.134	9	1	4
1700 to 1800	6.4	32.9	0.303	0.134	2	10	5
2031	Entry	Exit	Car%	Drop off %	Car Entry	Car Exit	Drop off
0800 to 0900	41.7	3.6	0.303	0.134	13	1	6
1700 to 1800	8.8	36.5	0.303	0.134	3	11	6

Pill: Development distribution of drop off and pick up trips



Pill: Development distribution of driver only trips



Summary of turning counts recorded

Summary of Turning Count Flows Recorded

Sheepway/Portbury/Wyndham Way	Portbury 100			Portbury Common			Wyndham Way			Sheepway		
	To: Portbury Common	To: Wyndham Way	To: Sheepway	To: Wyndham Way	To: Sheepway	To: Portbury 100	To: Sheepway	To: Portbury 100	To: Portbury Common	To: Portbury 100	To: Portbury Common	To: Wyndham Way
07-00 to 08-00	39.6%	59.2%	1.2%	14.5%	5.3%	80.3%	1.4%	95.1%	3.5%	76.6%	20.1%	3.3%
08-00 to 09-00	31.5%	67.0%	1.4%	33.6%	15.3%	51.1%	6.2%	86.9%	7.0%	48.6%	41.1%	10.3%
09-00 to 10-00	25.2%	71.5%	3.2%	44.6%	4.8%	50.6%	3.6%	82.0%	14.4%	40.0%	27.0%	33.0%
15-00 to 16-00	61.6%	26.8%	11.6%	45.8%	11.2%	43.0%	3.7%	69.4%	26.9%	19.8%	41.5%	38.7%
16-00 to 17-00	21.2%	75.0%	3.9%	40.6%	6.2%	53.2%	3.9%	71.4%	24.7%	19.3%	45.5%	35.2%
17-00 to 18-00	21.7%	75.4%	2.9%	44.0%	9.8%	46.2%	4.9%	93.7%	1.4%	14.3%	31.4%	54.3%
18-00 to 19-00	21.1%	75.6%	3.3%	50.6%	11.0%	38.3%	5.7%	92.1%	2.2%	6.0%	26.0%	68.0%

Quays Avenue/Wyndham Way/Serbert Way	Wyndham N (from Town Centre)			Serbert Way			Quays Avenue			Wyndham S (from Sheepway junction)		
	To: Serbert Way	To: Quays Avenue	To: Wyndham S	To: Quays Avenue	To: Wyndham S	To: Wyndham N	To: Serbert Way	To: Wyndham S	To: Wyndham N	To: Serbert Way	To: Wyndham N	To: Quays Avenue
07-00 to 08-00	4.5%	3.8%	91.7%	18.0%	62.3%	19.7%	86.2%	6.8%	7.0%	69.5%	23.3%	7.2%
08-00 to 09-00	12.1%	12.7%	75.2%	31.0%	47.1%	21.8%	69.5%	19.4%	11.2%	39.9%	16.4%	43.7%
09-00 to 10-00	13.4%	8.6%	78.0%	27.4%	54.8%	17.8%	74.4%	13.9%	11.7%	36.5%	20.1%	43.3%
15-00 to 16-00	18.5%	16.3%	65.2%	30.4%	42.1%	27.4%	73.0%	16.8%	10.2%	42.4%	17.0%	40.5%
16-00 to 17-00	16.4%	16.4%	67.2%	29.7%	45.1%	25.2%	75.6%	12.9%	11.5%	45.4%	17.2%	37.4%
17-00 to 18-00	18.1%	19.2%	62.7%	31.7%	41.9%	26.4%	76.1%	10.3%	13.6%	36.5%	19.8%	43.6%
18-00 to 19-00	20.9%	14.3%	64.9%	34.5%	35.1%	30.4%	77.9%	10.1%	12.0%	41.0%	15.3%	43.8%

Cabstand/Wyndham Way/High Street	Wyndham (To Town Centre)		High Street		Cabstand	To: High Street	U-turn
	To: High Street	To: Cabstand	To: Cabstand	To: Wyndham			
07-00 to 08-00	57.0%	43.0%	44.5%	55.5%	46.4%	53.1%	0.5%
08-00 to 09-00	57.1%	42.9%	55.2%	44.8%	47.9%	51.1%	1.0%
09-00 to 10-00	51.7%	48.3%	48.8%	51.2%	60.5%	38.5%	1.1%
15-00 to 16-00	46.6%	53.4%	51.7%	48.3%	53.4%	46.3%	0.3%
16-00 to 17-00	46.8%	53.2%	56.3%	41.7%	52.0%	46.9%	1.1%
17-00 to 18-00	47.4%	52.6%	63.2%	36.8%	45.3%	53.1%	1.6%
18-00 to 19-00	46.1%	53.9%	63.2%	36.8%	46.8%	52.3%	0.9%

Phoenix Way/Quays Avenue/Harbour Road	Quays Avenue		Harbour Road		Phoenix Way	
	To: Harbour Road	To: Phoenix Way	To: Phoenix Way	To: Quays Avenue	To: Harbour Road	To: Quays Avenue
07-00 to 08-00	73.0%	27.0%	14.1%	85.9%	24.4%	75.6%
08-00 to 09-00	76.5%	23.5%	34.1%	65.9%	41.0%	59.0%
09-00 to 10-00	69.9%	30.1%	22.1%	77.9%	28.5%	71.5%
15-00 to 16-00	52.8%	47.2%	43.1%	56.9%	32.6%	67.4%
16-00 to 17-00	51.6%	48.4%	32.6%	67.4%	29.3%	70.7%
17-00 to 18-00	49.2%	50.8%	30.9%	69.1%	33.3%	66.7%
18-00 to 19-00	50.1%	49.9%	38.6%	61.4%	34.9%	65.1%

Station Road/Harbour Road/Cabstand	Station Road		Harbour Road		Cabstand Road	
	To: Harbour Road	To: Cabstand	To: Cabstand	To: Station Road	To: Harbour Road	To: Station Road
07-00 to 08-00	25.2%	74.8%	91.8%	8.2%	33.5%	66.5%
08-00 to 09-00	32.1%	67.9%	83.3%	16.7%	23.9%	76.1%
09-00 to 10-00	32.3%	67.7%	81.6%	18.4%	21.5%	78.5%
15-00 to 16-00	44.8%	55.2%	81.1%	18.9%	21.6%	78.4%
16-00 to 17-00	40.1%	59.9%	78.4%	21.6%	24.7%	75.3%
17-00 to 18-00	55.6%	44.4%	70.4%	29.6%	29.4%	70.6%
18-00 to 19-00	43.1%	56.9%	69.8%	30.2%	34.3%	65.7%

Station Road/Heywood Road/Lodway	Station Road		Heywood Road		Lodway	
	To: Heywood Road	To: Lodway	To: Station Road	To: Lodway	To: Station Road	To: Heywood Road
07-00 to 08-00	30.5%	69.5%	4.2%	95.8%	19.8%	80.2%
08-00 to 09-00	30.9%	69.1%	8.2%	91.8%	14.6%	85.4%
09-00 to 10-00	29.0%	71.0%	5.2%	94.8%	32.1%	67.9%
15-00 to 16-00	28.9%	71.1%	8.5%	91.5%	33.3%	66.7%
16-00 to 17-00	18.9%	81.1%	10.8%	89.2%	33.3%	66.7%
17-00 to 18-00	29.2%	70.8%	6.9%	93.1%	32.8%	67.2%
18-00 to 19-00	19.6%	80.4%	10.3%	89.7%	32.9%	67.1%

Monmouth Road/Back Lane/Station Road	Station Road		Monmouth Road		Back Lane	
	To: Monmouth Road	To: Back Lane	To: Back Lane	To: Station Road	To: Station Road	To: Monmouth Road
07-00 to 08-00	100.0%	0.0%	2.6%	97.4%	100.0%	0.0%
08-00 to 09-00	100.0%	0.0%	0.0%	100.0%	100.0%	0.0%
09-00 to 10-00	100.0%	0.0%	2.4%	97.6%	100.0%	0.0%
15-00 to 16-00	97.4%	2.6%	0.0%	100.0%	100.0%	0.0%
16-00 to 17-00	93.8%	6.3%	0.0%	100.0%	83.3%	16.7%
17-00 to 18-00	96.2%	3.8%	0.0%	100.0%	100.0%	0.0%
18-00 to 19-00	92.9%	7.1%	0.0%	100.0%	100.0%	0.0%