

Technical Note B

Project: Wisbech Area Transport Study	To: FDC
Subject: Analysing Future Year Trip Distribution	From: Atkins
Date: 16/11/2010	cc:

1. Introduction

Atkins Transport Planning and Management was commissioned by Cambridgeshire County Council (CCC) and Fenland District Council (FDC) in January 2008 to produce a transport model for FDC. The model provides forecasts for the future land use planning of Wisbech and its surrounding area and is designed to inform their Local Development Framework (LDF).

The scope of the Wisbech Area Transport Study (WATS) was to provide a transport model for Base Year (2008) and three Forecast Years (2016, 2021 and 2026).

In July 2010 FDC has re-commissioned Atkins to carry out additional tasks to complete the Wisbech LDF modelling work comprising further analysis on the forecast year trip distribution, defining additional options and testing and investigating the impacts of the public transport interventions.

This technical note analyse the level of usage of the Western Relief Road (WRR) and routing of traffic generated by the developments identified in the LDF. This is in response to discussions with the Highways Agency, FDC and CCC at a meeting in November 2009.

2. Wisbech Model

2.1 Model Overview

The highway model of Wisbech was created using the SATURN modelling suite developed and maintained by Atkins.

The modelled time periods are:

- AM Peak Period (08:00 – 09:00);
- Inter Peak Period (14:00 – 15:00); and
- PM Peak Period (17:00 – 18:00).

The following six User Classes (UC) were modelled:

- User Class 1 (UC1) – Home-Based Work (HBW) – light vehicles;
- User Class 2 (UC2) – Home-Based Education (HBE) – light vehicles;
- User Class 3 (UC3) – Employer's Business (EB) – light vehicles;
- User Class 4 (UC4) – Other Trip Purposes (OTP) – light vehicles;
- User Class 5 (UC5) – Other Goods Vehicle Type 1 (OGV1) – medium goods vehicles; and
- User Class 6 (UC6) – Other Goods Vehicle Type 2 (OGV2) – heavy goods vehicles.

2.2 Future Test Scenarios

Previously seven tests were carried out on scenarios defined by the FDC, this included tests with and without infrastructure. Among the seven scenarios the following two scenarios, Test 1 and Test 5 have been analysed in this note to identify the percentage of traffic using the WRR, previously using the Town Bridge and Freedom Bridge, and distribution of development trips.

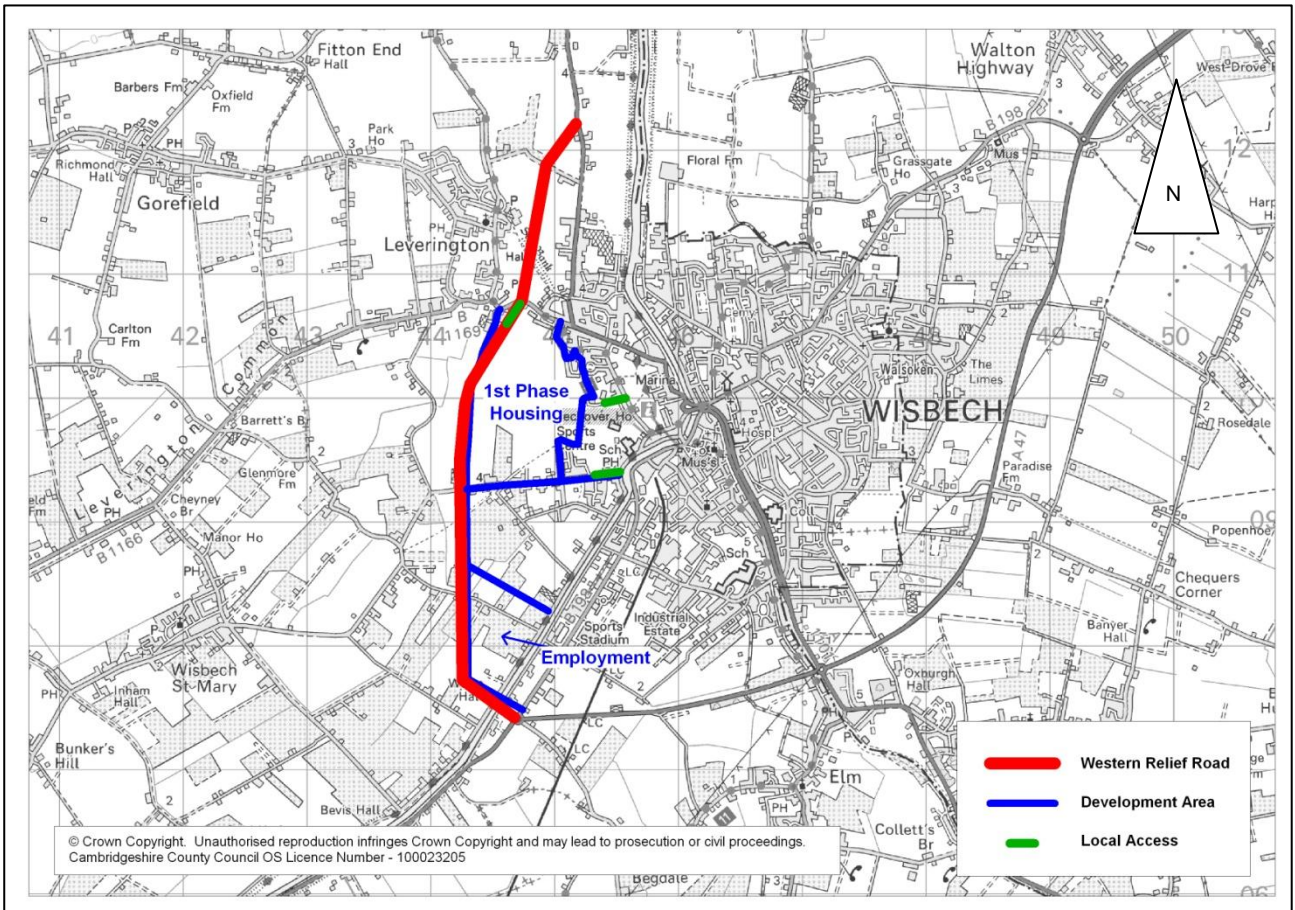
Test 1

This test consists of areas of housing and employment with local site accesses to the western side of Wisbech and WRR as shown in Figure 2.1 and the phasing of development in Table 2.1.

Table 2.1 – Phasing of Test 1 Development

Description	2016	2021	2026	Total
Number of houses	0	1000	1000	2000
Acres of employment	0	50	50	100

Figure 2.1 – Test 1 Scenario



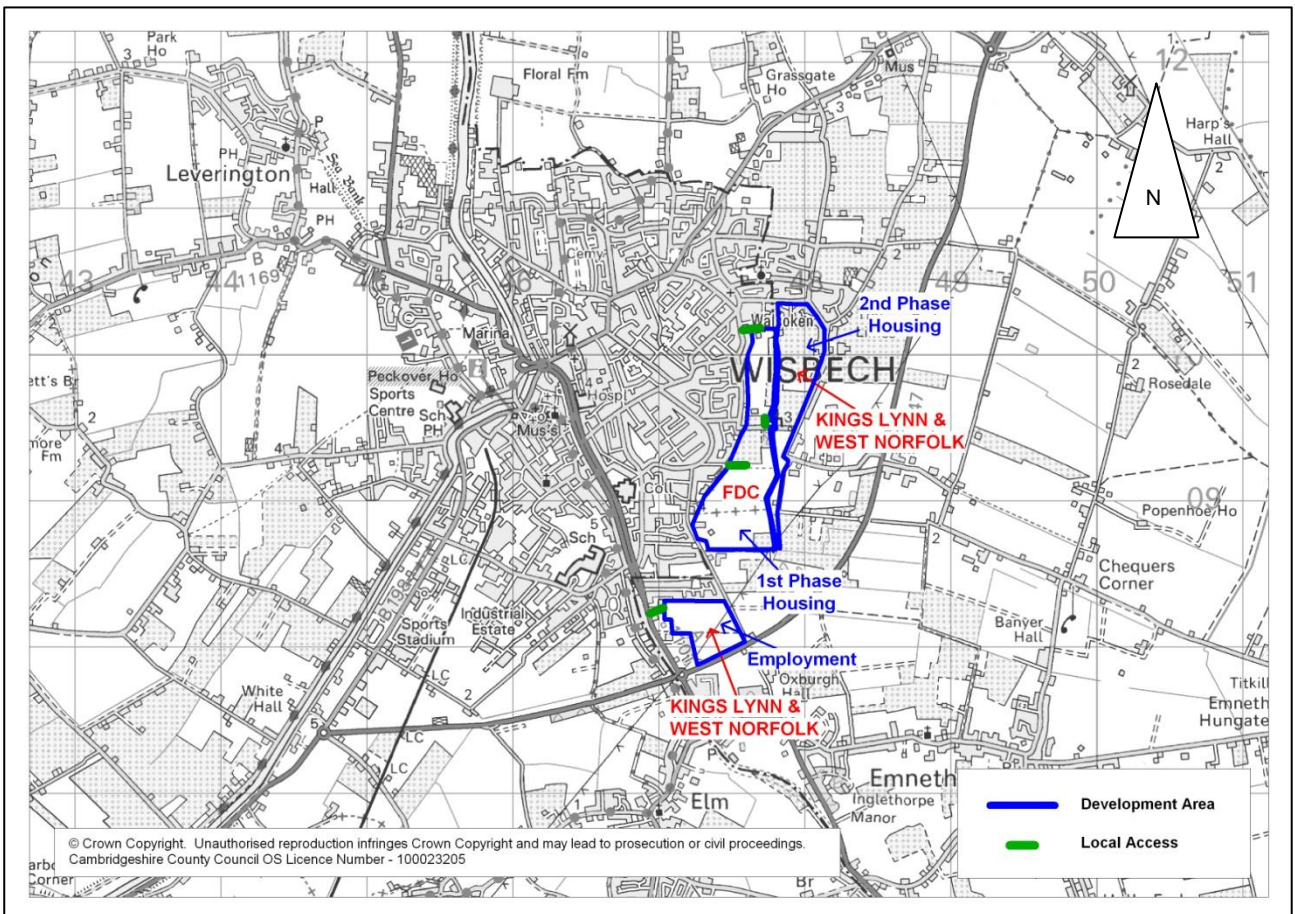
Test 5

This test consists of areas of housing and employment with local site accesses to the eastern side of Wisbech as shown in Figure 2.2 and the phasing of development in Table 2.2.

Table 2.2 - Phasing of Test 5 Development

Description	2016	2021	2026	Total
Number of houses	800	700	400	1900
Acres of employment	0	3.7	0	3.7

Figure 2.2 - Test 5 Scenario



3. Western Relief Road

A western bypass, Western Relief Road (WRR), for Wisbech has been assessed as part of the LDF tests to provide an alternative route to traffic currently using the river crossings in Wisbech, and to assist development to be brought forward on the western side of Wisbech.

The benefits expected from this bypass scheme are congestion relief and improvement in the fields of safety, accessibility, integration, air quality, noise and visual intrusion.

The percentage of traffic that currently is using Freedom Bridge and Town Bridge but could transfer to the WRR was assessed to see how much congestion relief could be achieved for the two bridges by implementing the bypass scheme.

With this aim a series of tests have been developed for Test 1 scenario (AM, IP and PM time periods and for all forecast years) where traffic are banned from using the WRR, but all other network element remains identical. So in the tests the increase in traffic on the two bridges represents the traffic that is forced to use the bridges in absence of the WRR scheme.

Accordingly the difference in traffic on the two bridges between Test 1 with and without WRR models is a representation of the likely traffic demands diverting to the WRR from the two bridges.

The following tables show the number and percentage of traffic (w.r.t. total traffic using bridges) that currently is using Freedom Bridge and Town Bridge but have the potential to transfer to the WRR.

Table 3.1 – Traffic demands diverting to WRR (vehicles)

Year	Time Period	From Freedom Bridge		From Town Bridge	
		WB	EB	WB	EB
2016	AM	77	333	59	58
	IP	161	227	112	135
	PM	197	228	29	130
2021	AM	85	167	57	116
	IP	157	165	110	233
	PM	233	223	15	93
2026	AM	98	52	57	38
	IP	191	26	59	221
	PM	171	152	41	25

Table 3.2 – Traffic demands diverting to WRR(%)

Year	Time Period	From Freedom Bridge		From Town Bridge	
		WB	EB	WB	EB
2016	AM	8%	25%	31%	13%
	IP	15%	19%	42%	44%
	PM	15%	19%	7%	45%
2021	AM	8%	12%	26%	21%
	IP	13%	13%	32%	51%
	PM	15%	17%	3%	29%
2026	AM	9%	4%	24%	8%
	IP	14%	2%	16%	43%
	PM	10%	1%	7%	8%

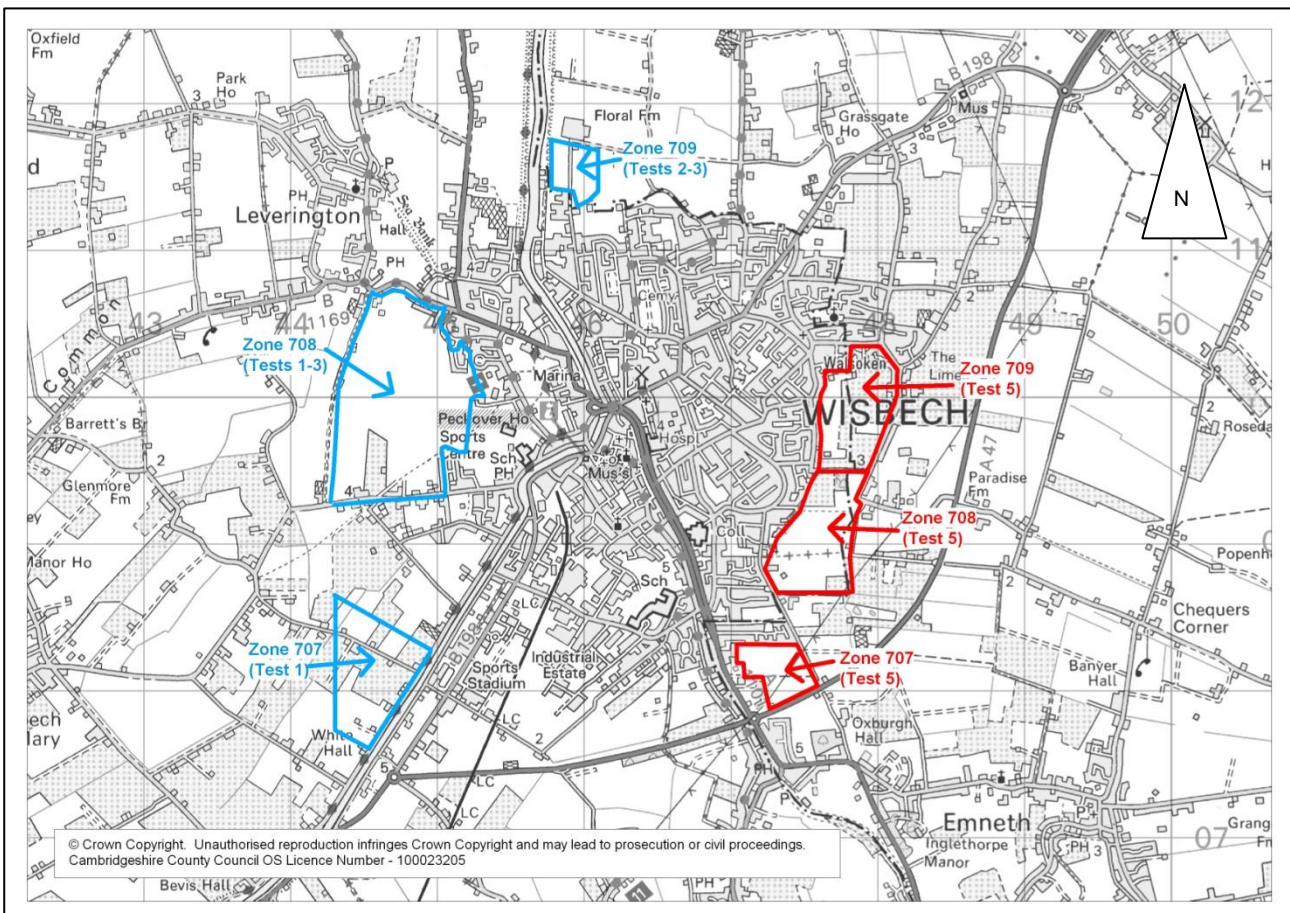
The tables show that generally the combined EB and WB traffic demands have more diverting to the WRR in the IP and PM peak period than in AM period (for both of the bridges).

Generally more traffic travelling EB diverts to WRR than in the WB direction. This diversion trend gradually decreases over time as traffic growth increases, this is particularly evident in the EB direction.

4. Routing of Development Traffic

The LDF development zones are located on the western side in Test 1 and on the eastern side in Test 5 (refer to section 2.2). Figure 4.1 below shows the locations of the LDF development zones and the 'model zones' that represent them.

Figure 4.1 – LDF Development Zones



The zones shown in figure 4.2 and table 4.1 below are referred to as Wisbech town zones in the analysis of the trip distribution.

Figure 4.2 – Wisbech Town Zones

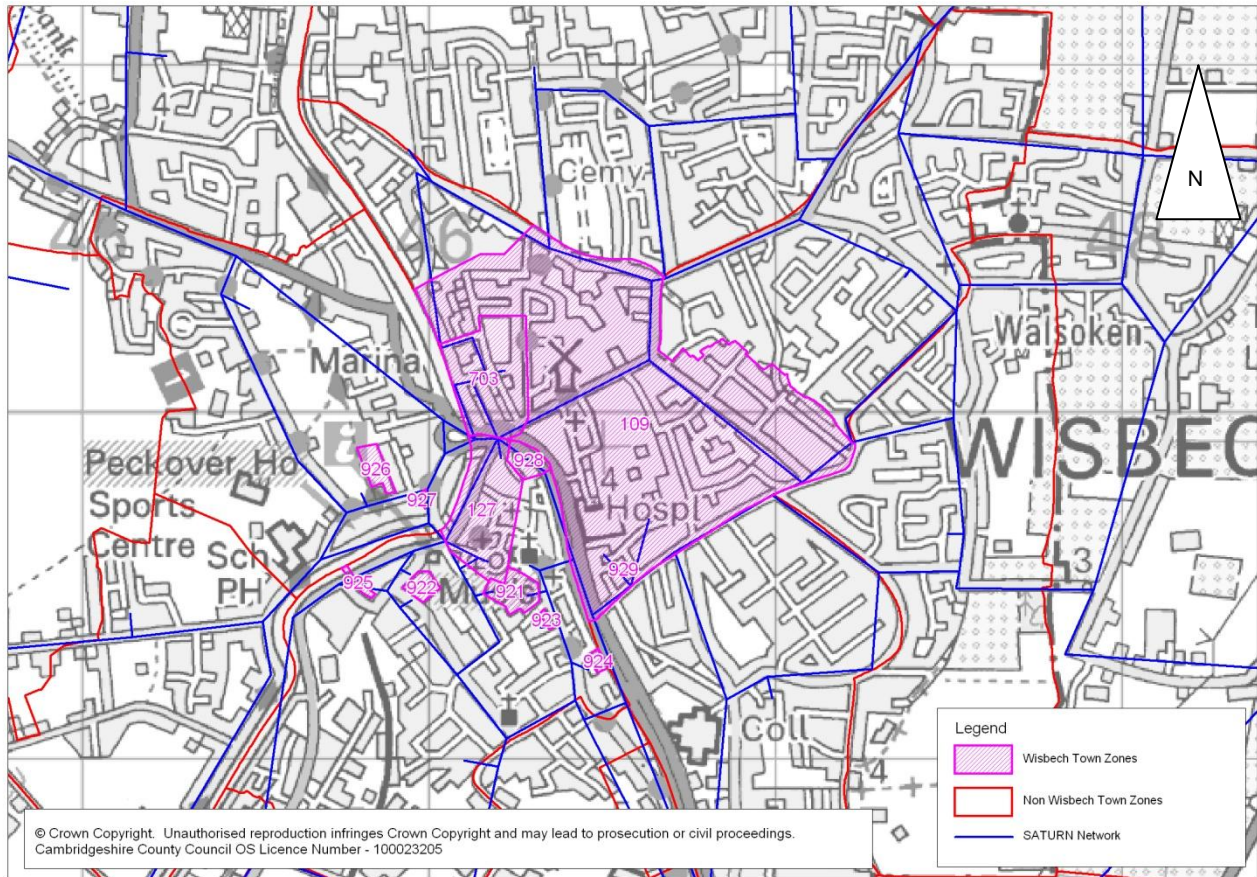
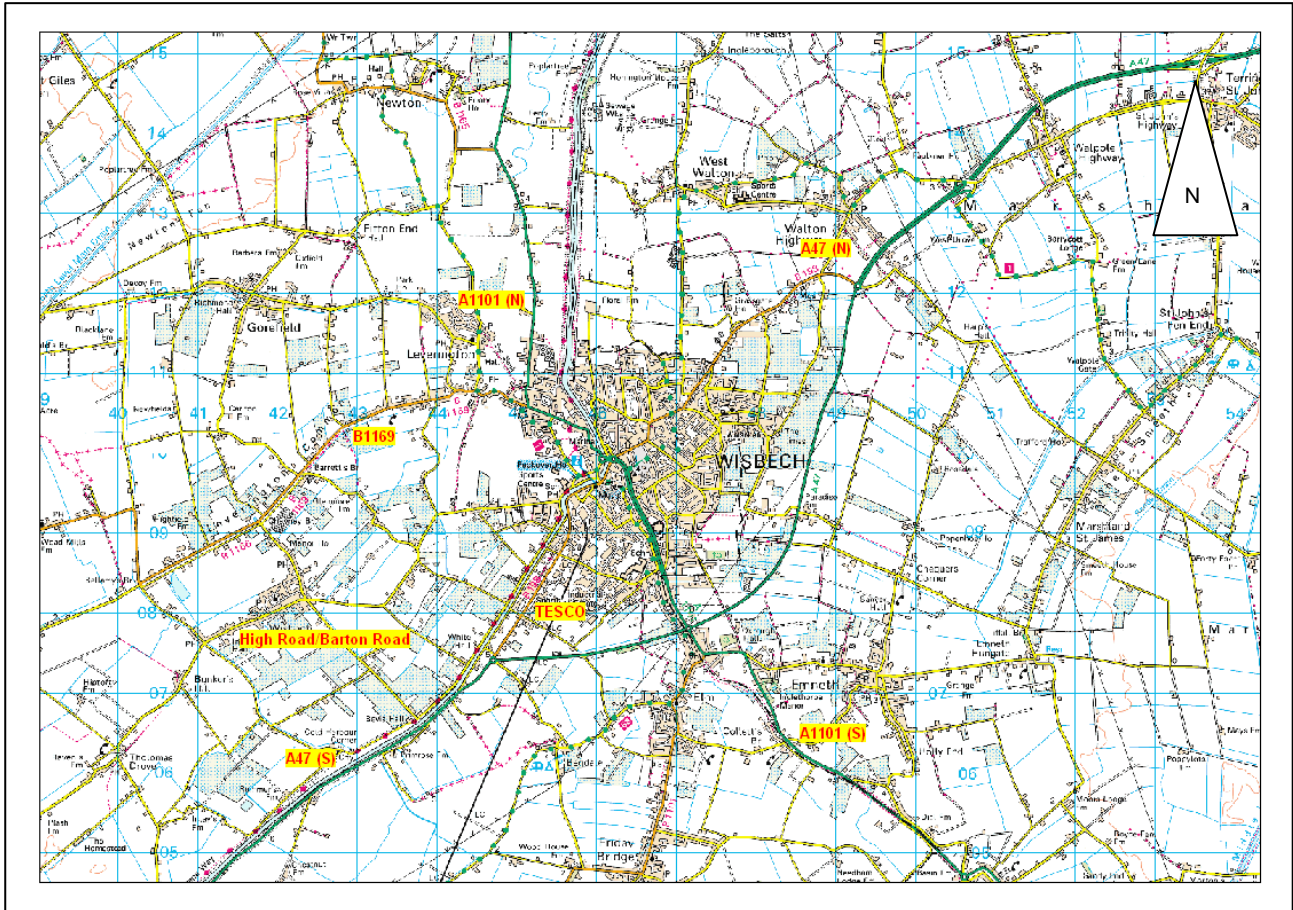


Table 4.1 – Wisbech Town Zone List

No.	SATURN Zone Number
1	109
2	127
3	703
4	921
5	922
6	923
7	924
8	925
9	926
10	927
11	928
12	929

Figure 4.3 below shows the general references used to demonstrate trip direction in the following analysis.

Figure 4.3 – General Reference For Trip distribution



4.1 Test 1 Development trip distribution

Tables 4.2, 4.3 and 4.4 below present the level of traffic generated by the LDF development zones, in each of the forecast years. We have included 2016 for completeness, even though there is no proposed LDF development in Test 1 for 2016.

The development trips associated with the LDF zones have been summarised for Test 1 using forecast year 2021 as this is the first forecast year in Test 1 with associated LDF development trips.

Table 4.2 – Trips generated by LDF Zones (2016)

Zone	AM		IP		PM	
	O	D	O	D	O	D
Employment (707)	0	0	0	0	0	0
Residential (708)	0	0	0	0	0	0
Total	0	0	0	0	0	0

No development in 2016.

Table 4.3 - Trips generated by LDF Zones (2021)

Zone	AM		IP		PM	
	O	D	O	D	O	D
Employment (707)	7	21	11	12	23	10
Residential (708)	314	103	203	167	182	309
Total	321	124	214	179	205	319

Table 4.4 - Trips generated by LDF Zones (2026)

Zone	AM		IP		PM	
	O	D	O	D	O	D
Employment (707)	10	38	17	18	39	13
Residential (708)	628	207	411	333	365	616
Total	638	245	428	351	404	629

The distribution of the trips generated by the developments from the appropriate SATURN models is presented in a series of figures in appendix A. And have been summarised below with reference to the network corridors identified in figure 4.3

4.1.1 Employment Trips

The level of employment trips is low for Test 1 scenario. The main trip attractions and originator for the employment trips (all time periods) are Wisbech town zones and South Brink/ Tesco areas.

4.1.2 Residential Trips

AM peak

In the 2021 AM peak period about 13% of the residential trips with origins from the LDF zones are going into Wisbech town zones, 18% to A47 (N), 12% to A47 (S), 11% to A1101 (N) and 9% to A1101 (S), 3% to South Brink/ Tesco, 4% to B1169 and 4% to High Road/Burton Road direction.

Of the trips attracted to the LDF residential zones in the AM peak period, about 17% are coming from Wisbech town zones, 17% from A47 (N), 5% from A47 (S), 9% from A1101 (N) and 5% from A1101 (S), 5% from South Brink/ Tesco, 4% from B1169 and 8% from High Road/Burton Road.

Figure 4.4 - Zone 708 AM Residential Trip Routing

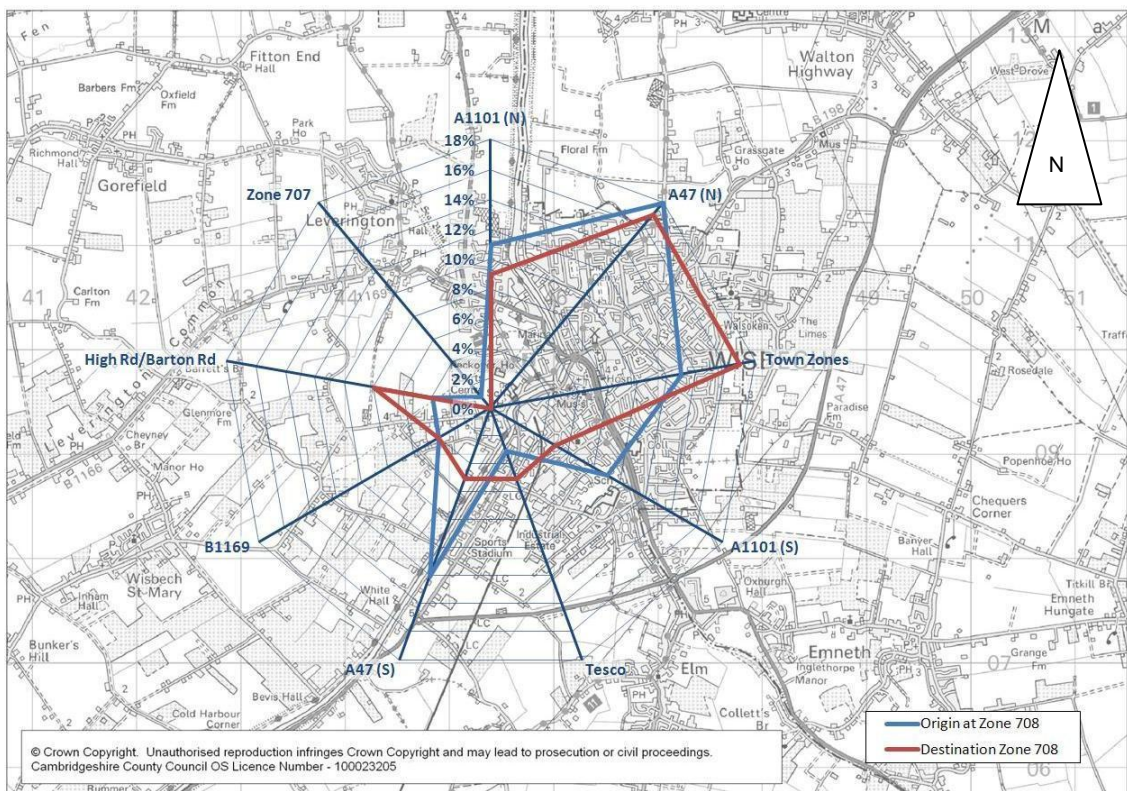


Table 4.5 - Zone 708 AM Residential Trip Routing

	A1101 (N)		A47 (N)		Town Zones		A1101 (S)		Tesco		A47 (S)		B1169		High Rd/Barton Rd		Zone 707	
Origin 708	35	11%	55	18%	40	13%	29	9%	8	3%	37	12%	12	4%	13	4%	3	1%
Destination 708	9	9%	18	17%	18	17%	5	5%	5	5%	5	5%	4	4%	8	8%	0	0%
Total	44	14%	73	24%	58	19%	34	11%	13	4%	42	14%	16	5%	21	7%	3	1%

Inter-Peak

In the 2021 IP period about 11% of the residential trips with origins from the LDF zones are going into Wisbech town zones, 15% to A47 (N), 6% to A47 (S), 7% to A1101 (N) and 8% to A1101 (S), 4% to South Brink/ Tesco, 3% to B1169 and 5% to High Road/Burton Road direction.

Of the trips attracted to the LDF residential zones in the IP period, about 10% are coming from Wisbech town zones, 8% from A47 (N), 5% from A47 (S), 8% from A1101 (N) and 8% from A1101 (S), 6% from South Brink/ Tesco, 4% from B1169 and 6% from High Road/Burton Road.

Figure 4.5 - Zone 708 IP Residential Trip Routing

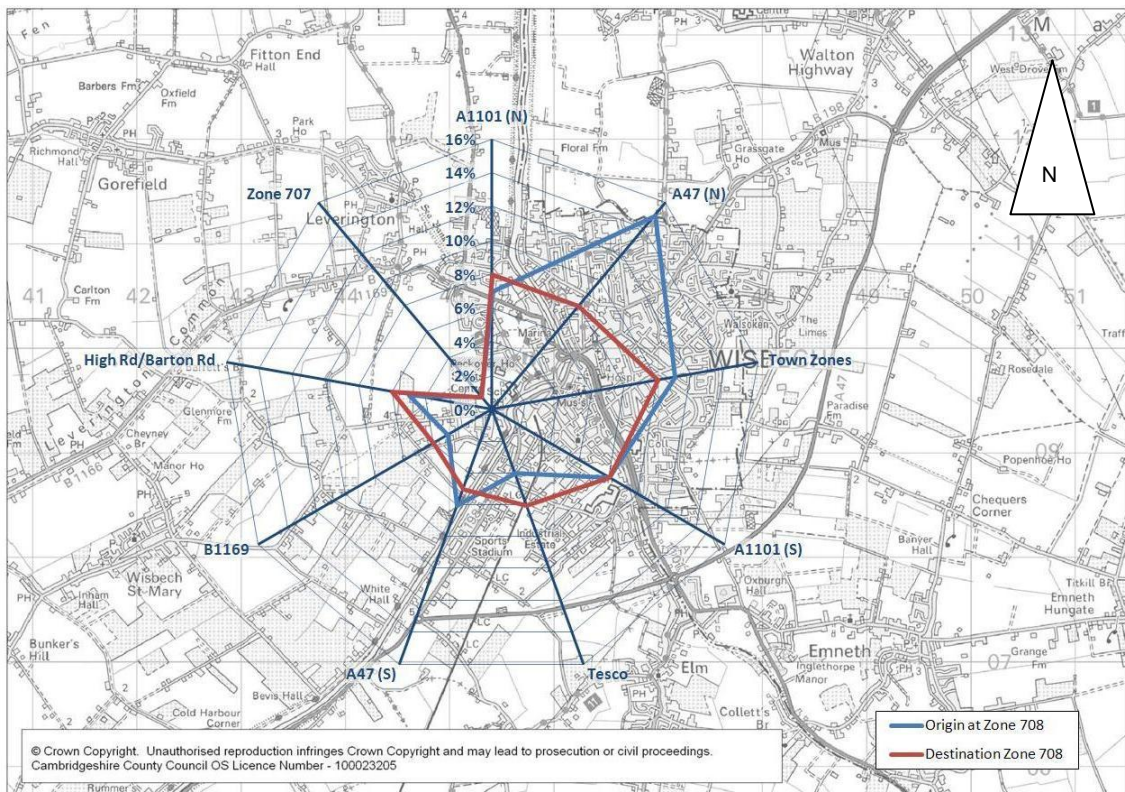


Table 4.6 - Zone 708 IP Residential Trip Routing

	A1101 (N)		A47 (N)		Town Zones		A1101 (S)		Tesco		A47 (S)		B1169		High Rd/Barton Rd		Zone 707	
Origin 708	15	7%	31	15%	22	11%	16	8%	8	4%	12	6%	7	3%	10	5%	2	1%
Destination 708	13	8%	14	8%	16	10%	13	8%	10	6%	9	5%	6	4%	10	6%	2	1%
Total	28	13%	45	21%	38	16%	29	13%	18	8%	21	10%	13	6%	20	9%	4	2%

PM peak

In the 2021 PM peak period about 14% of the residential trips with origins from the LDF zones are going into Wisbech town zones, 8% to A47 (N), 4% to A47 (S), 7% to A1101 (N) and 7% to A1101 (S), 4% to South Brink/ Tesco, 3% to B1169 and 5% to High Road/Burton Road direction.

Of the trips attracted to the LDF residential zones in the PM peak period, about 16% are coming from Wisbech town zones, 8% from A47 (N), 4% from A47 (S), 7% from A1101 (N) and 8% from A1101 (S), 6% from South Brink/ Tesco, 4% from B1169 and 7% from High Road/Burton Road.

Figure 4.6 - Zone 708 PM Residential Trip Routing

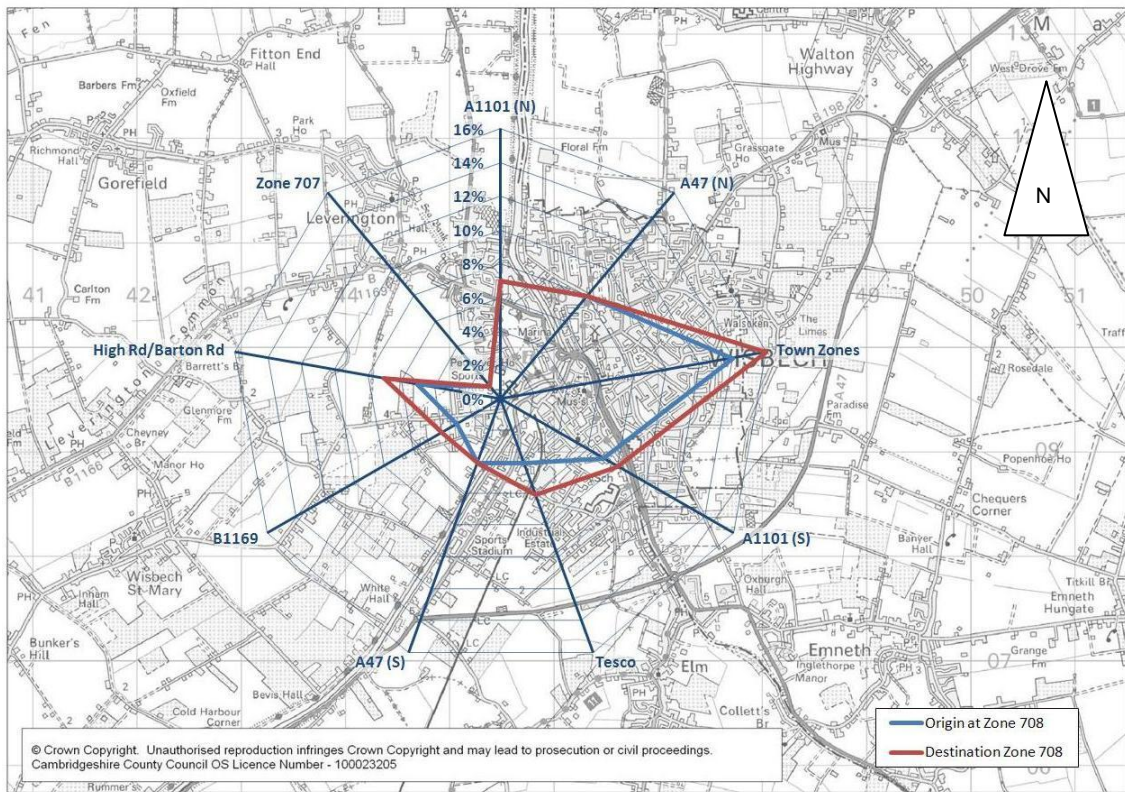


Table 4.7 - Zone 708 PM Residential Trip Routing

	A1101 (N)		A47 (N)		Town Zones		A1101 (S)		Tesco		A47 (S)		B1169		High Rd/Barton Rd		Zone 707	
Origin 708	12	7%	14	8%	25	14%	13	7%	8	4%	8	4%	6	3%	10	5%	2	1%
Destination 708	23	7%	26	8%	50	16%	25	8%	17	6%	12	4%	11	4%	23	7%	4	1%
Total	35	12%	40	14%	75	26%	38	13%	25	9%	20	7%	17	6%	33	11%	6	2%

4.2 Test 5 Development trip distribution

Tables 4.5, 4.6 and 4.7 below present the level of traffic generated by the LDF development zones, in each of the forecast years.

The development trips associated with the LDF zones have been summarised for Test 5 using forecast year 2016.

Table 4.8 – Trips generated by LDF Zones (2016)

Zone	AM		IP		PM	
	O	D	O	D	O	D
Employment (707)	76	28	52	44	48	77
Residential (708)	122	42	81	68	74	123
Residential (709)	44	18	32	28	31	46
Total	242	88	165	140	153	246

Table 4.9 - Trips generated by LDF Zones (2021)

Zone	AM		IP		PM	
	O	D	O	D	O	D
Employment (707)	122	46	85	71	77	124
Residential (708)	232	80	154	127	138	230
Residential (709)	105	39	72	61	67	105
Total	459	165	311	259	282	459

Table 4.10 - Trips generated by LDF Zones (2026)

Zone	AM		IP		PM	
	O	D	O	D	O	D
Employment (707)	128	49	90	74	82	130
Residential (708)	262	91	178	145	160	261
Residential (709)	209	75	144	117	131	209
Total	599	215	412	336	373	600

The distribution of the trips generated by the developments from the appropriate SATURN models is presented in a series of figures in appendix A. And have been summarised below with reference to the network corridors identified in figure 4.3

4.2.1 Employment Trips

AM peak

In the 2016 AM peak period about 38% of the employment traffic with origins from the LDF development zones are going to Wisbech town zones, 15% towards A47 (N) and A47 (S), 11% towards A1101 (N) and A1101 (S).

Of the trips attracted to the LDF residential zones in the AM peak period, about 43% are coming from Wisbech town zones, about 14% from A47 (N) and A47 (S), 7% from A1101 (N) and A1101 (S).

Figure 4.7 - Zone 707 AM Employment Trip Routing

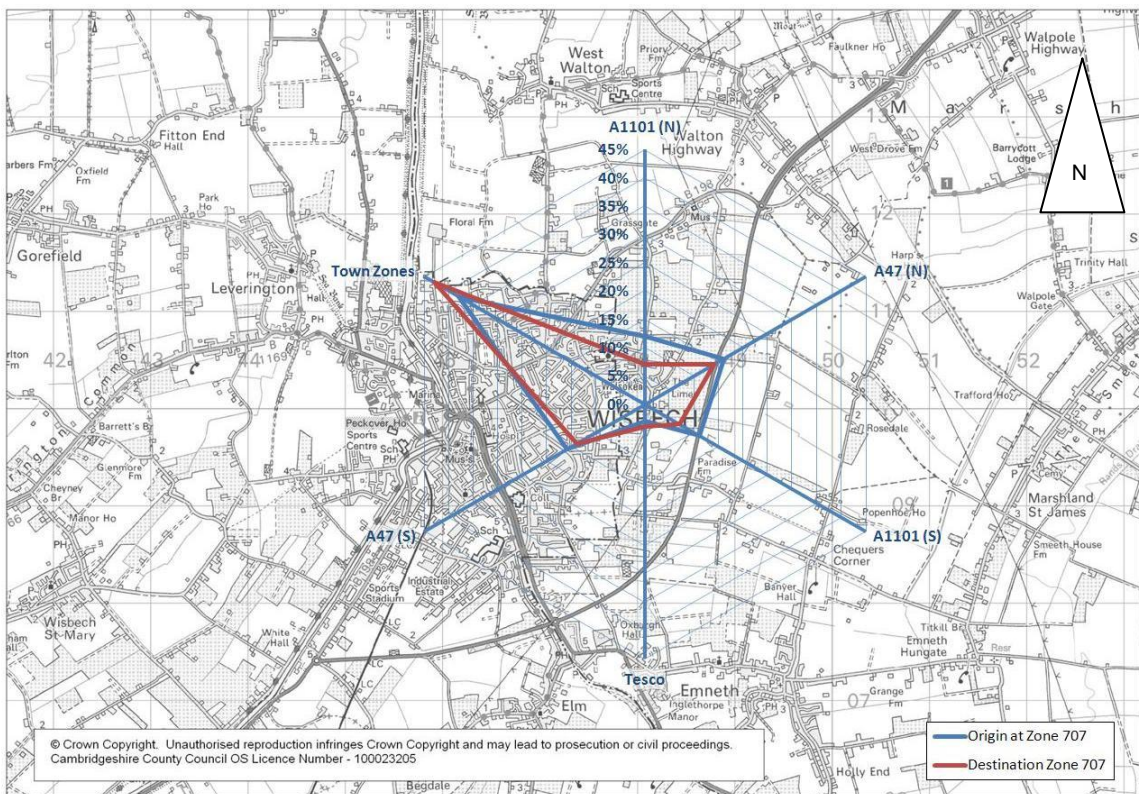


Table 4.11 - Zone 707 AM Employment Trip Routing

	A1101 (N)		A47 (N)		Town Zones		A1101 (S)		Tesco		A47 (S)	
Origin 707	9	12%	12	16%	29	38%	8	11%	2	3%	12	16%
Destination 707	2	7%	4	14%	12	43%	2	7%	1	4%	4	14%
Total	11	11%	16	16%	41	42%	10	10%	3	3%	16	16%

Inter-Peak

In the 2016 IP period about 37% of the employment traffic with origins from the LDF development zones are going to Wisbech town zones, 15% from South Brink/ Tesco, 17% towards A47 (N) and 12% to A47 (S), 9% towards A1101 (N) and A1101 (S).

Of the trips attracted to the LDF residential zones in the IP period, about 39% are coming from Wisbech town zones, 16% from South Brink/ Tesco, 14% from A47 (N) and 18% from A47 (S), 8% from A1101 (N) and A1101 (S).

Figure 4.8 - Zone 707 IP Employment Trip Routing

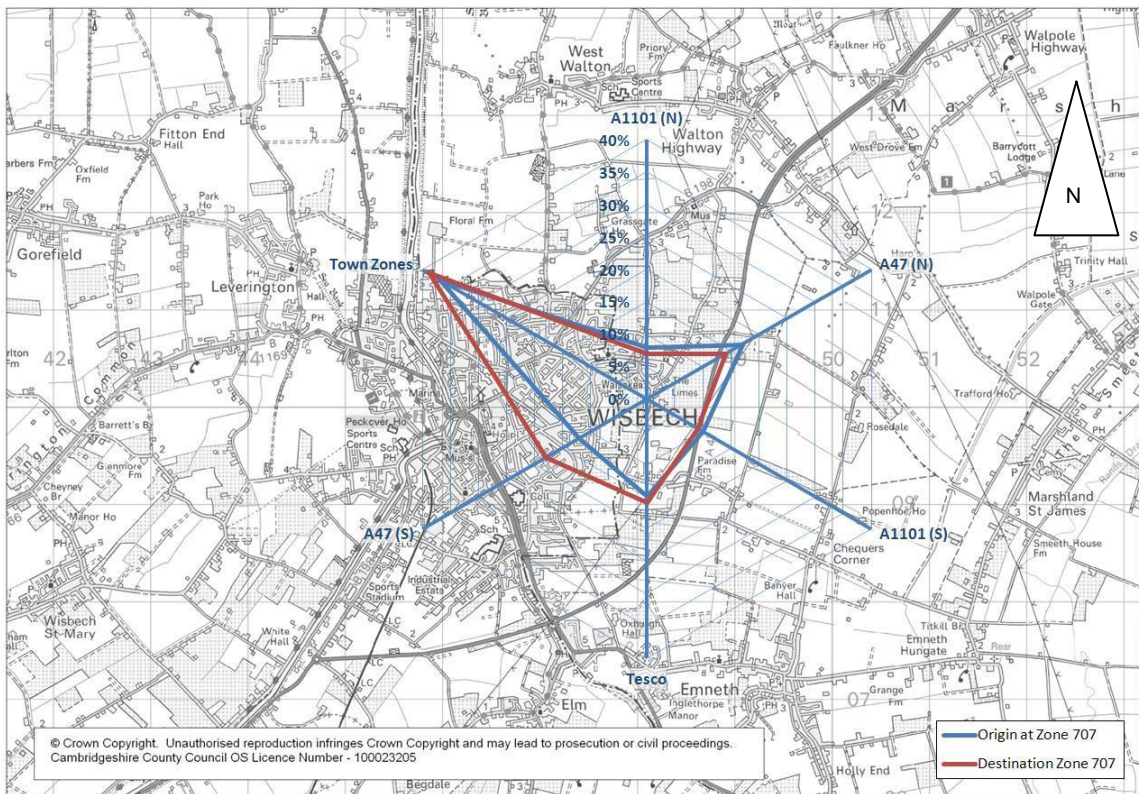


Table 4.12 - Zone 707 IP Employment Trip Routing

	A1101 (N)		A47 (N)		Town Zones		A1101 (S)		Tesco		A47 (S)	
Origin 707	4	8%	9	17%	19	37%	5	10%	8	15%	6	12%
Destination 707	3	7%	6	14%	17	39%	4	9%	7	16%	8	18%
Total	7	7%	15	16%	36	38%	9	9%	15	16%	14	15%

PM peak

In the 2016 PM period about 31% of the employment traffic with origins from the LDF development zones are going to Wisbech town zones, 16% to South Brink/ Tesco, 10% towards A47 (N) and 4% to A47 (S), 7% towards A1101 (N) and A1101 (S).

Of the trips attracted to the LDF residential zones in the PM peak period, about 39% are coming from Wisbech town zones, 13% from South Brink/Tesco, about 14% from A47 (N) and 10% from A47 (S), 9% from A1101 (N) and A1101 (S).

Figure 4.9 - Zone 707 PM Employment Trip Routing

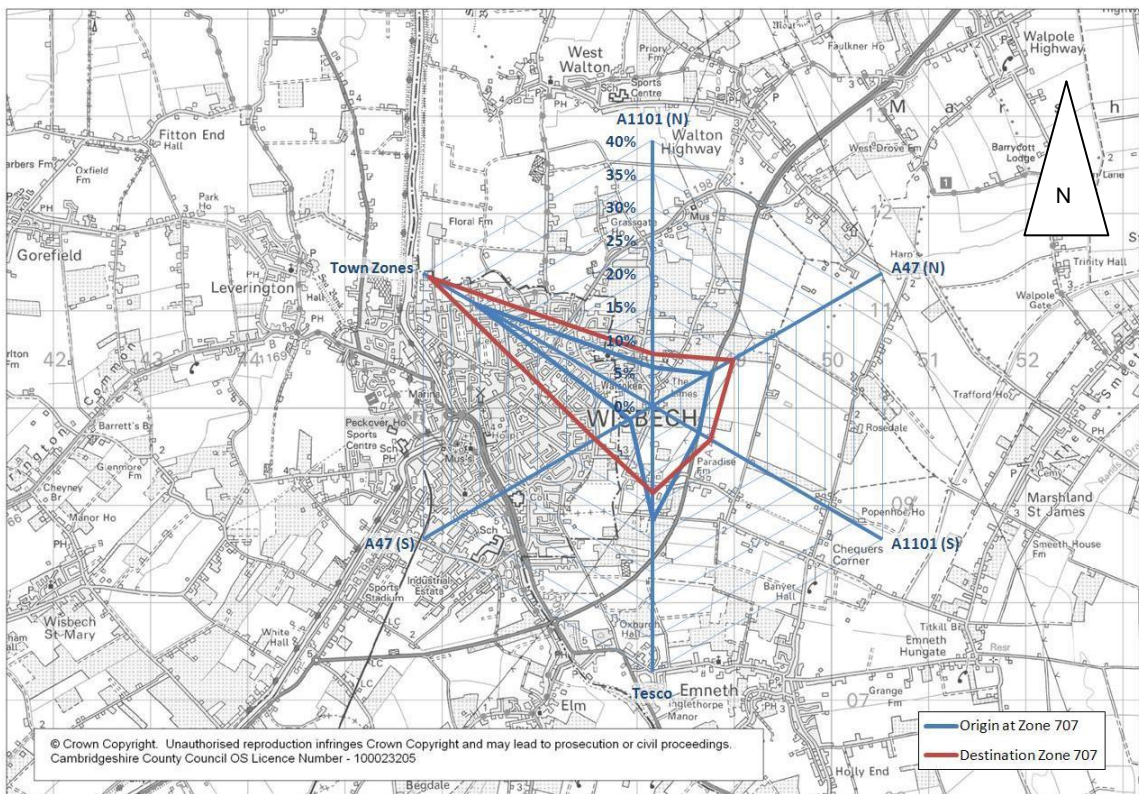


Table 4.13 - Zone 707 PM Employment Trip Routing

	A1101 (N)		A47 (N)		Town Zones		A1101 (S)		Tesco		A47 (S)	
Origin 707	3	6%	5	10%	15	31%	4	8%	8	17%	2	4%
Destination 707	6	8%	11	14%	30	39%	8	10%	10	13%	8	10%
Total	9	8%	16	15%	45	41%	12	11%	18	16%	10	9%

4.2.2 Residential Trips

AM peak

In the 2016 AM peak period from about 23% of the residential traffic with origins from the LDF development zones are going to Wisbech town zones, 11% towards A47 (N) and 13% to A47 (S), 12% towards A1101 (N) and 7% to A1101 (S), 7% to South Brink/ Tesco and 4% to the LDF employment zones.

Of the trips attracted to the LDF residential zones in the AM peak period, about 63% are coming from Wisbech town zones, about 12% from A47 (N) and 7% from A47 (S), 8% from A1101 (N) and 3% from A1101 (S) and 8% from South Brink/ Tesco.

Figure 4.10 - Zone 708 AM Residential Trip Routing

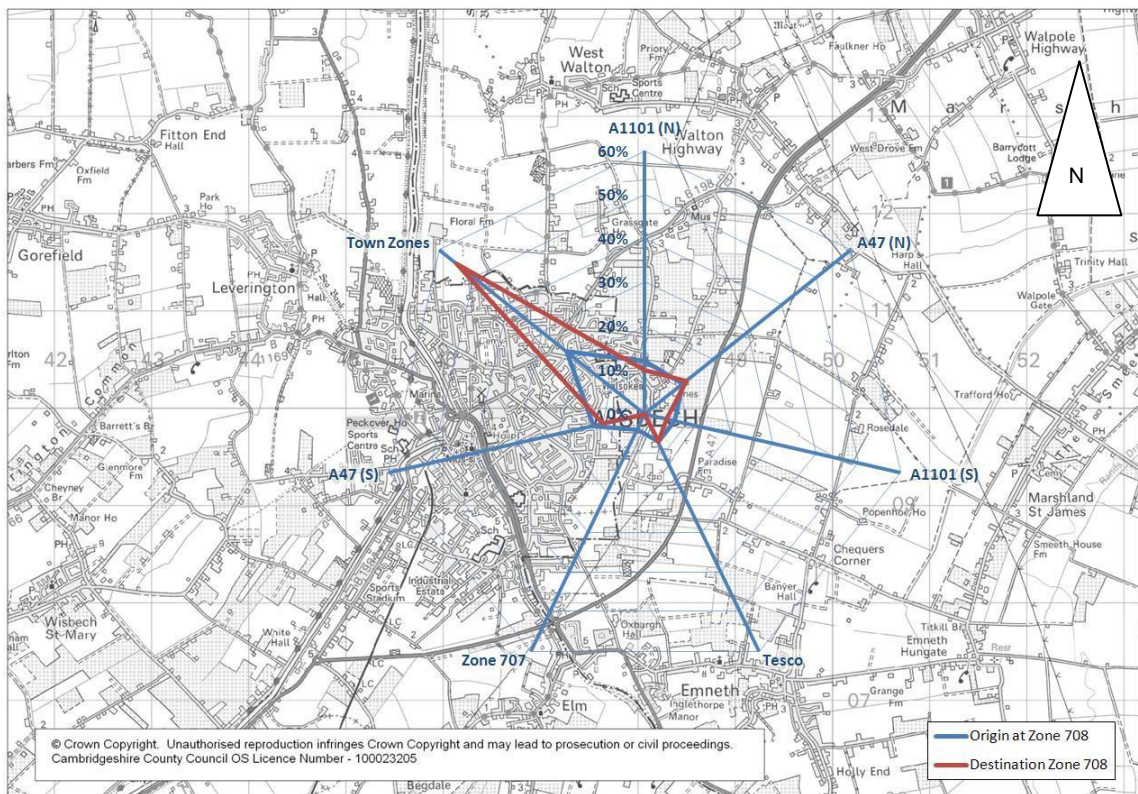


Figure 4.11 - Zone 709 AM Residential Trip Routing

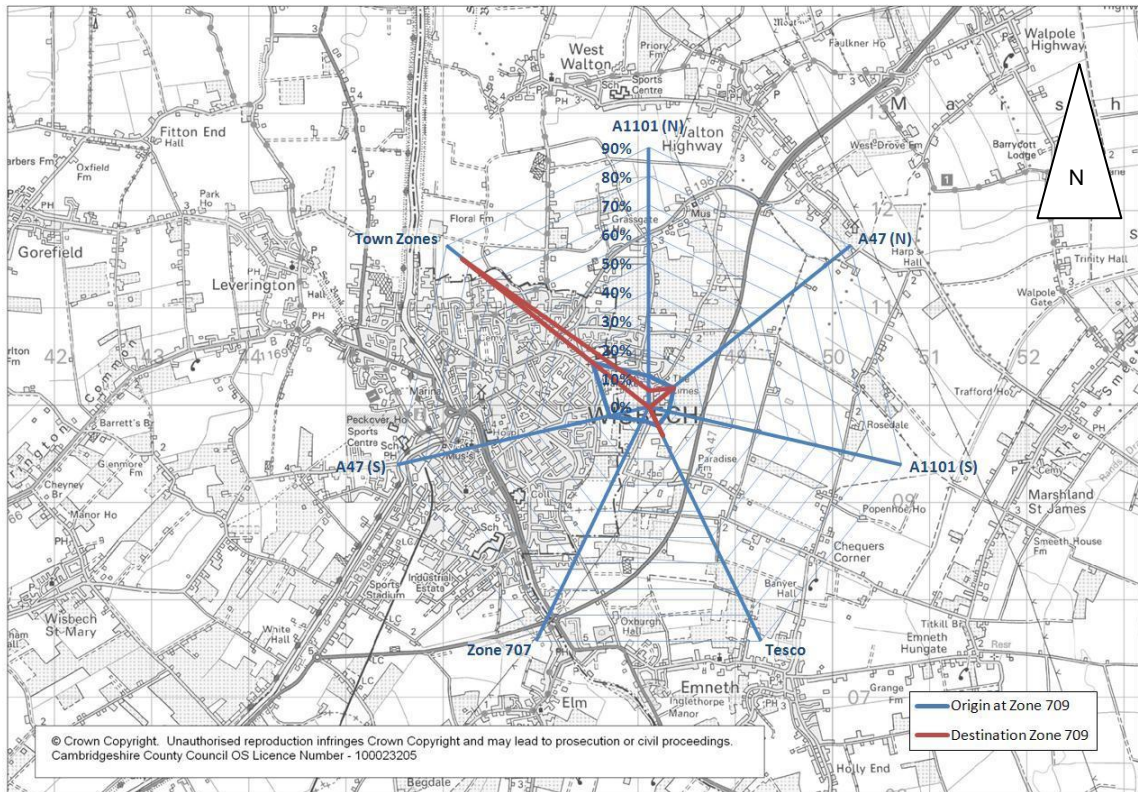


Table 4.14 - Zone 708 & 709 AM Employment Trip Routing

	A1101 (N)		A47 (N)		Town Zones		A1101 (S)		Tesco		A47 (S)		Zone 707	
Origin 708	15	12%	13	11%	28	23%	9	7%	8	7%	15	12%	5	4%
Destination 708	4	10%	5	12%	23	55%	2	5%	3	7%	4	10%	0	0%
Origin 709	5	11%	5	11%	11	25%	3	7%	3	7%	6	14%	2	5%
Destination 709	1	6%	2	11%	15	83%	0	0%	2	11%	0	0%	0	0%
Total	25	14%	25	14%	77	43%	3	2%	16	9%	25	14%	7	4%

Inter-Peak

In the 2016 IP period about 30% of the residential traffic with origins from the LDF development zones are going to Wisbech town zones, 11% towards A47 (N) and 6% to A47 (S), 7% towards A1101 (N) and 5% to A1101 (S), 12% to South Brink/ Tesco and 6% to the LDF residential zones .

Of the trips attracted to the LDF residential zones in the IP period, about 29% are coming from Wisbech town zones, about 10% from A47 (N) and 5% from A47 (S), 8% from A1101 (N) and 5% from A1101 (S) and 10% from South Brink/ Tesco.

Figure 4.12 - Zone 708 IP Residential Trip Routing

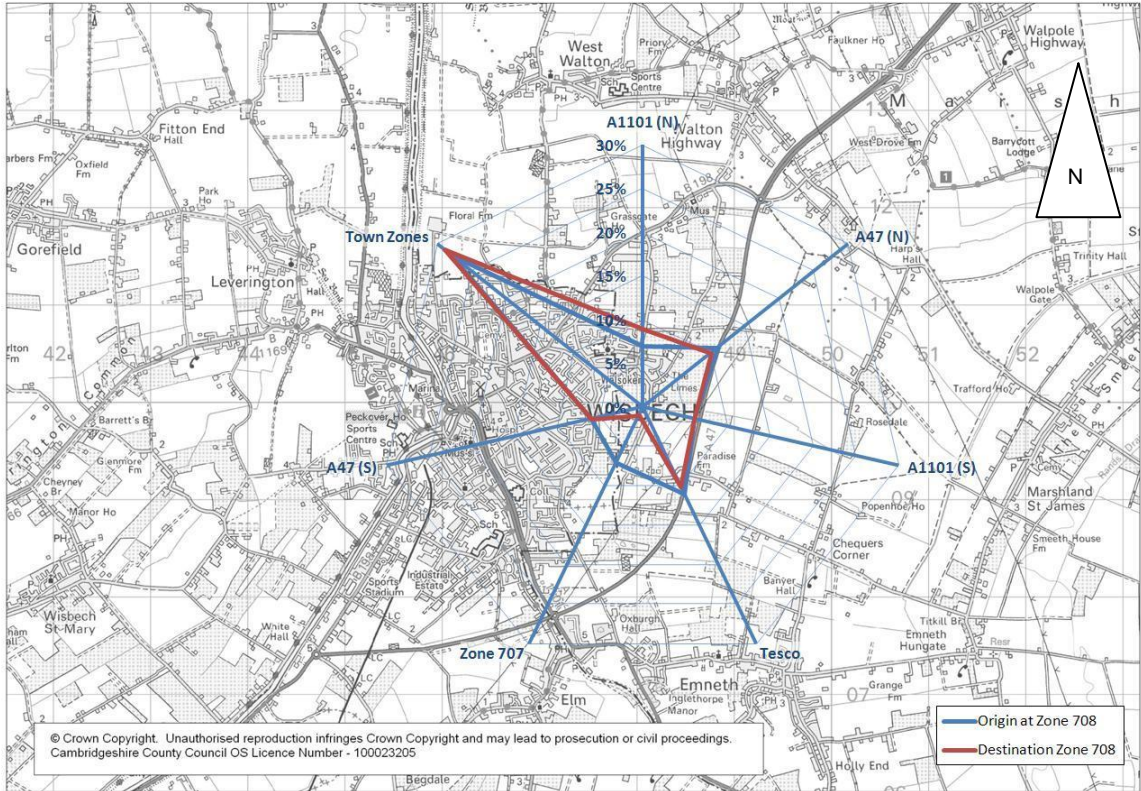


Figure 4.13 - Zone 709 IP Residential Trip Routing

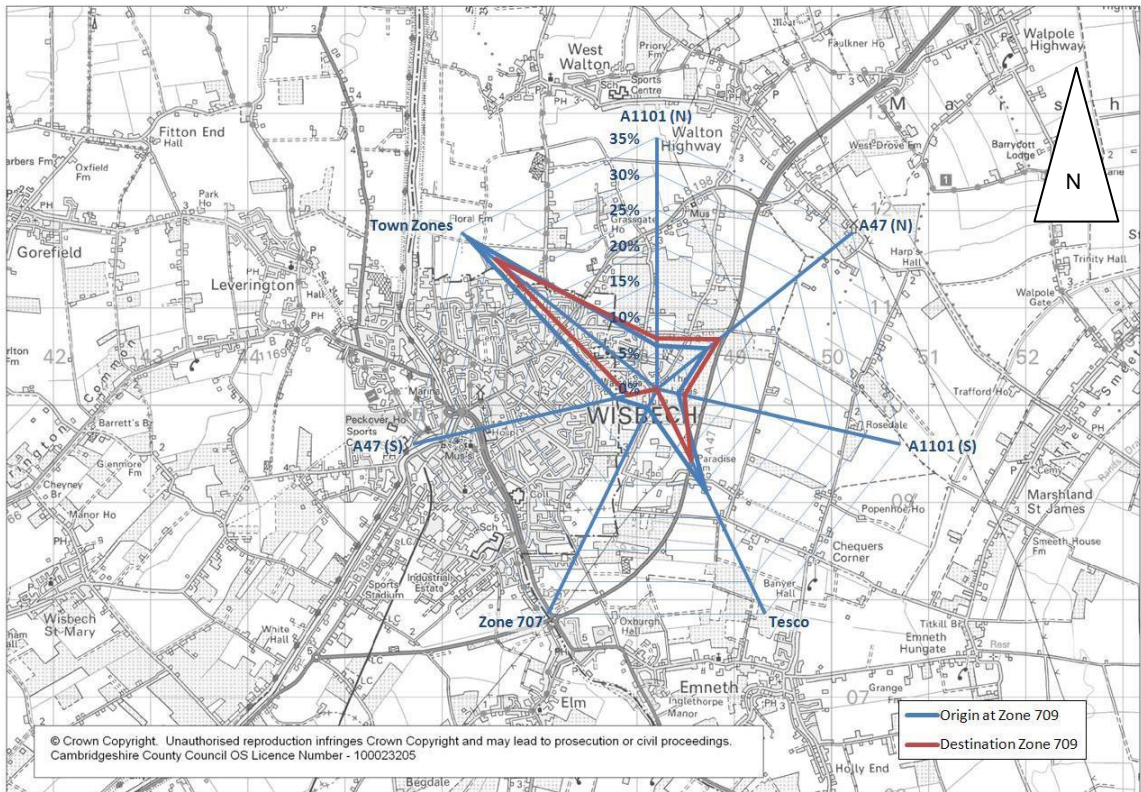


Table 4.15 - Zone 708 & 709 IP Employment Trip Routing

	A1101 (N)		A47 (N)		Town Zones		A1101 (S)		Tesco		A47 (S)		Zone 707	
Origin 708	6	7%	9	11%	23	28%	5	6%	9	11%	5	6%	6	7%
Destination 708	6	9%	7	10%	20	29%	4	6%	7	10%	4	6%	1	1%
Origin 709	2	6%	3	9%	11	34%	1	3%	5	16%	2	6%	1	3%
Destination 709	2	7%	3	11%	8	29%	1	4%	3	11%	1	4%	0	0%
Total	16	10%	22	14%	62	40%	11	7%	24	15%	12	8%	8	5%

PM peak

In the PM peak period about 31% of the residential traffic with origins from the LDF development zones are going to Wisbech town zones, 8% towards A47 (N) and 4% to A47 (S), 7% towards A1101 (N) and 5% to A1101 (S), 17% to South Brink/ Tesco and 3% to the LDF residential zones .

Of the trips attracted to the LDF residential zones in the PM peak period, about 38% are coming from Wisbech town zones, about 11% from A47 (N) and 6% from A47 (S), 8% from A1101 (N) and 5% from A1101 (S) and 12% from South Brink/ Tesco.

Figure 4.14 - Zone 708 PM Residential Trip Routing

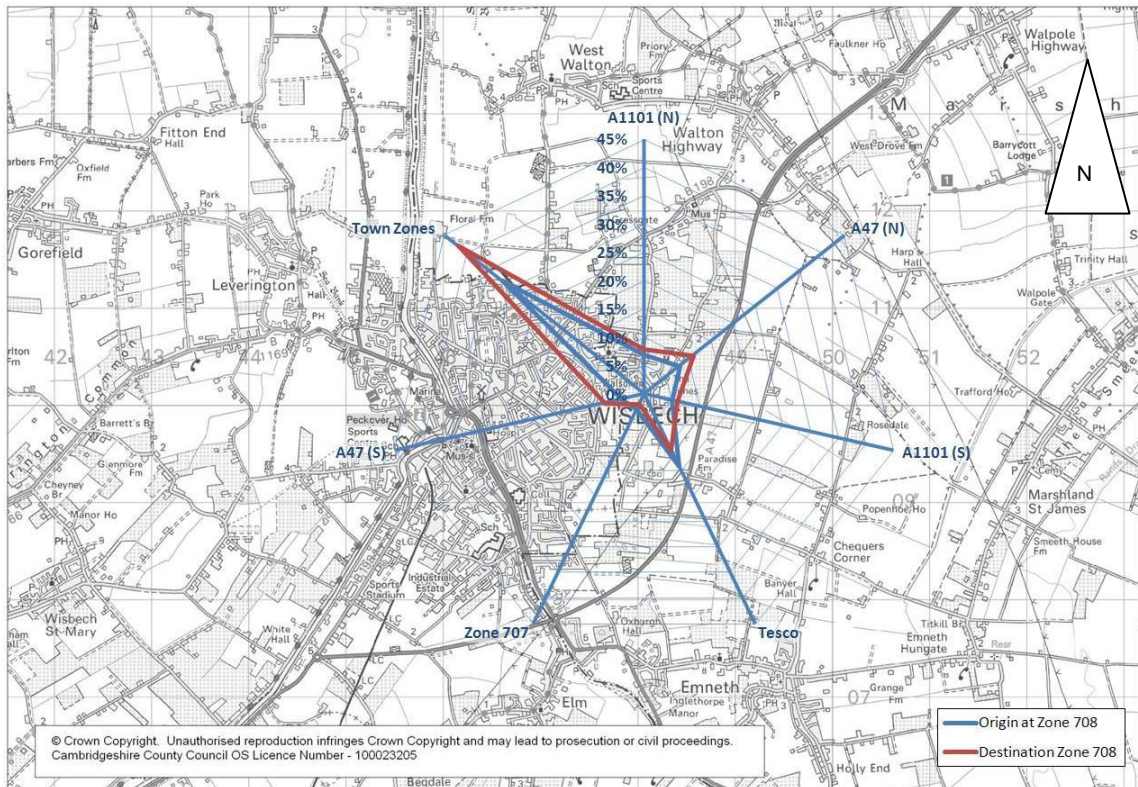


Figure 4.15 - Zone 709 PM Residential Trip Routing

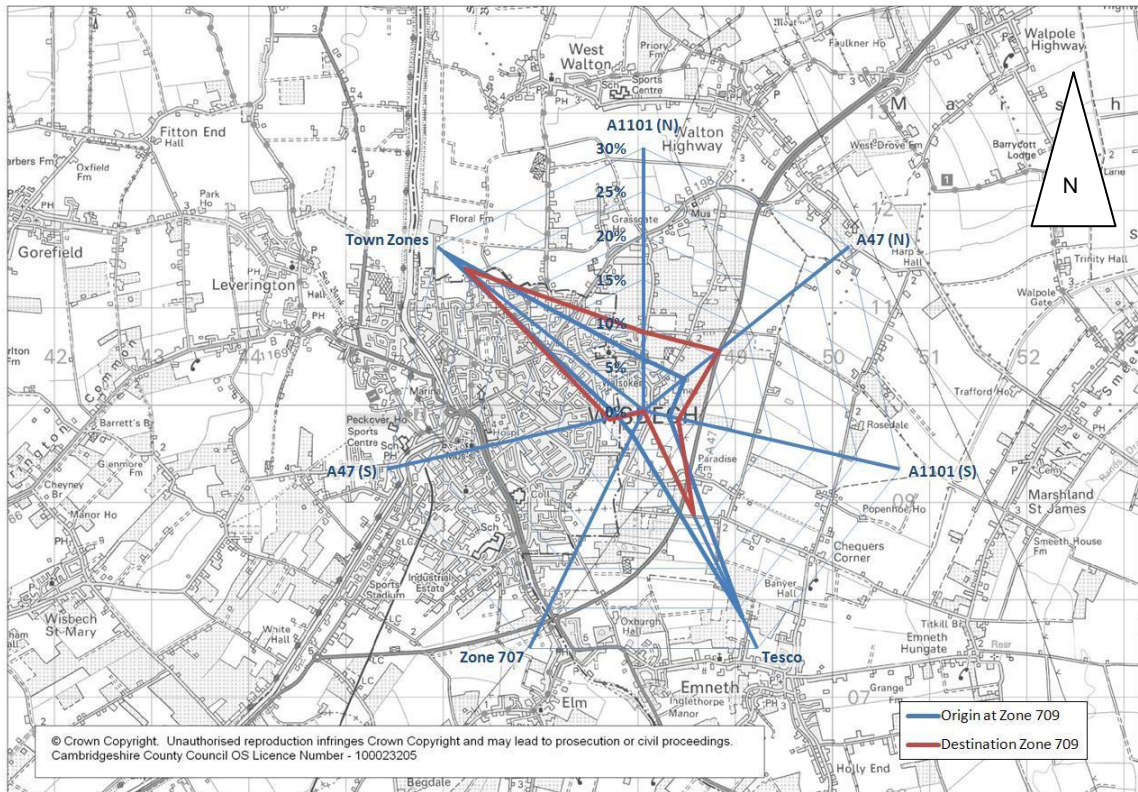


Table 4.16 - Zone 708 & 709 PM Employment Trip Routing

	A1101 (N)		A47 (N)		Town Zones		A1101 (S)		Tesco		A47 (S)		Zone 707	
Origin 708	5	7%	6	8%	24	32%	4	5%	10	14%	3	4%	2	3%
Destination 708	10	8%	14	11%	52	42%	7	6%	14	11%	8	7%	2	2%
Origin 709	2	6%	2	6%	9	29%	1	3%	8	26%	1	3%	1	3%
Destination 709	4	9%	5	11%	12	26%	2	4%	6	13%	2	4%	0	0%
Total	21	10%	27	12%	97	45%	14	6%	38	18%	14	6%	5	2%

5. Appendix A - Test 1 Trip Distribution

Figure 5.1 – Trips Originated from Employment Zone 707 (2021 – AM)

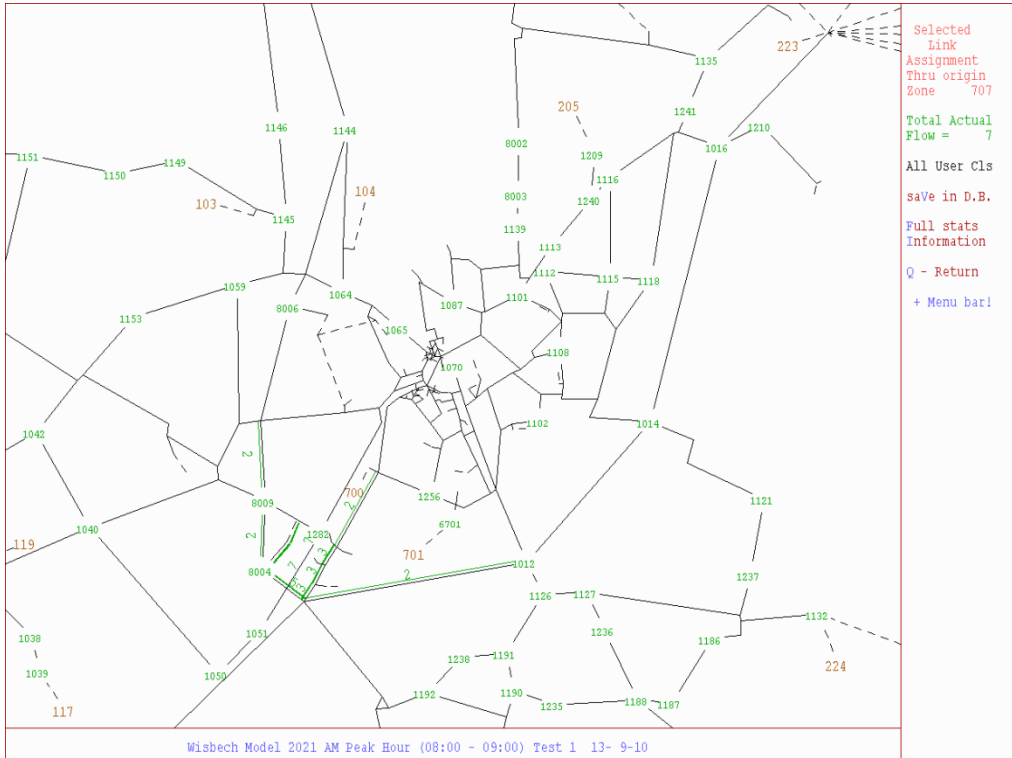


Figure 5.2 - Trips Ended at Employment Zone 707 (2021 – AM)

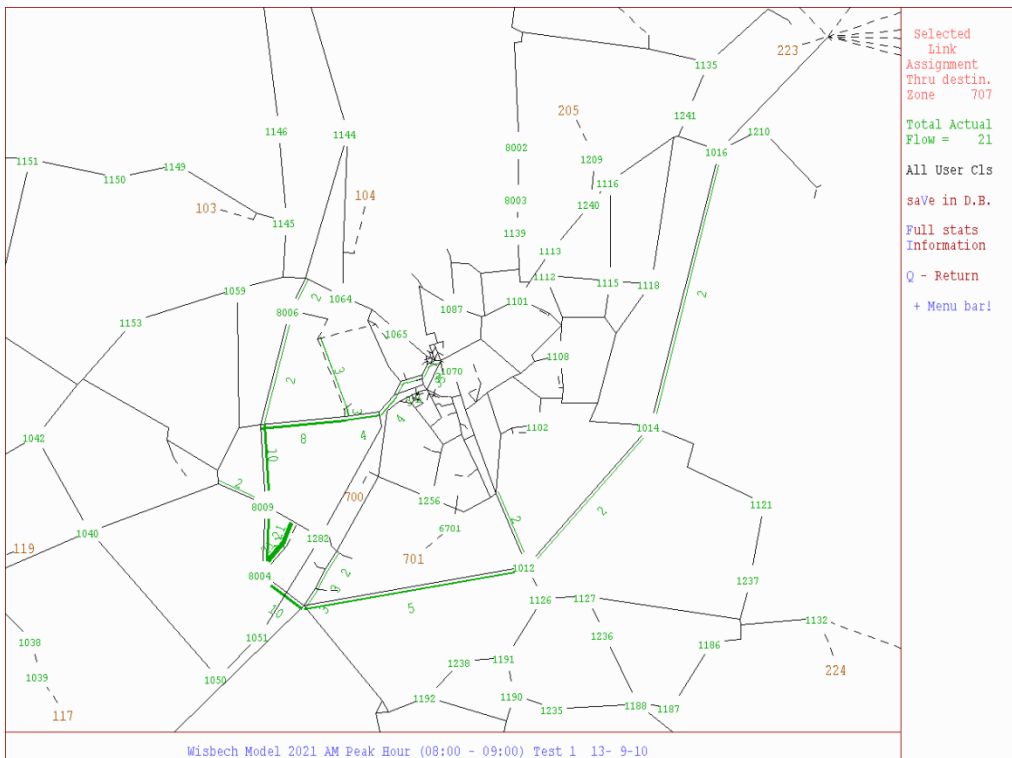


Figure 5.3 – Trips Originated from Residential Zone 708 (2021 – AM)

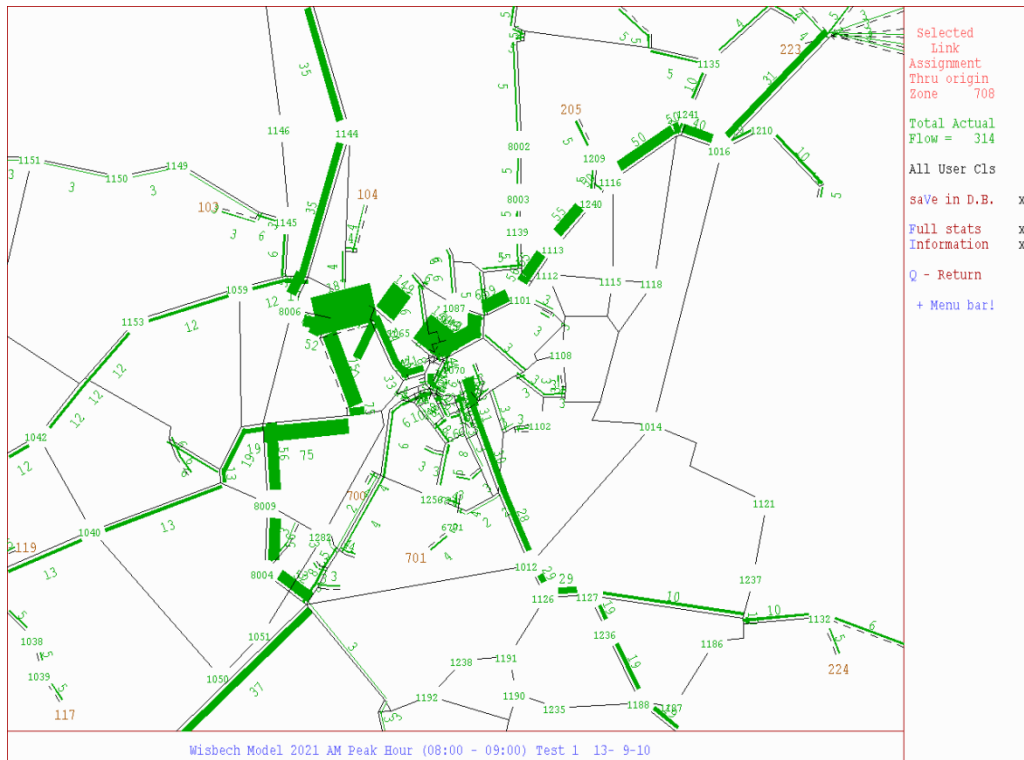


Figure 5.4 – Trips Ended at Residential Zone 708 (2021 – AM)

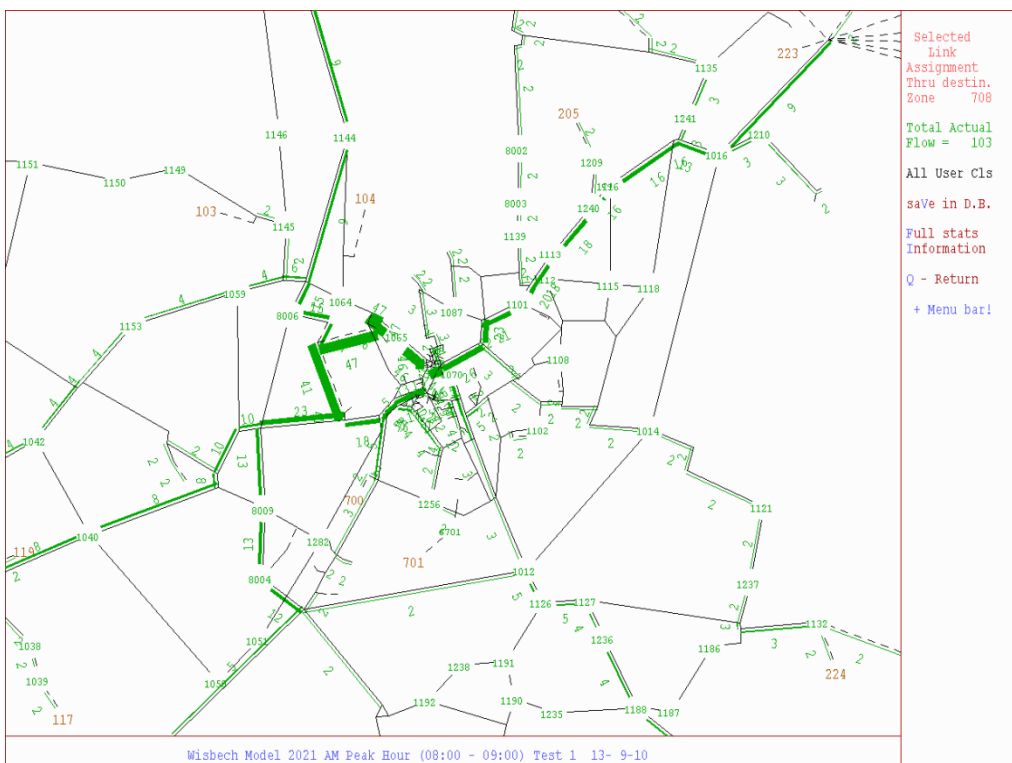


Figure 5.5 – Trips Originated from Employment Zone 707 (2021 – IP)

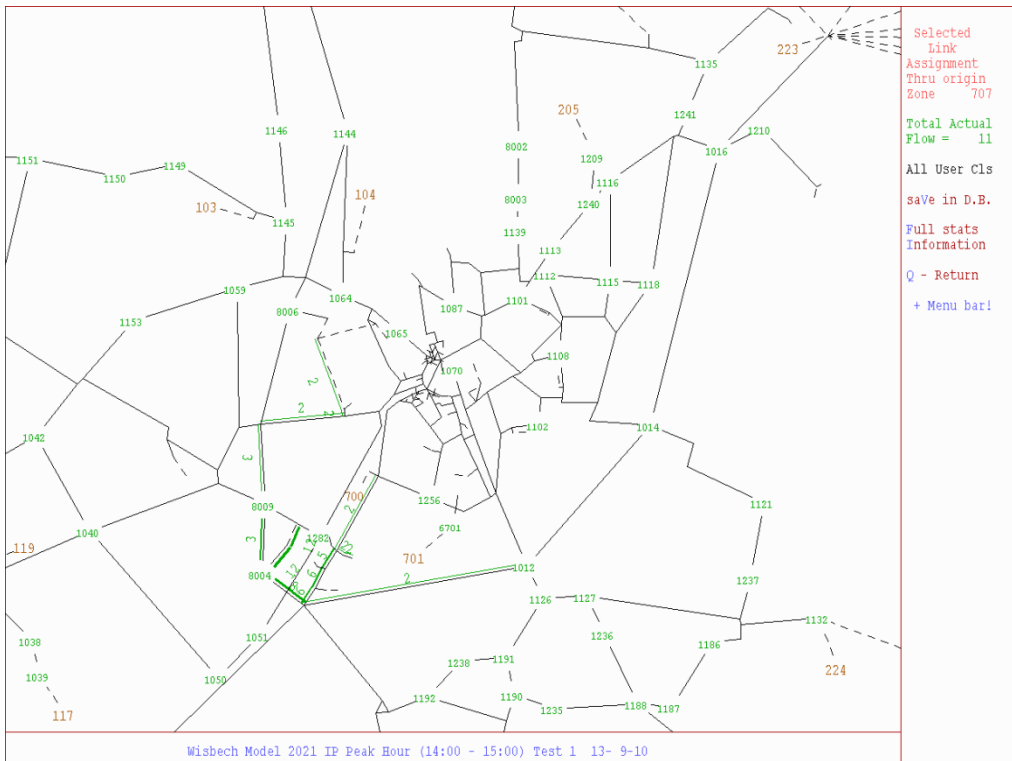


Figure 5.6 – Trips Ended at Employment Zone 707 (2021 – IP)

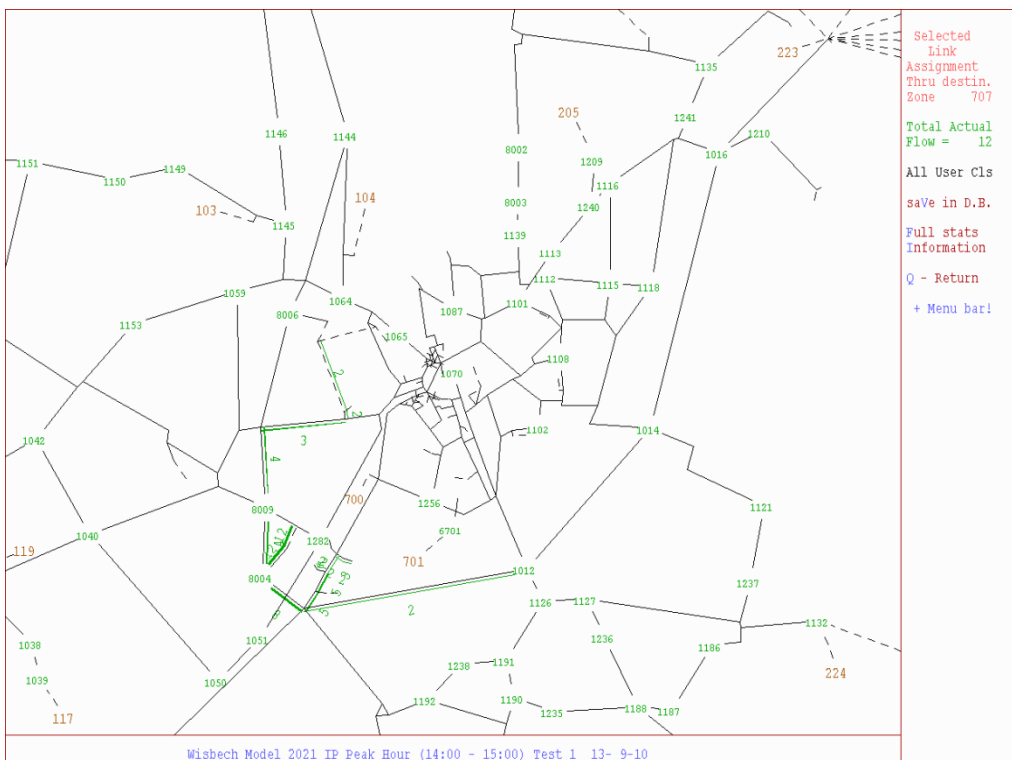


Figure 5.7 – Trips Originated from Residential Zone 708 (2021 – IP)

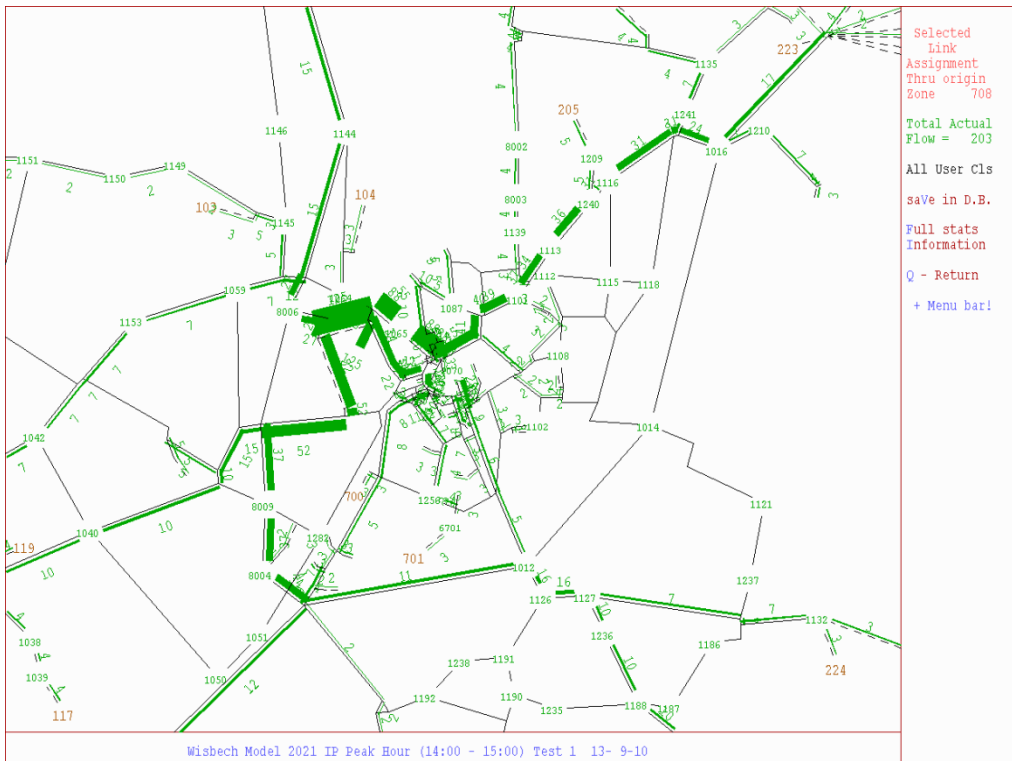


Figure 5.8 – Trips Ended at Residential Zone 708 (2021 – IP)

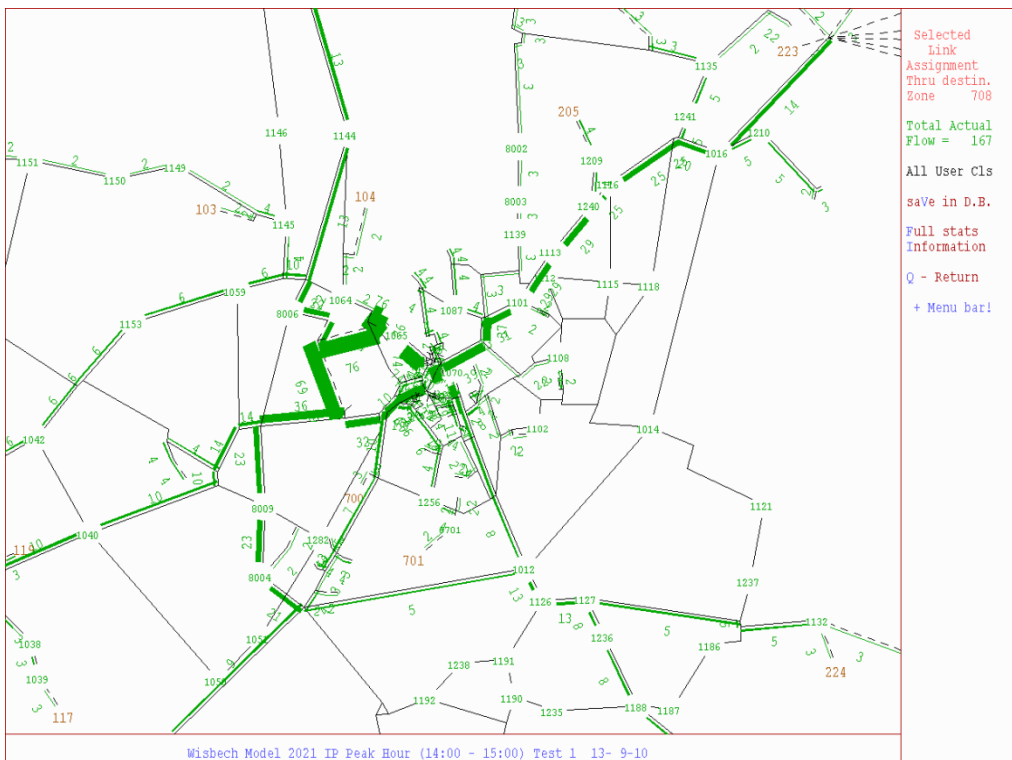


Figure 5.9 – Trips Originated from Employment Zone 707 (2021 – PM)

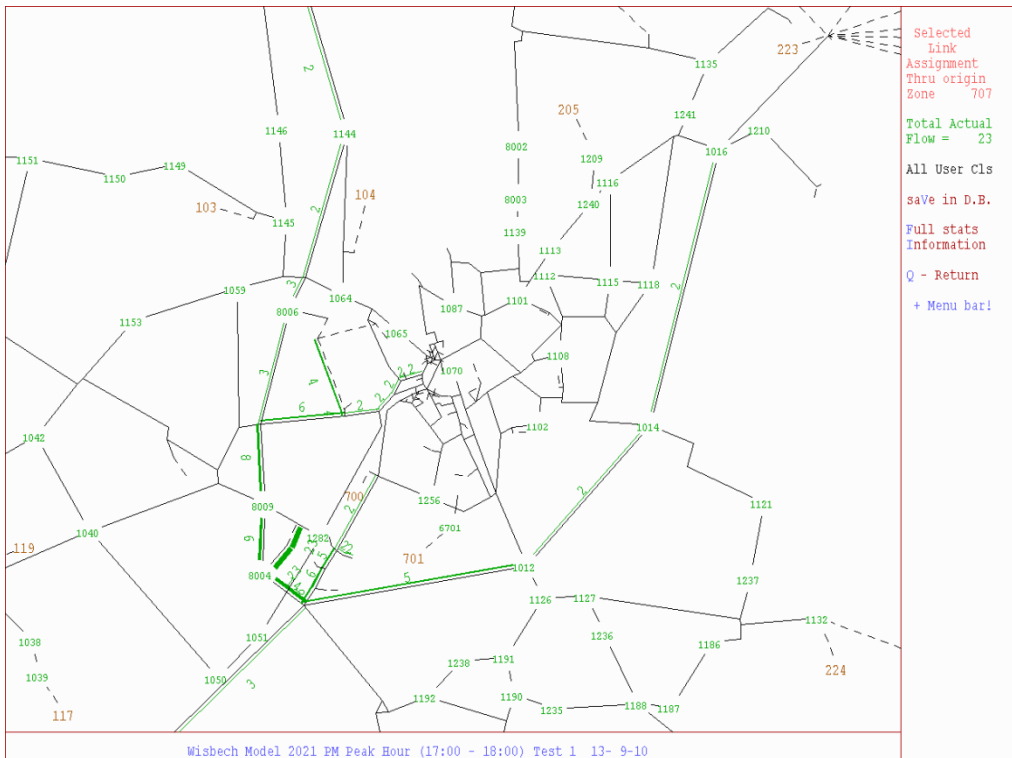


Figure 5.10 – Trips Ended at Employment Zone 707 (2021 – PM)

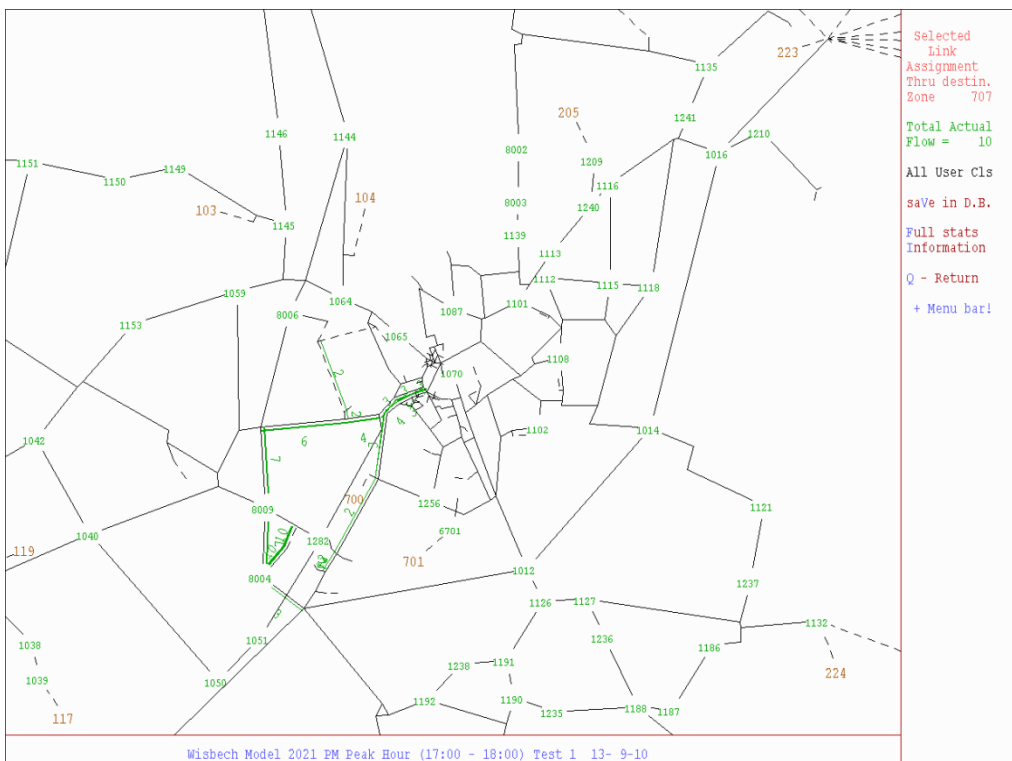


Figure 5.11 – Trips Originated from Residential Zone 708 (2021 – PM)

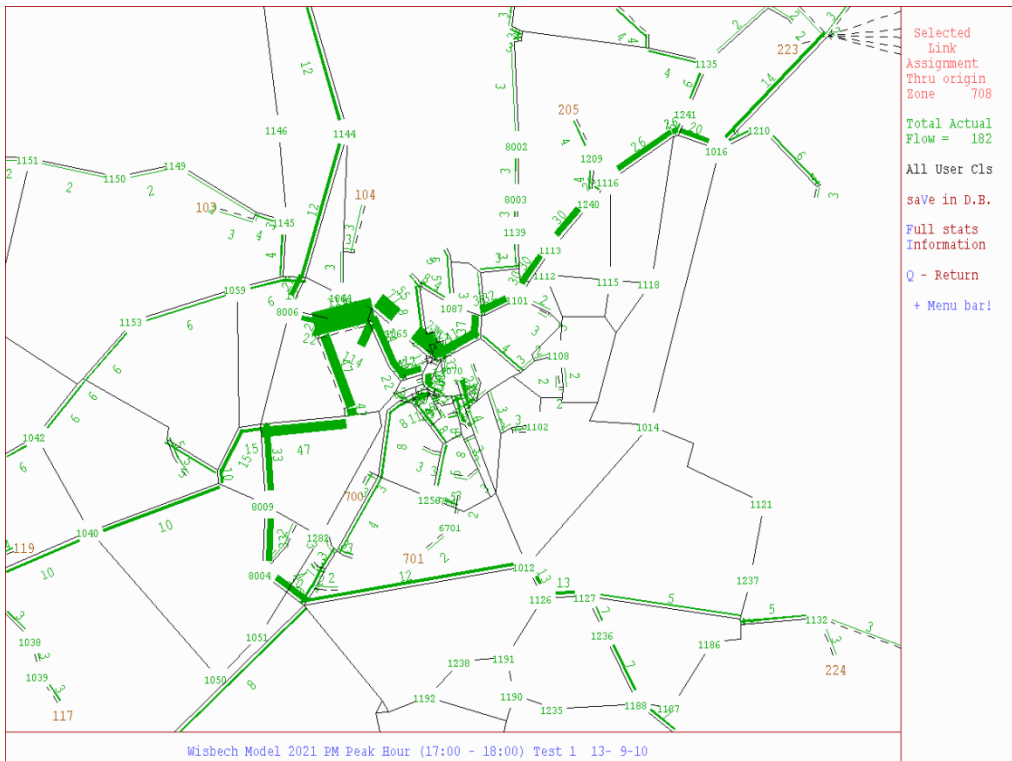


Figure 5.12 - Trips Ended at Residential Zone 708 (2021 – PM)

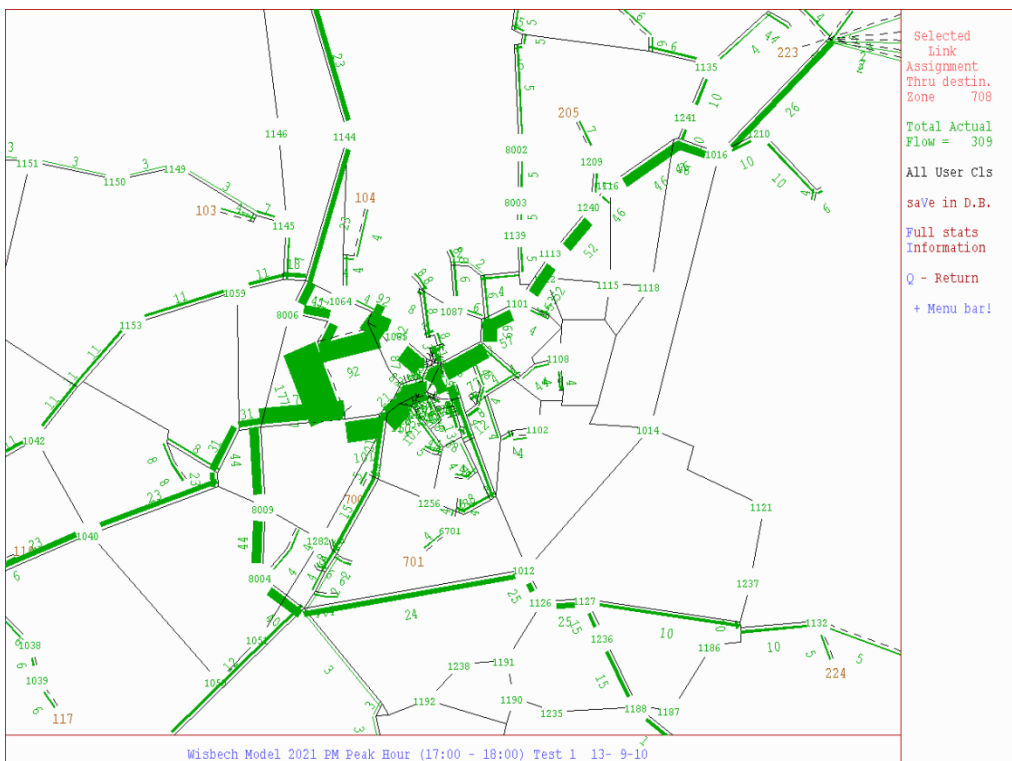


Figure 5.13 – Trips Originated from Employment Zone 707 (2026 – AM)

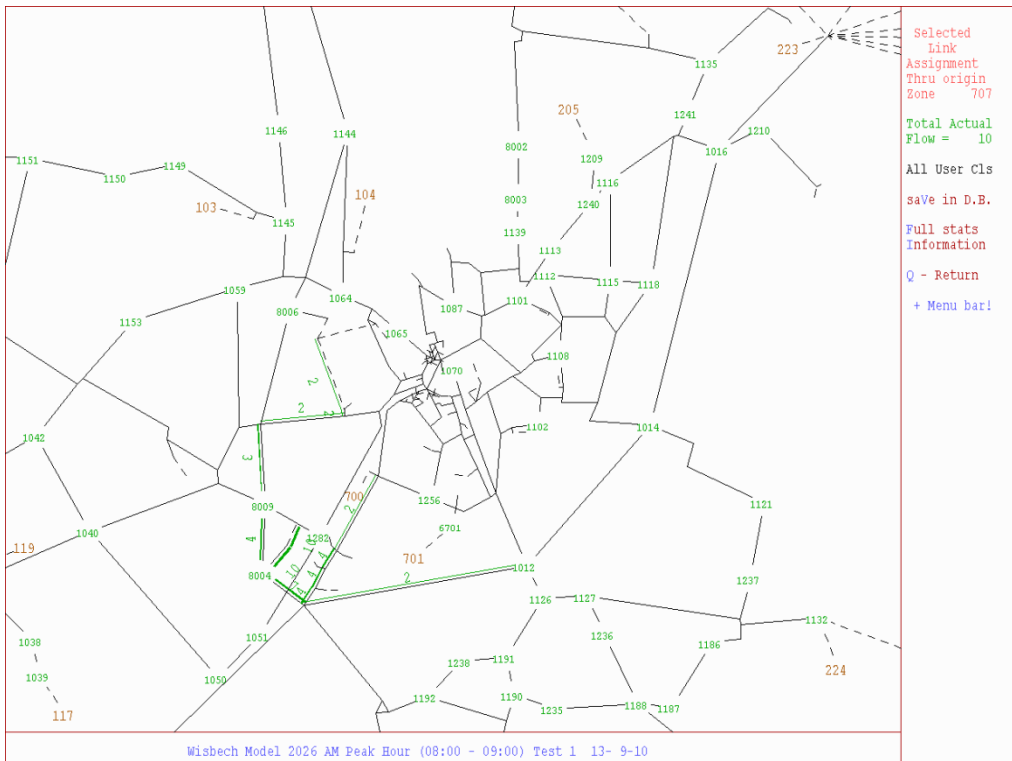


Figure 5.14 - Trips Ended at Employment Zone 707 (2026 – AM)

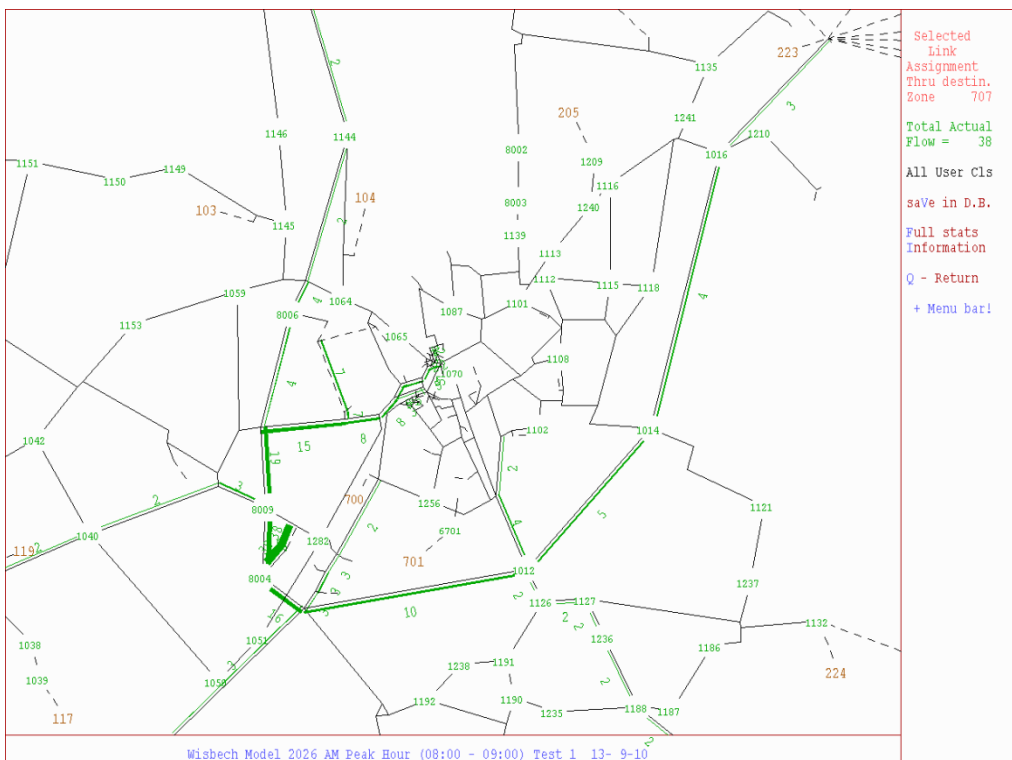


Figure 5.15 – Trips Originated from Residential Zone 708 (2026 – AM)

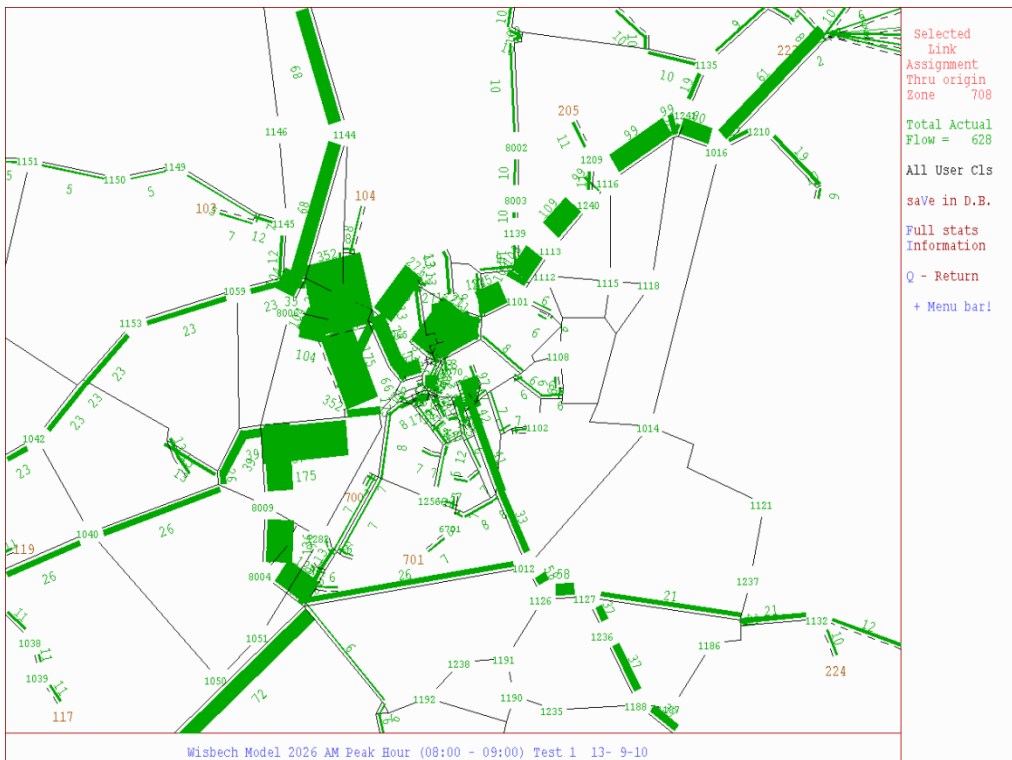


Figure 5.16 – Trips Ended at Residential Zone 708 (2026 – AM)

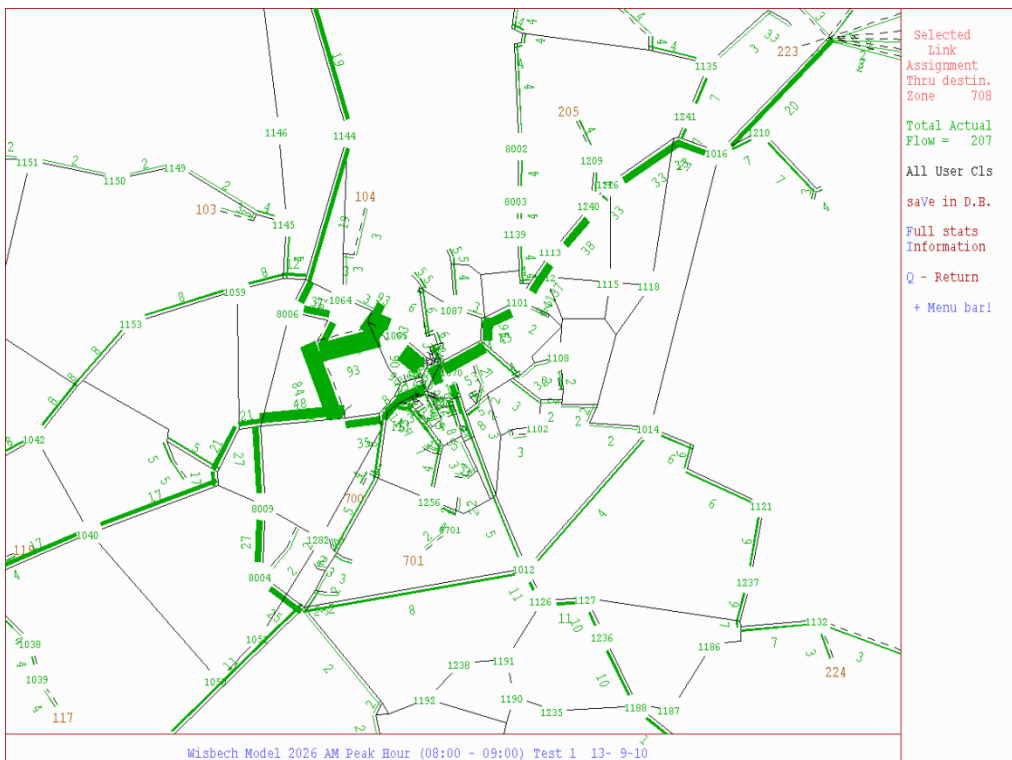


Figure 5.17 – Trips Originated from Employment Zone 707 (2026 – IP)

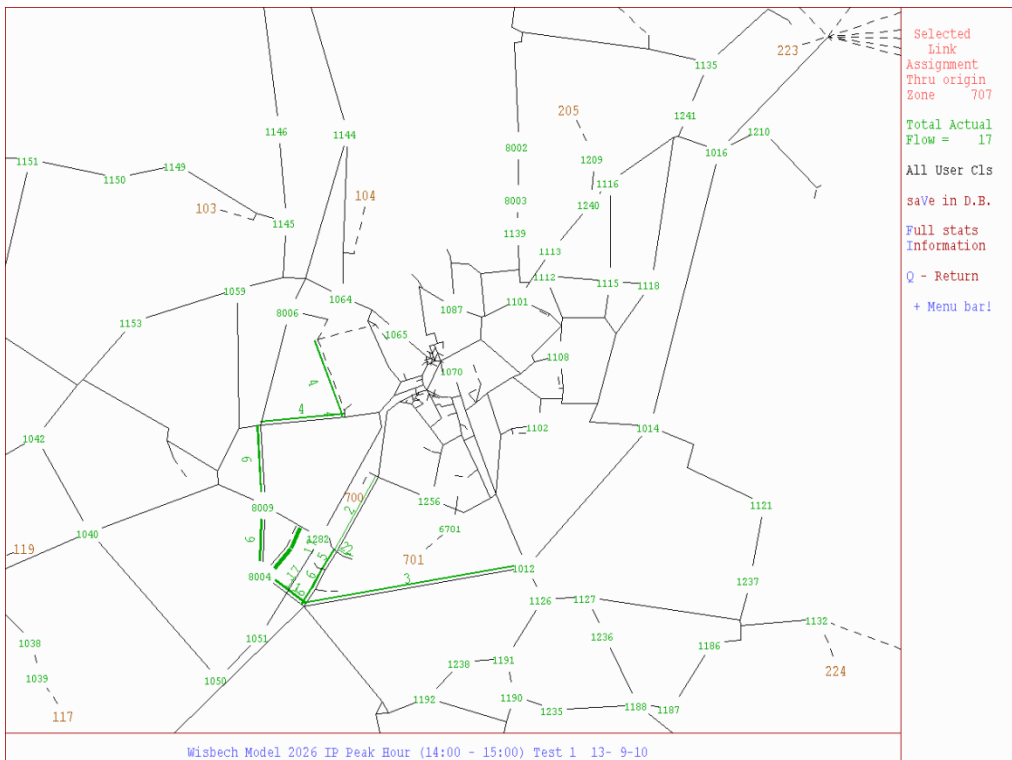


Figure 5.18 – Trips Ended at Employment Zone 707 (2026 – IP)

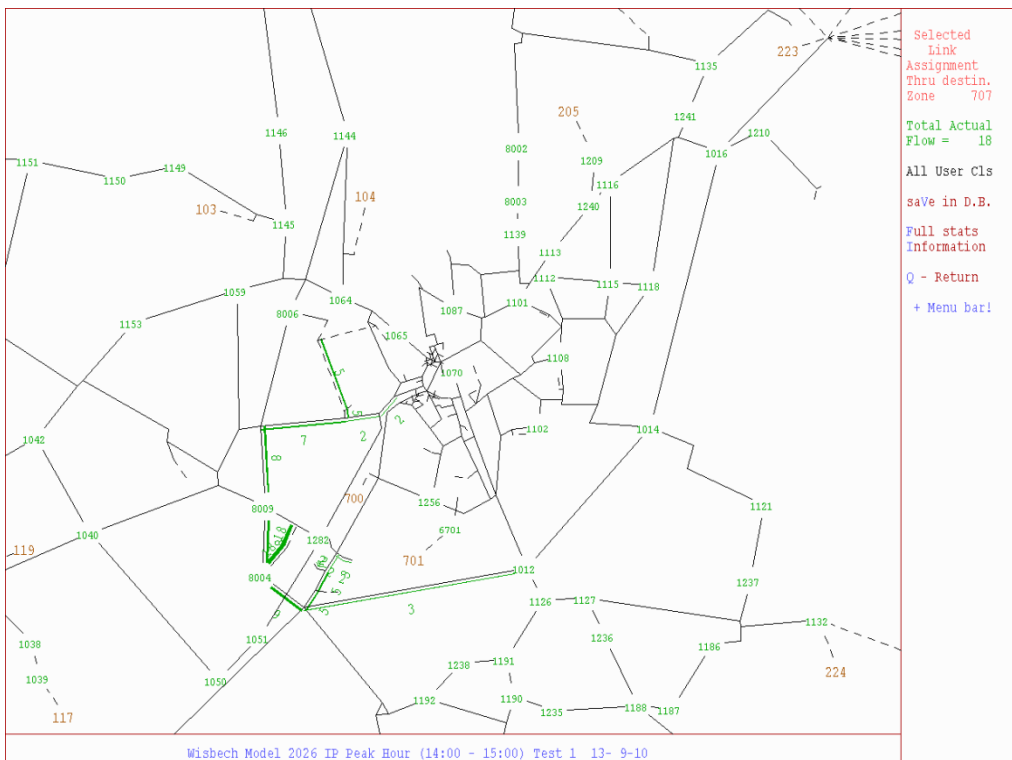


Figure 5.19 – Trips Originated from Residential Zone 708 (2026 – IP)

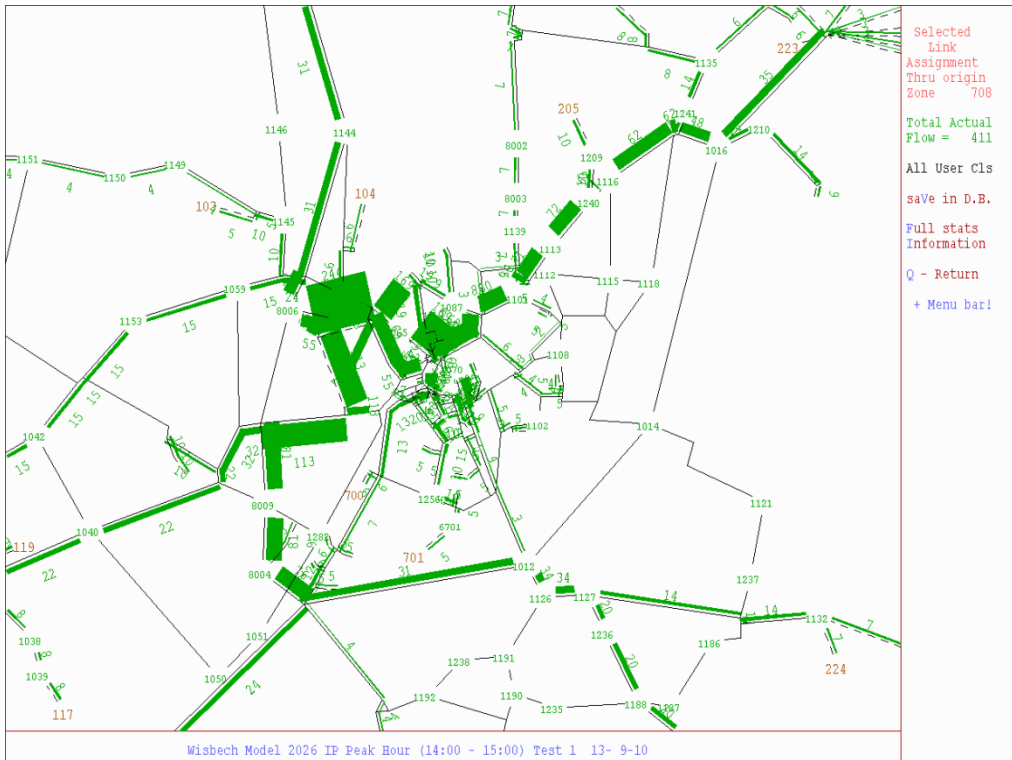


Figure 5.20 – Trips Ended at Residential Zone 708 (2026 – IP)

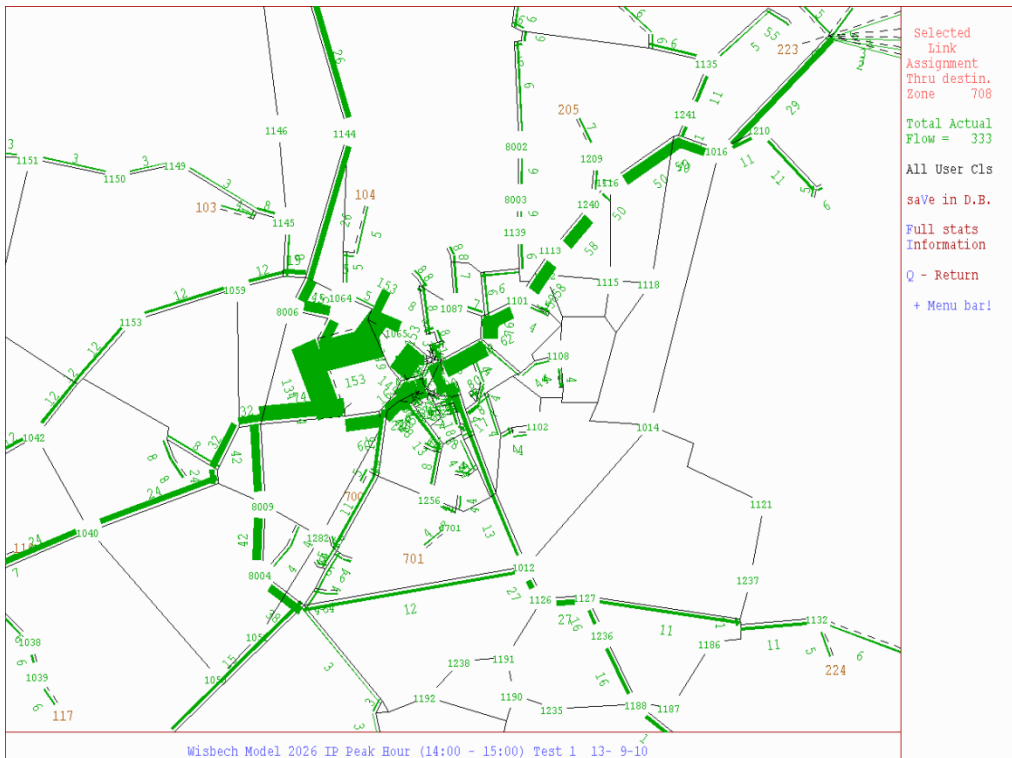


Figure 5.21 – Trips Originated from Employment Zone 707 (2026 – PM)

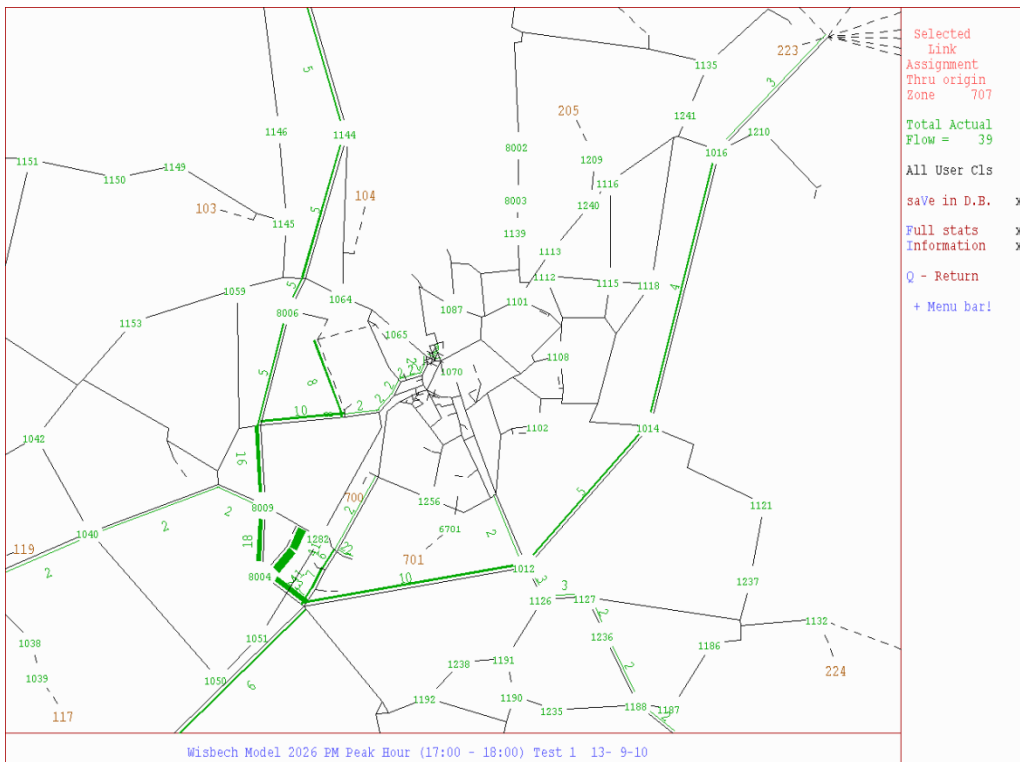


Figure 5.22 – Trips Ended at Employment Zone 707 (2026 – PM)

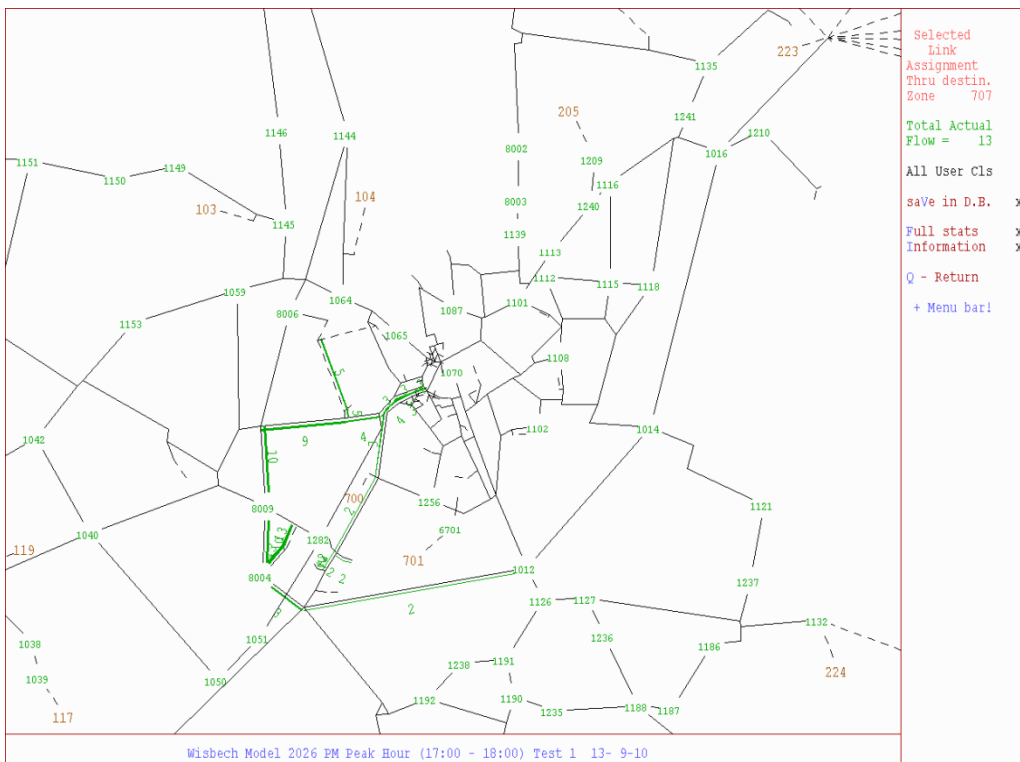


Figure 5.23 – Trips Originated from Residential Zone 708 (2026 – PM)

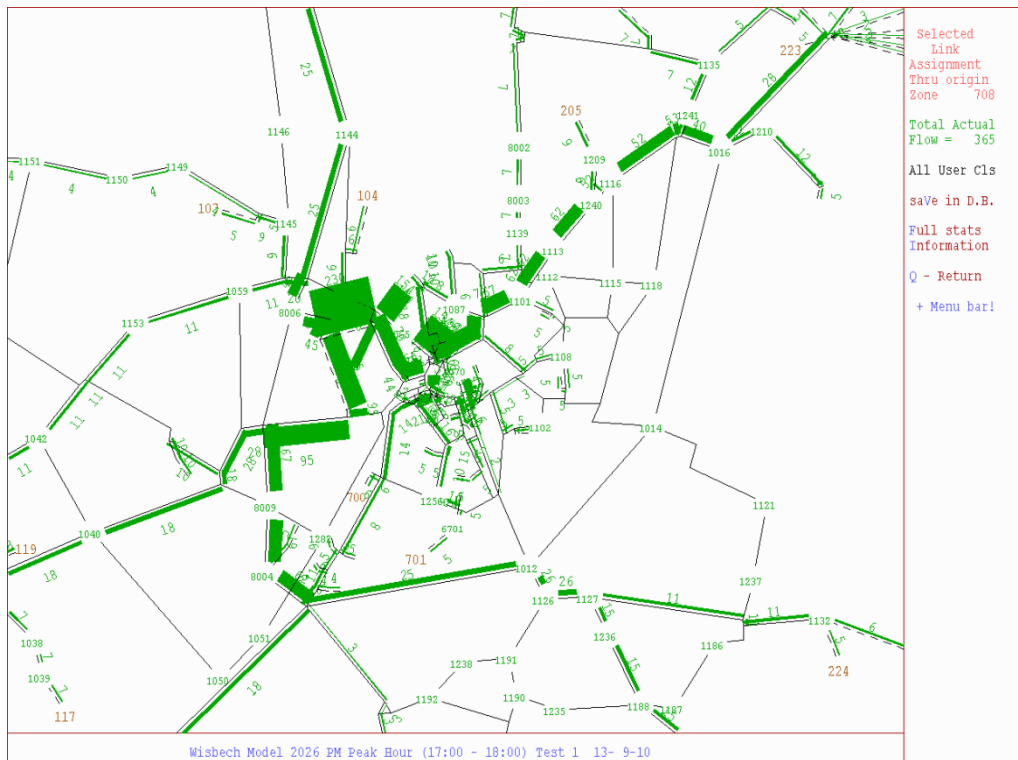
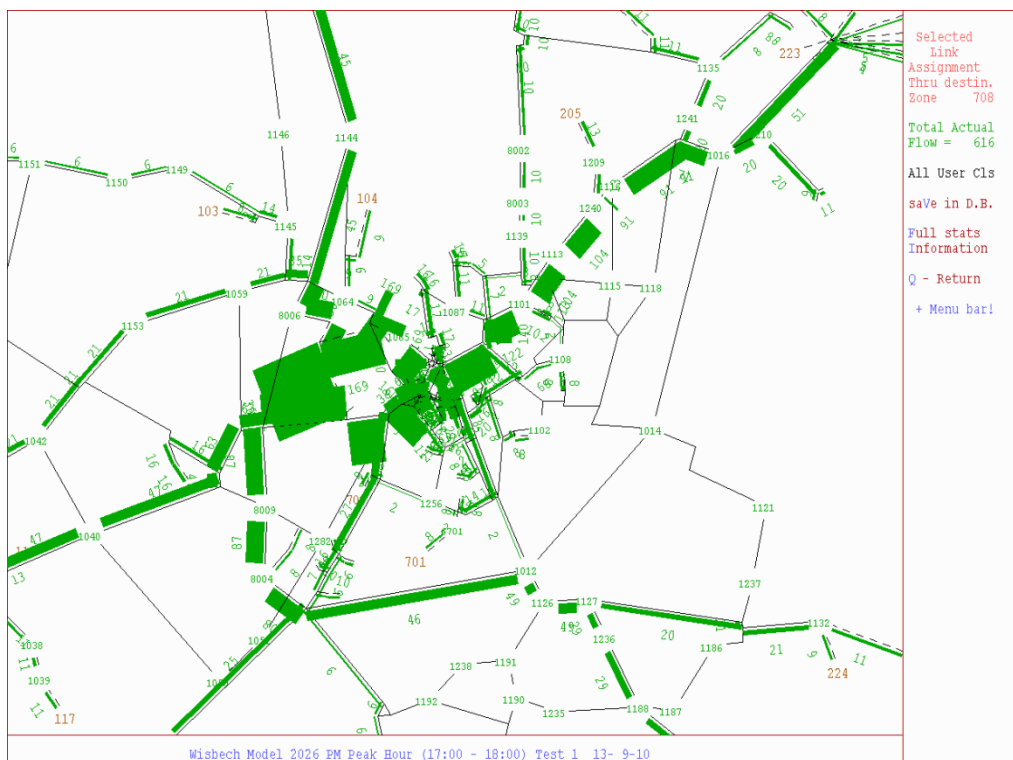


Figure 5.24 - Trips Ended at Residential Zone 708 (2026 – PM)



6. Appendix B - Test 5 Trip Distribution

Figure 6.1 – Trips Originated from Employment Zone 707 (2016 – AM)

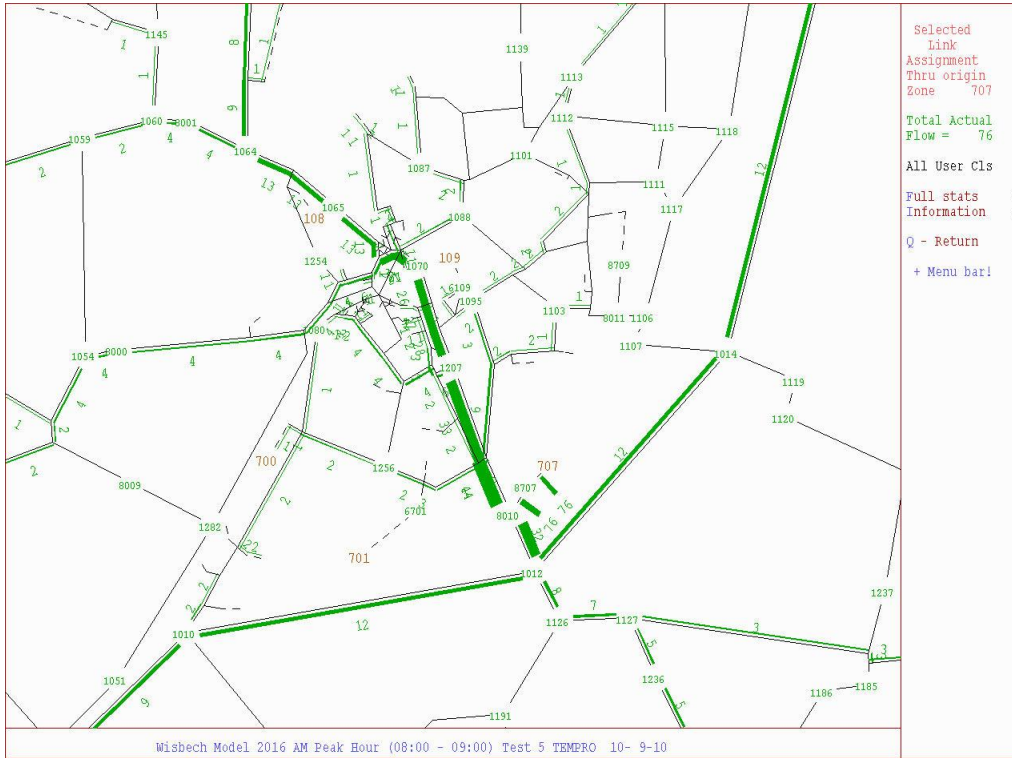


Figure 6.2 - Trips Ended at Employment Zone 707 (2016 – AM)

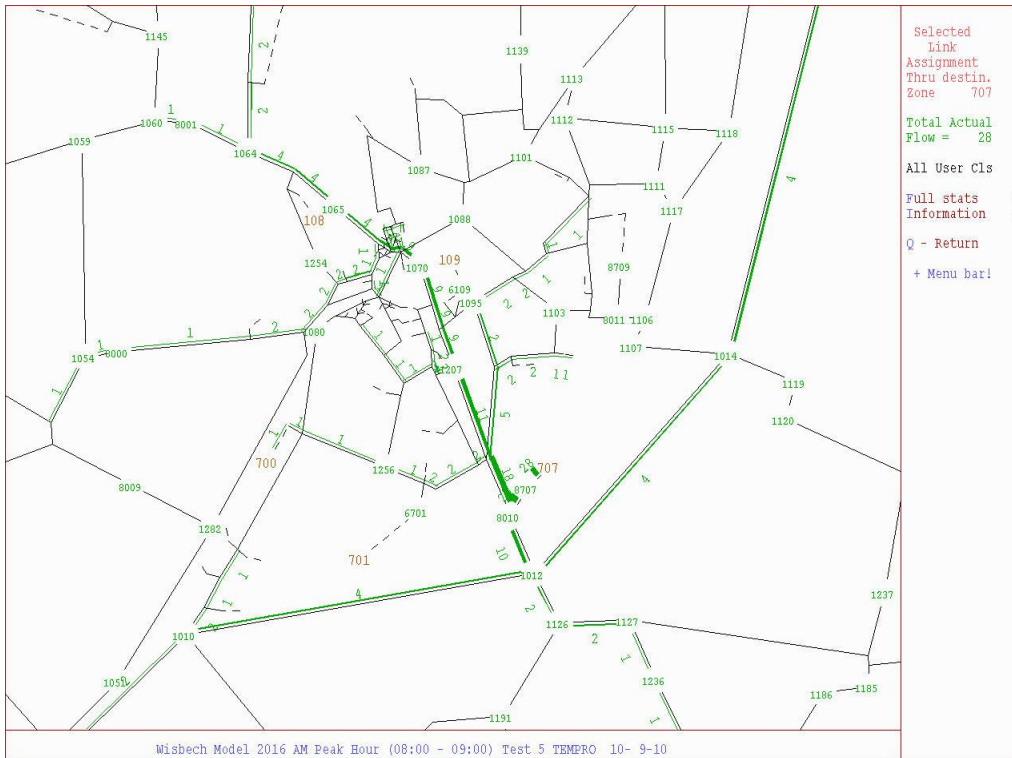


Figure 6.3 – Trips Originated from Residential Zone 708 (2016 – AM)

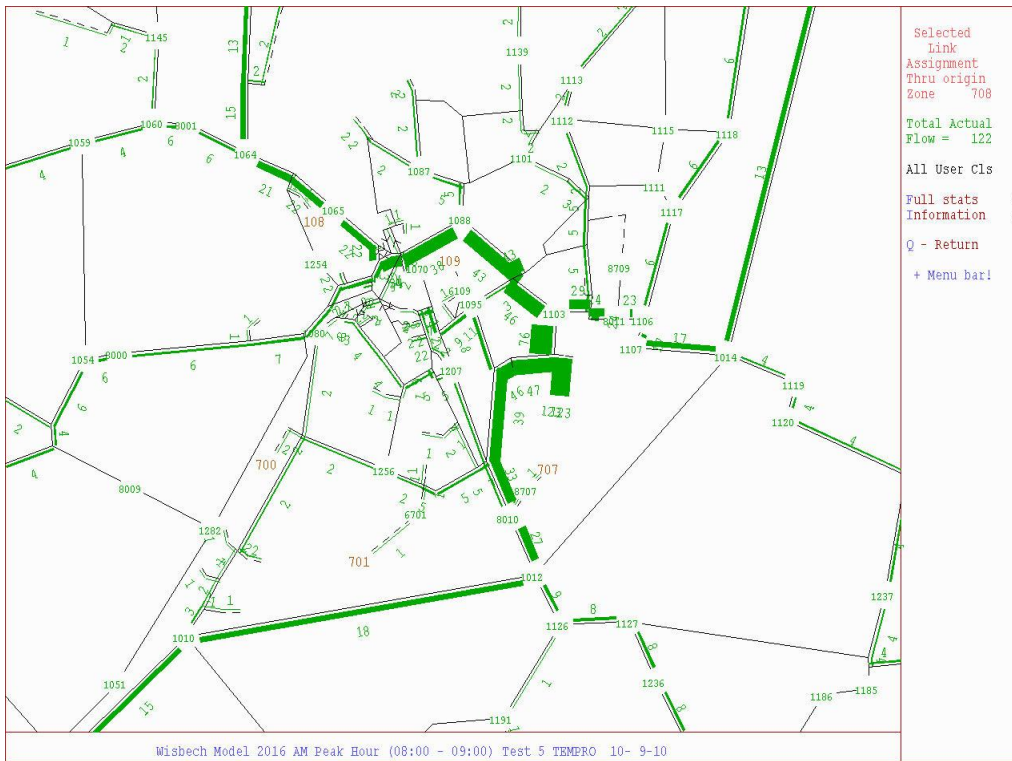


Figure 6.4 – Trips Ended at Residential Zone 708 (2016 – AM)

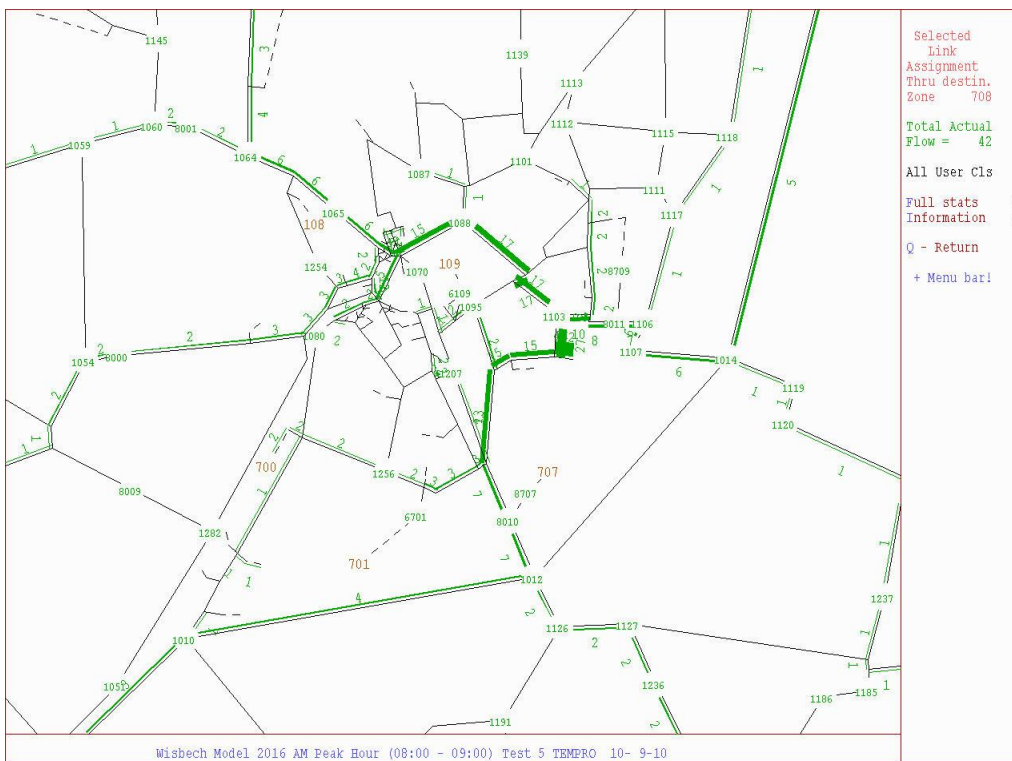


Figure 6.5 – Trips Originated from Residential Zone 709 (2016 – AM)

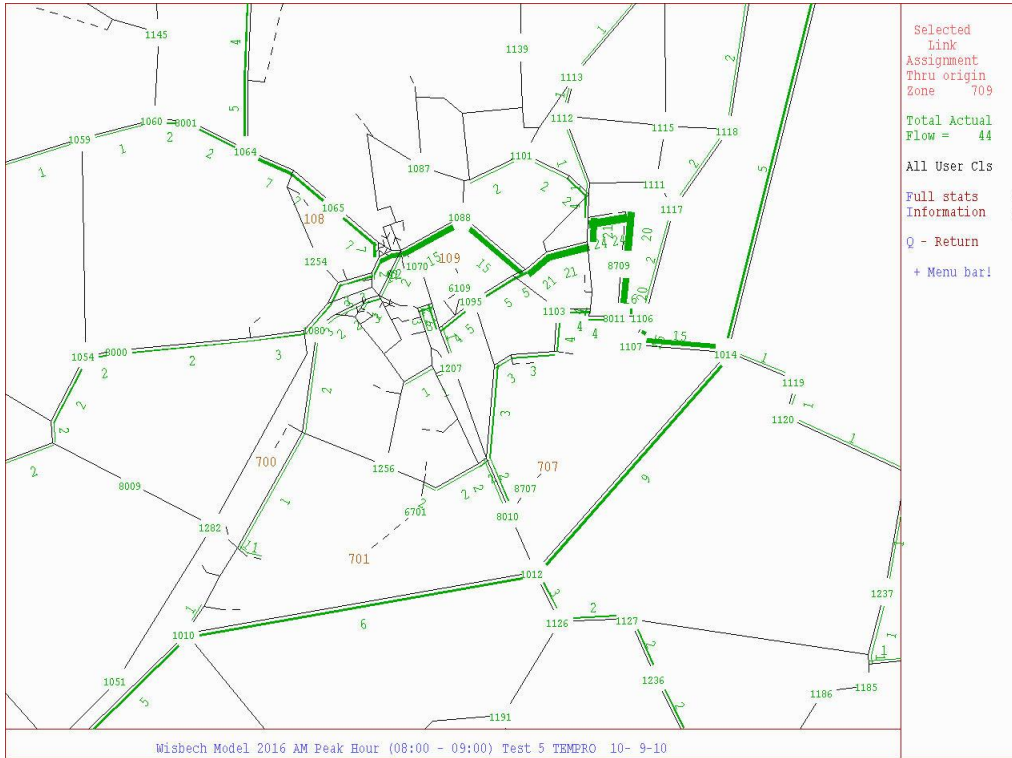


Figure 6.6 – Trips Ended at Residential Zone 709 (2016 – AM)

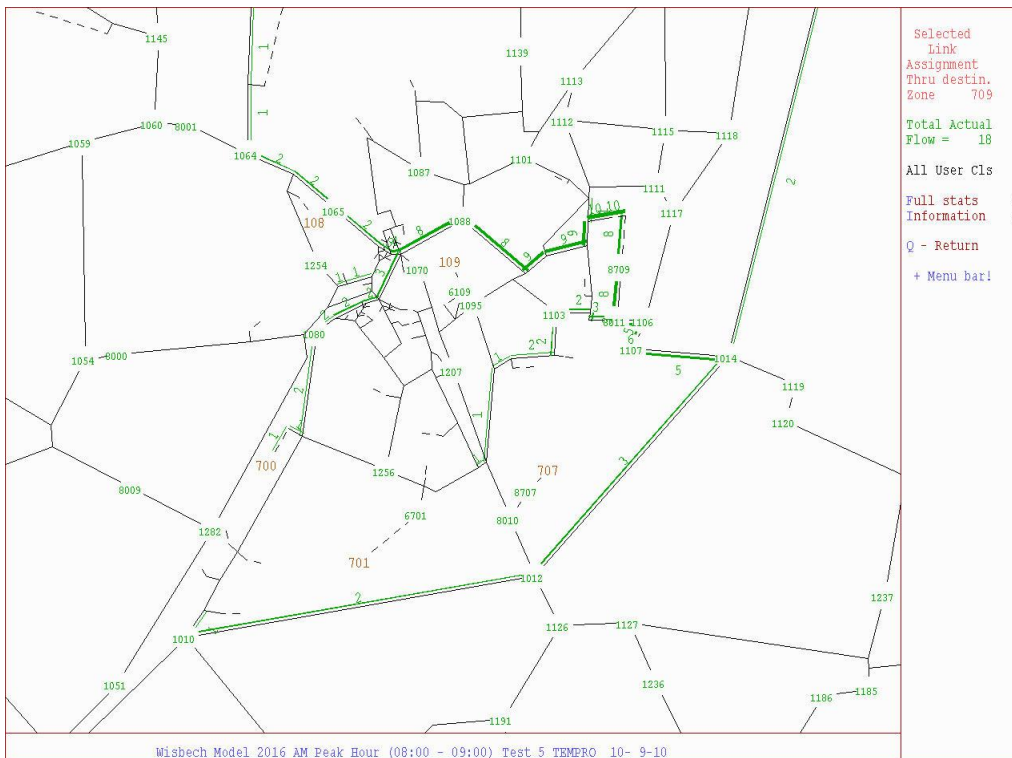


Figure 6.7 – Trips Originated from Employment Zone 707 (2016 – IP)

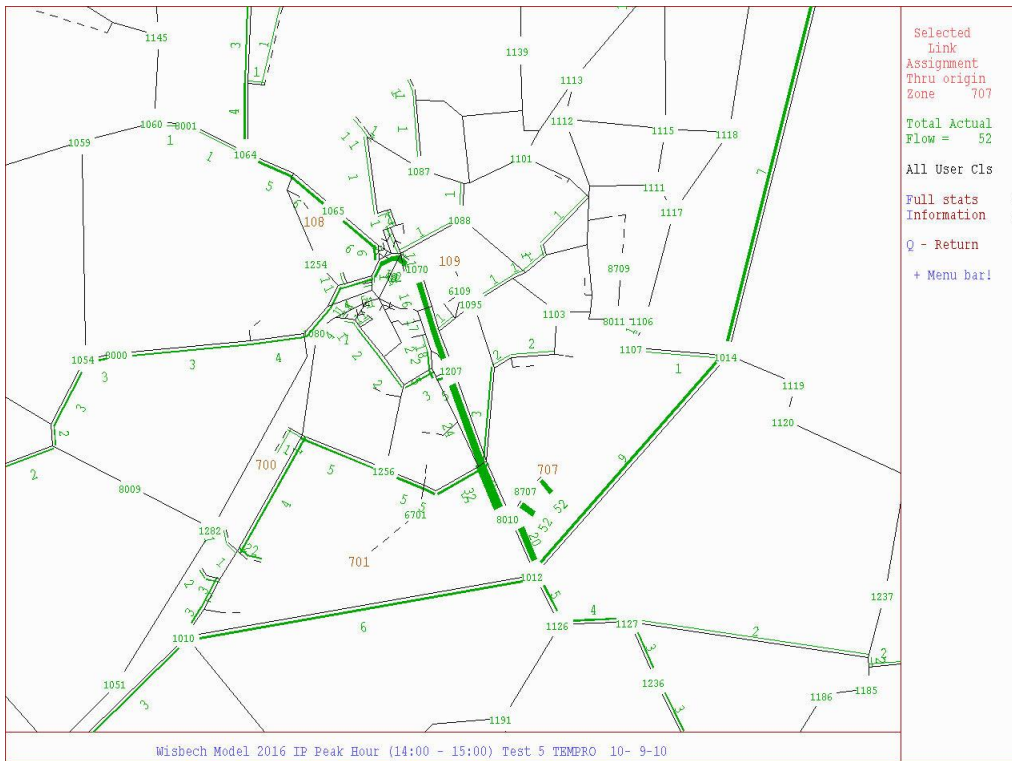


Figure 6.8 – Trips Ended at Employment Zone 707 (2016 – IP)

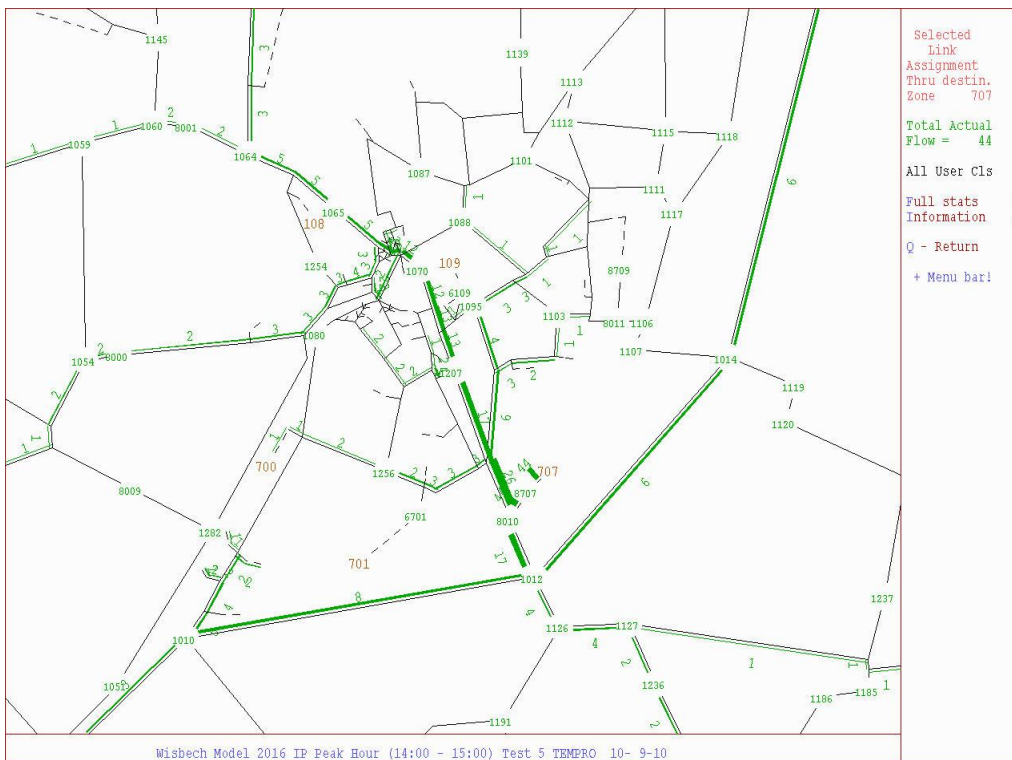


Figure 6.9 – Trips Originated from Residential Zone 708 (2016 – IP)

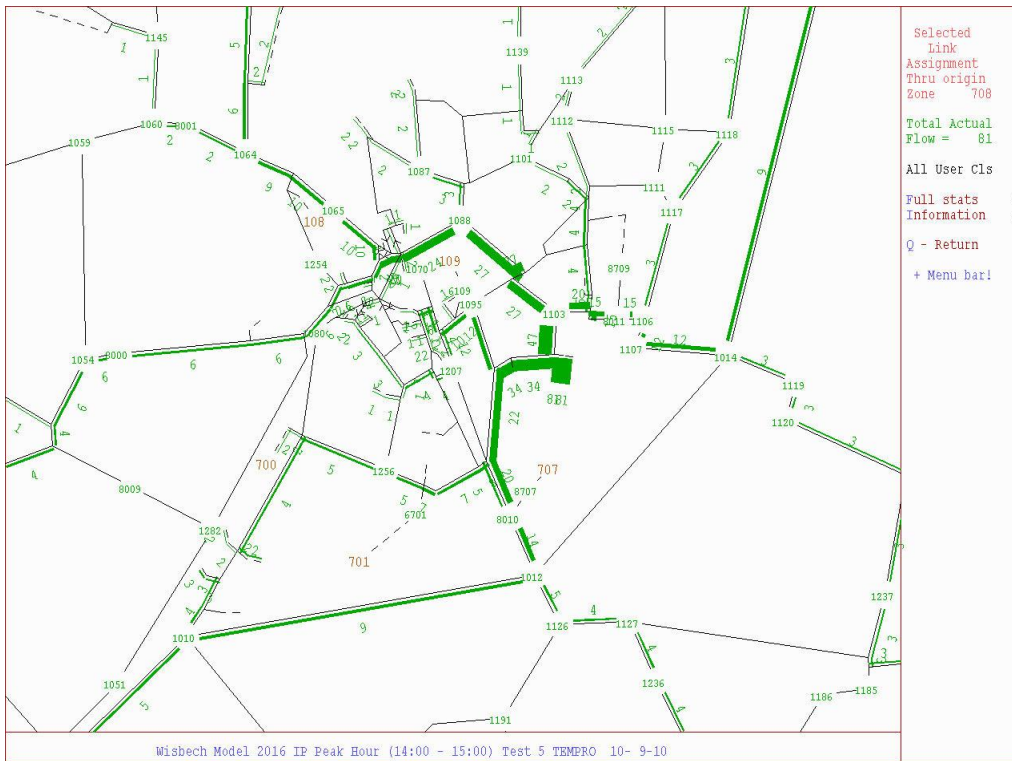


Figure 6.10 – Trips Ended at Residential Zone 708 (2016 – IP)

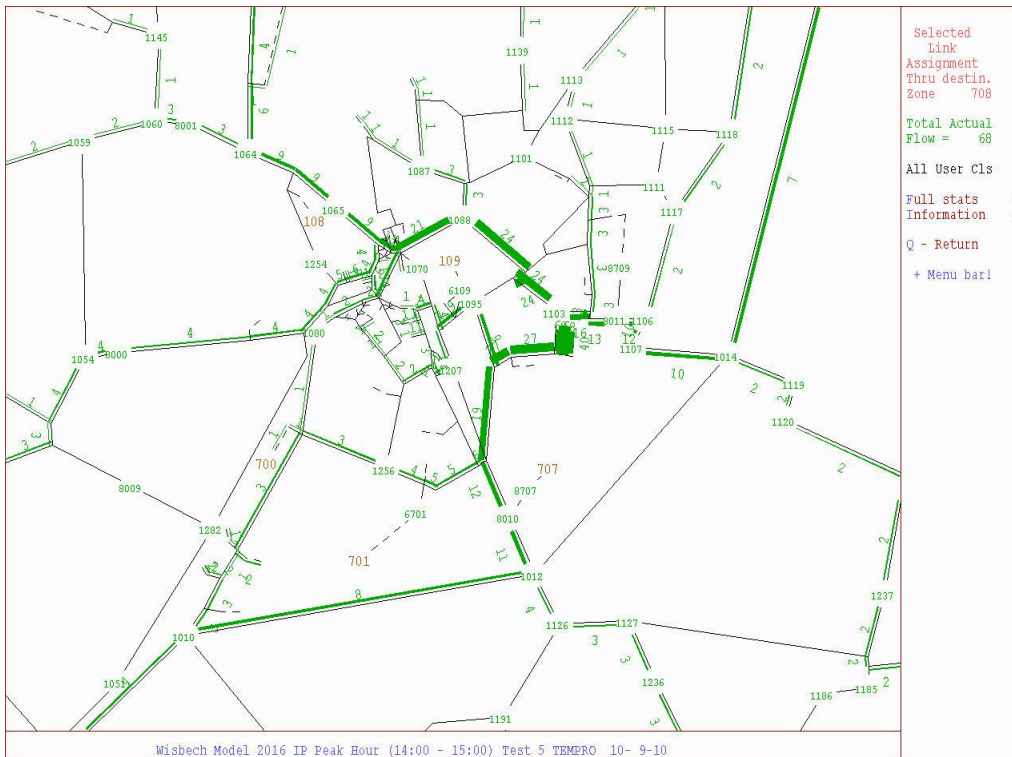


Figure 6.11 – Trips Originated from Residential Zone 709 (2016 – IP)

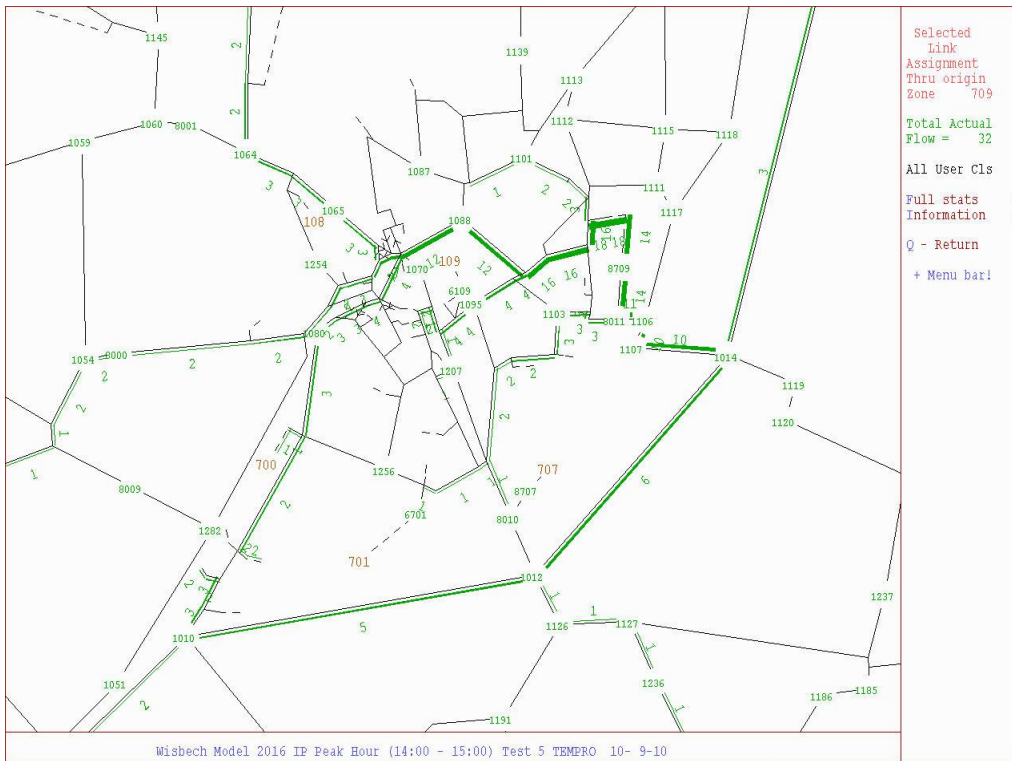


Figure 6.12 – Trips Ended at Residential Zone 709 (2016 – IP)

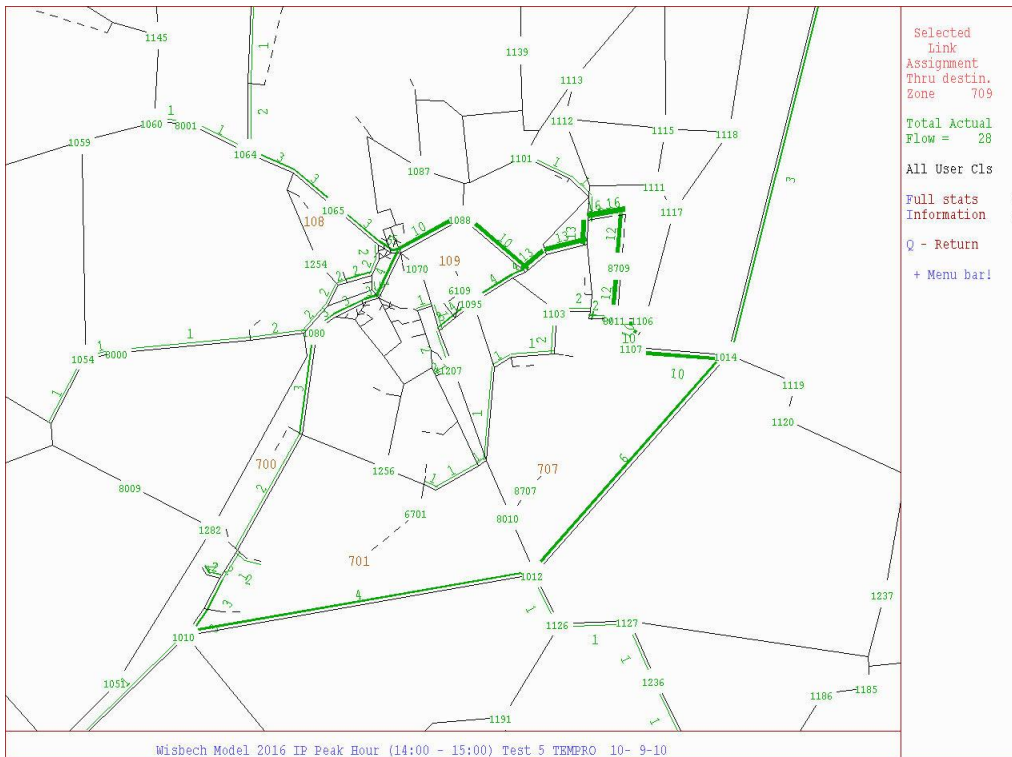


Figure 6.13 – Trips Originated from Employment Zone 707 (2016 – PM)

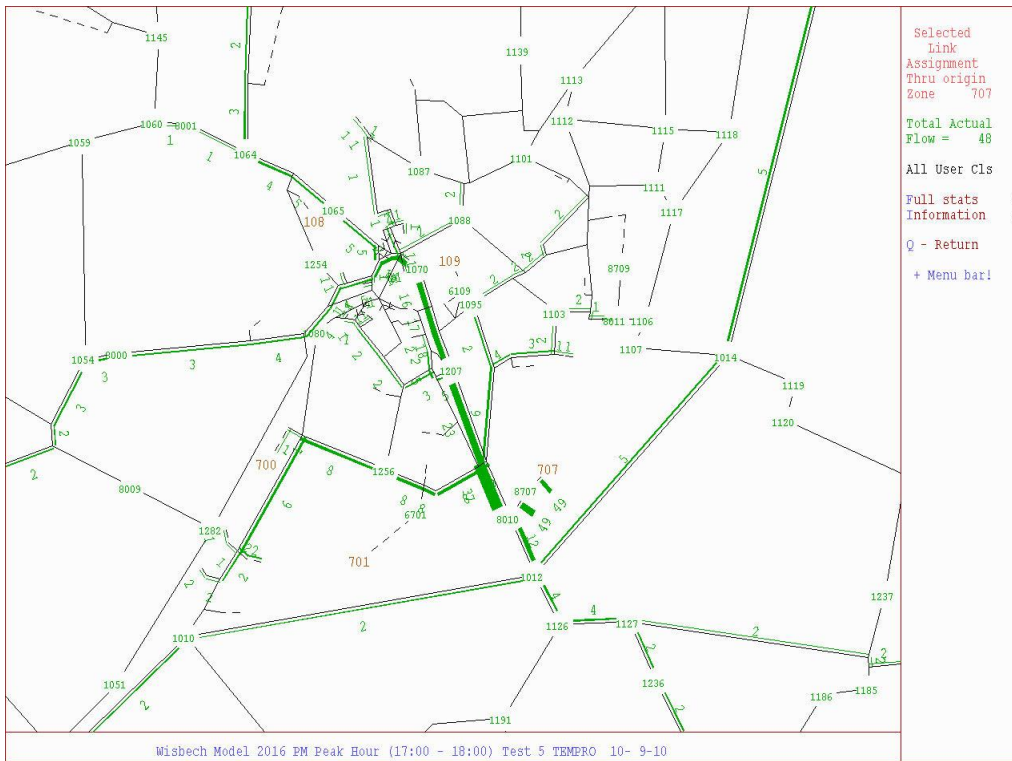


Figure 6.14 – Trips Ended at Employment Zone 707 (2016 – PM)

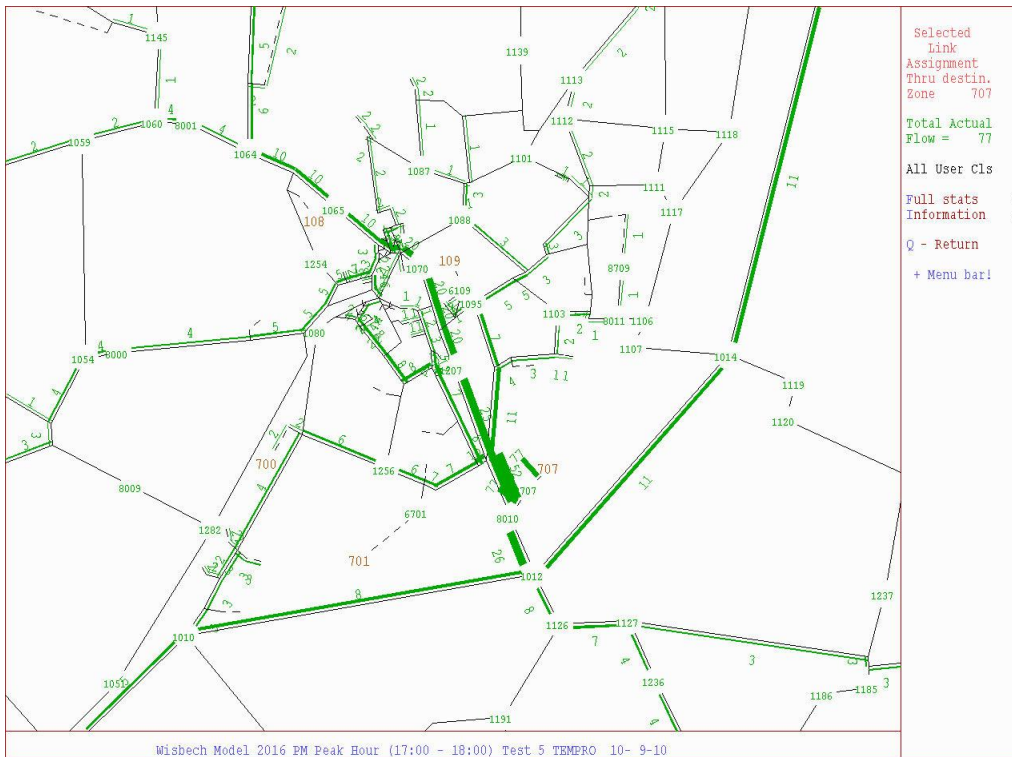


Figure 6.15 – Trips Originated from Residential Zone 708 (2016 – PM)

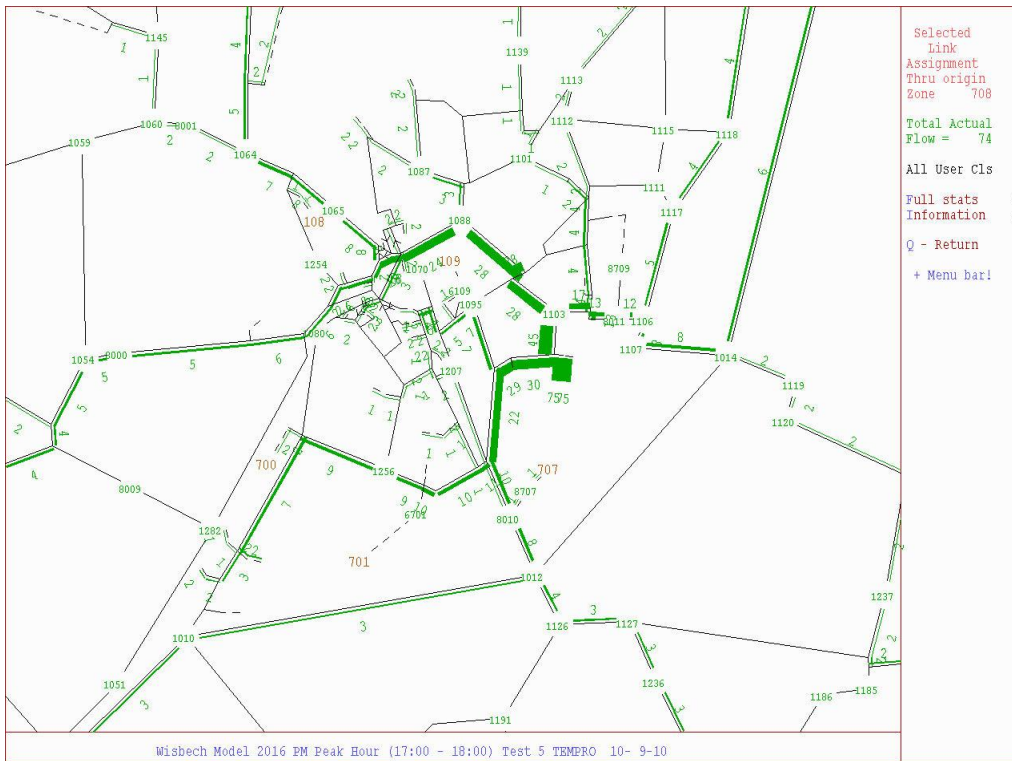


Figure 6.16 - Trips Ended at Residential Zone 708 (2016 – PM)

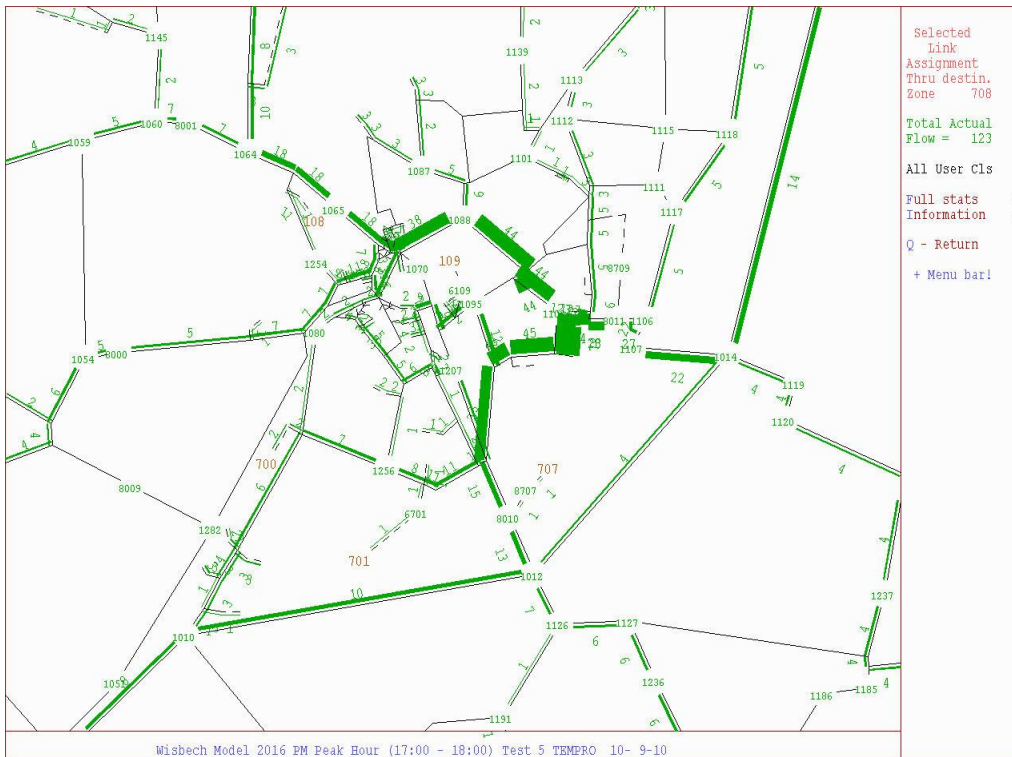


Figure 6.17 – Trips Originated from Residential Zone 709 (2016 – PM)

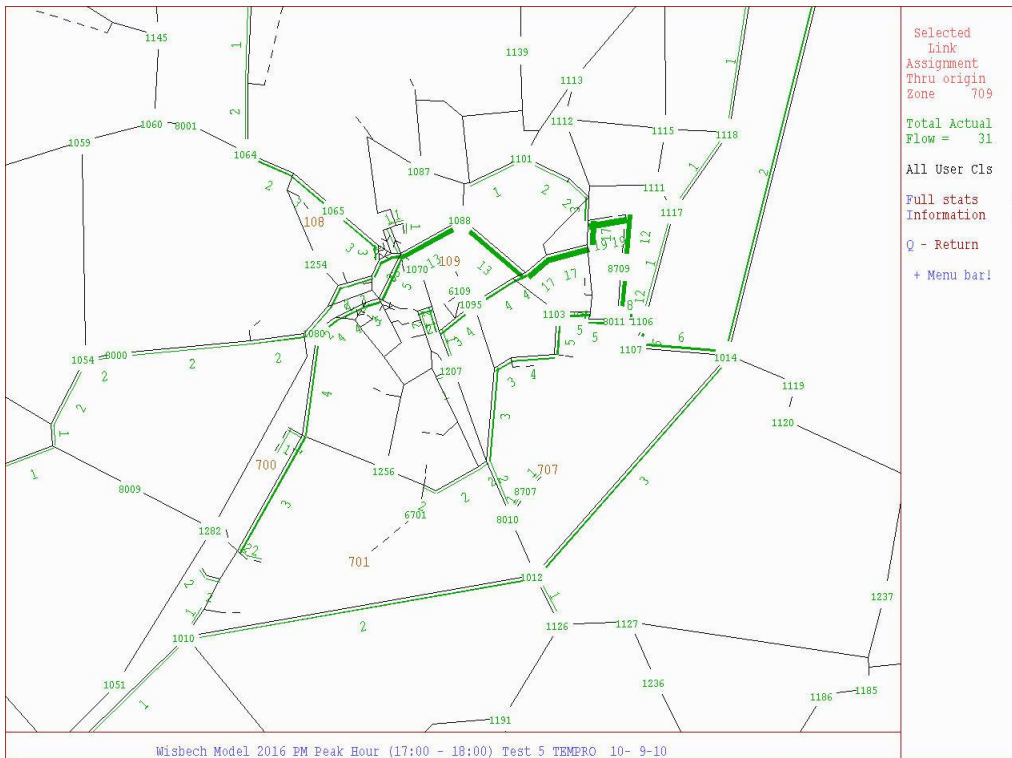


Figure 6.18 - Trips Ended at Residential Zone 709 (2016 – PM)

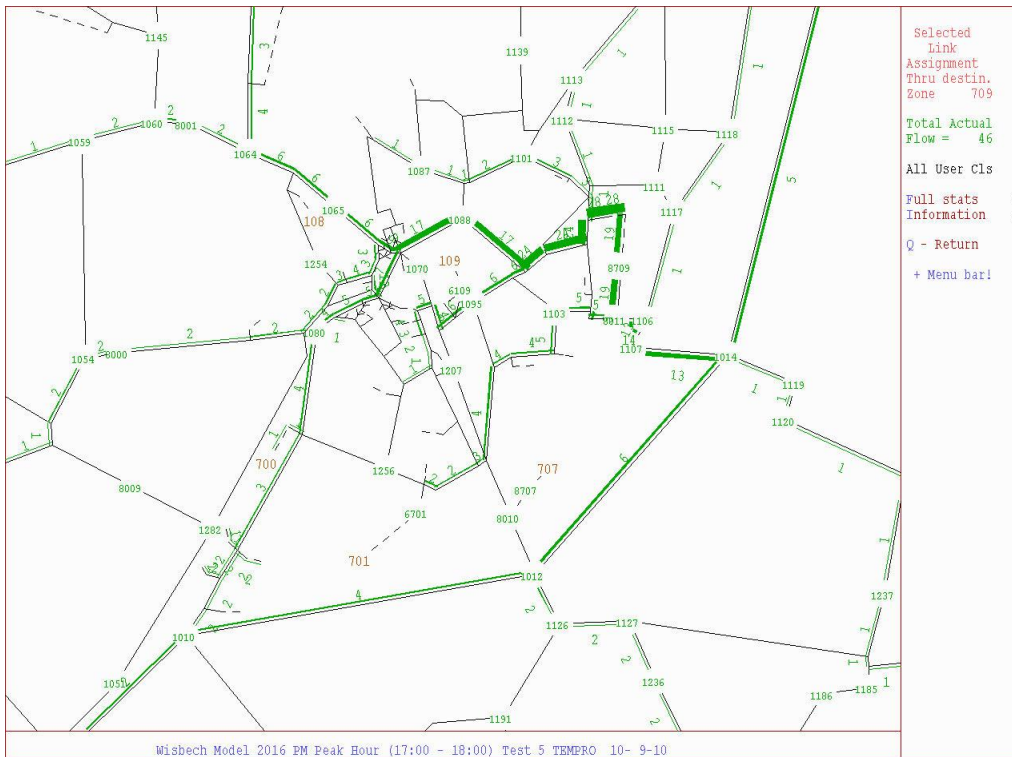


Figure 6.19 – Trips Originated from Employment Zone 707 (2021 – AM)

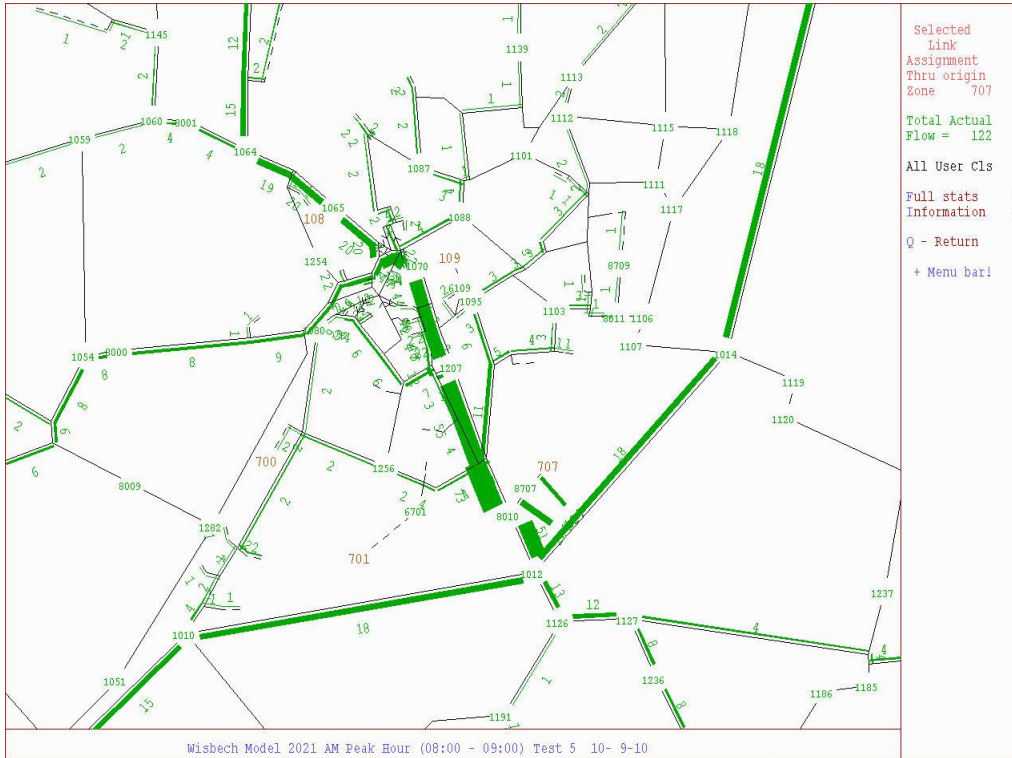


Figure 6.20 - Trips Ended at Employment Zone 707 (2021 – AM)

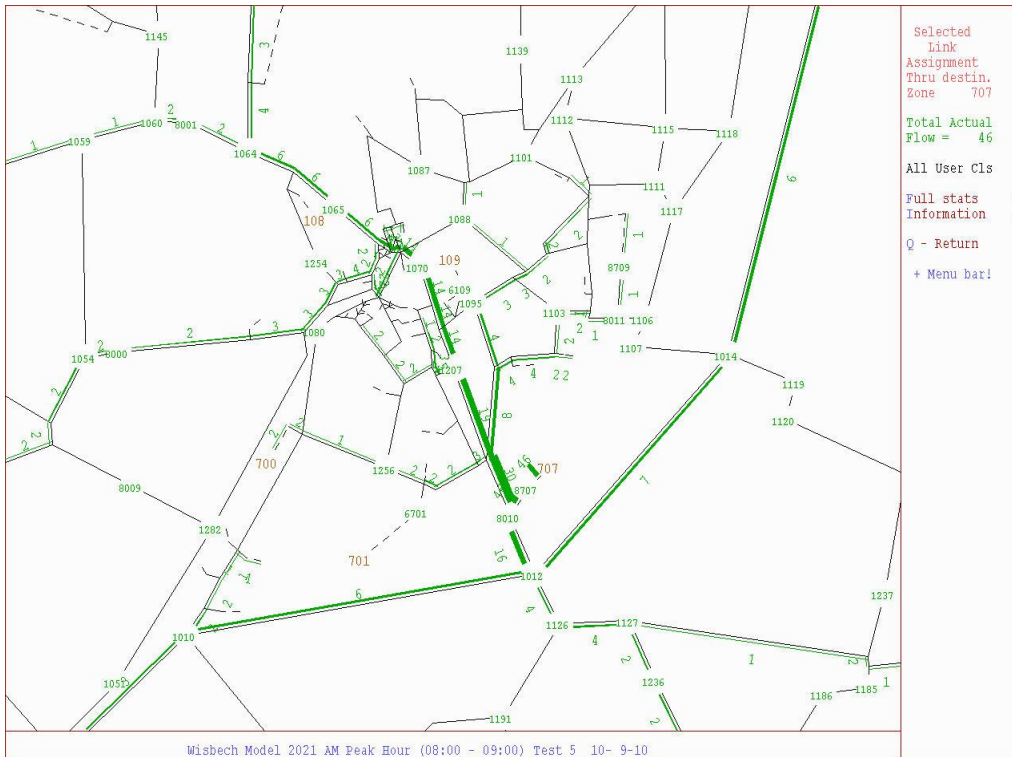


Figure 6.21 – Trips Originated from Residential Zone 708 (2021 – AM)

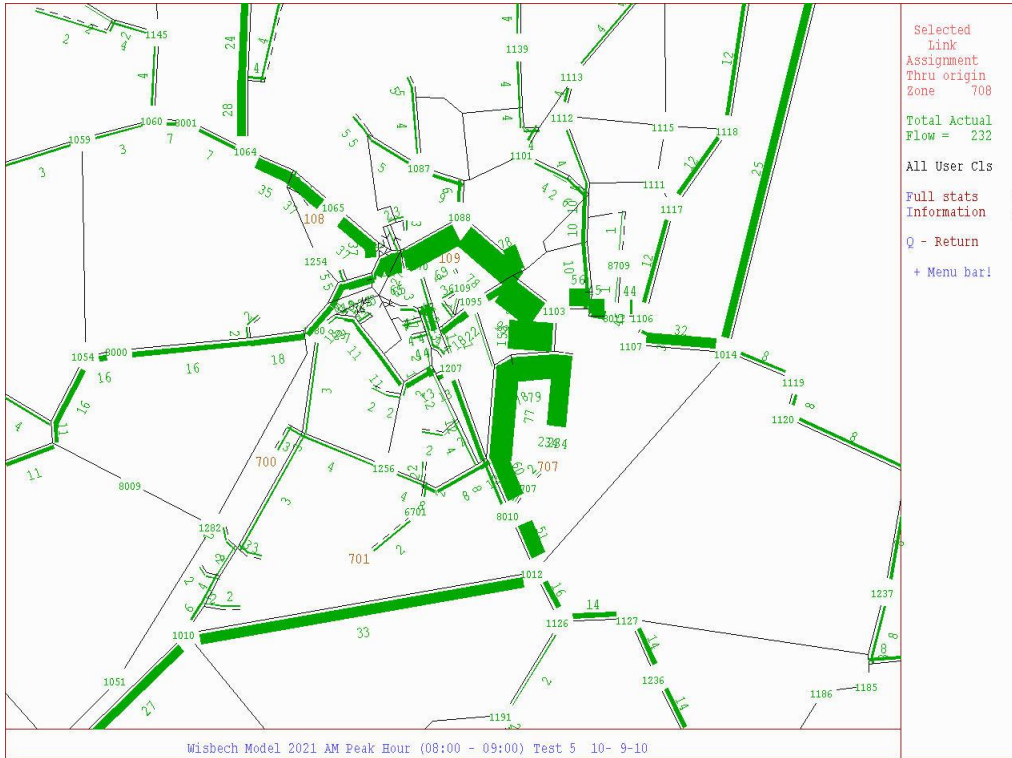


Figure 6.22 – Trips Ended at Residential Zone 708 (2021 – AM)

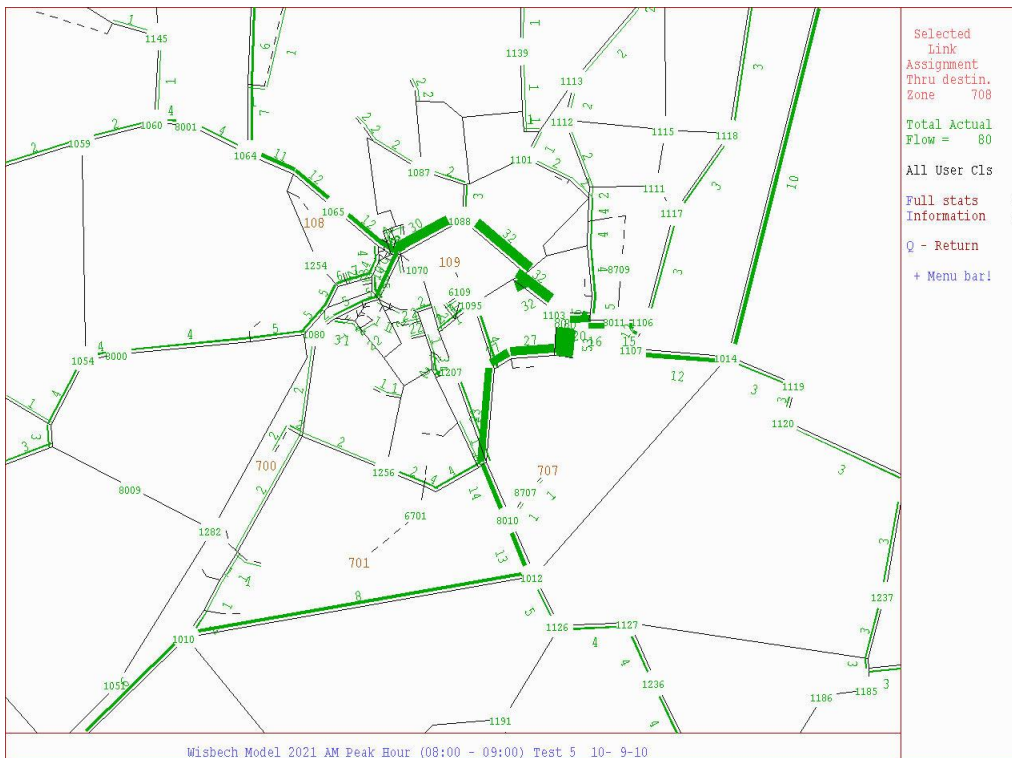


Figure 6.23 – Trips Originated from Residential Zone 709 (2021 – AM)

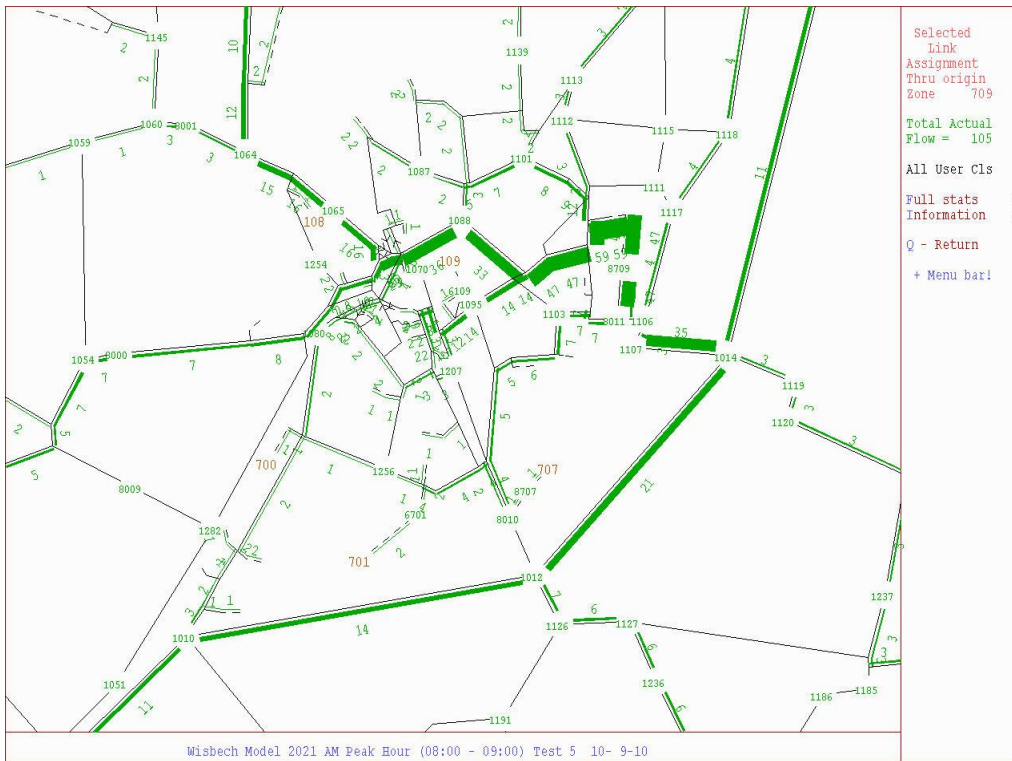


Figure 6.24 – Trips Ended at Residential Zone 709 (2021 – AM)

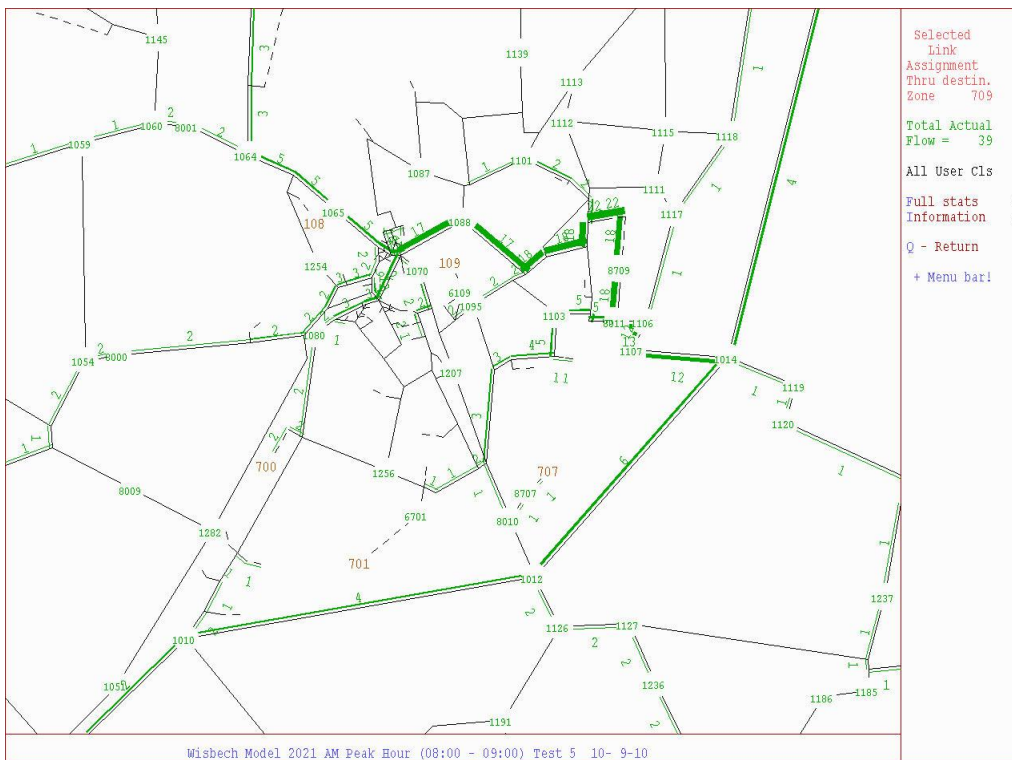


Figure 6.25 – Trips Originated from Employment Zone 707 (2021 – IP)

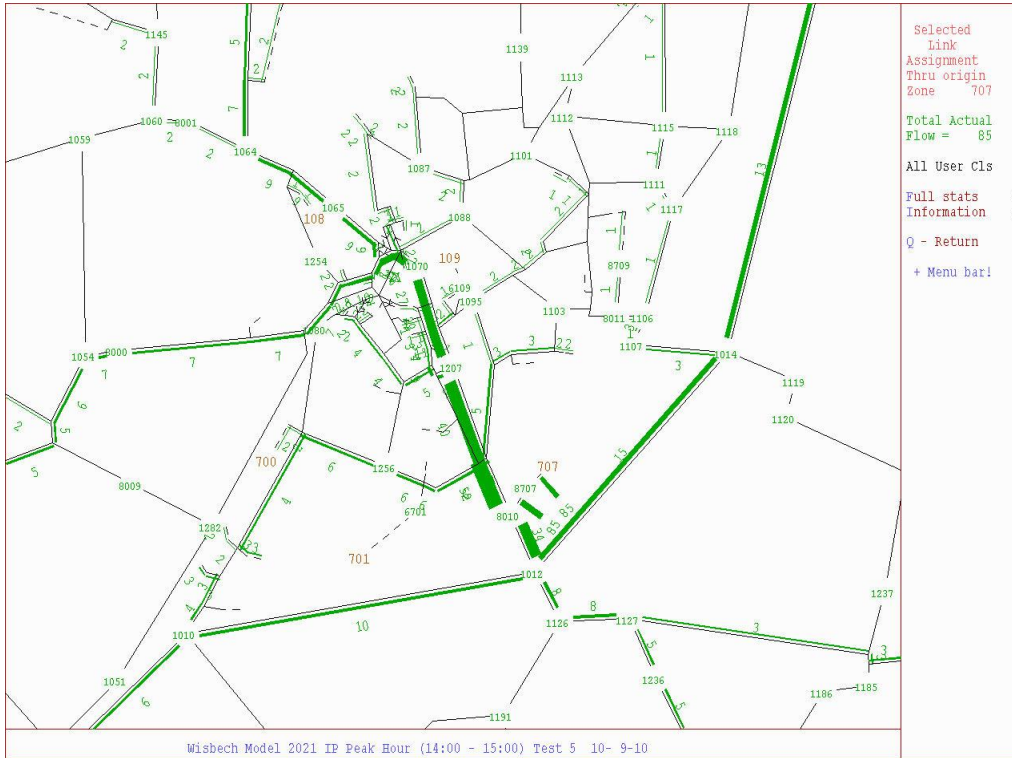


Figure 6.26 – Trips Ended at Employment Zone 707 (2021 – IP)

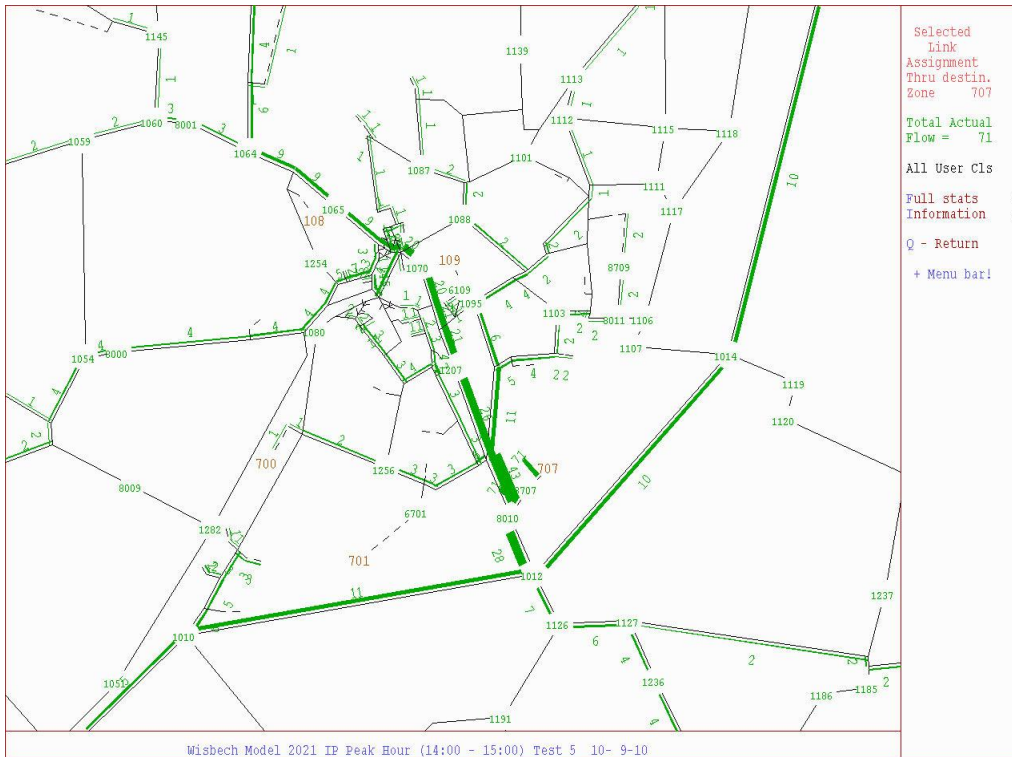


Figure 6.27 – Trips Originated from Residential Zone 708 (2021 – IP)

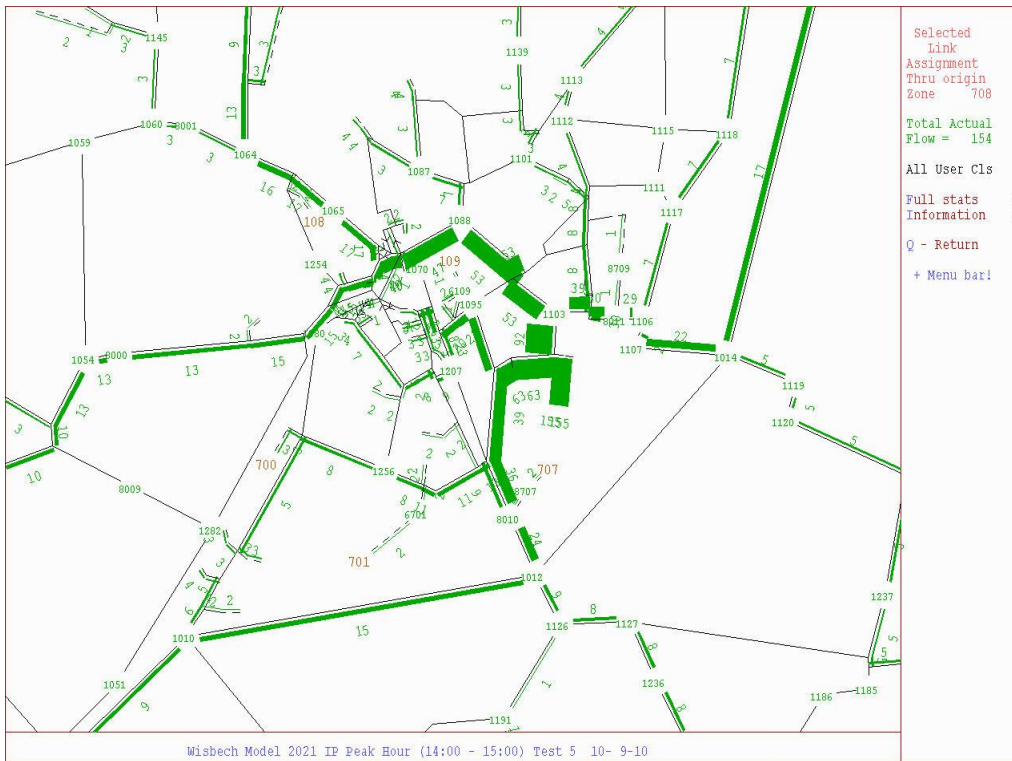


Figure 6.28 – Trips Ended at Residential Zone 708 (2021 – IP)

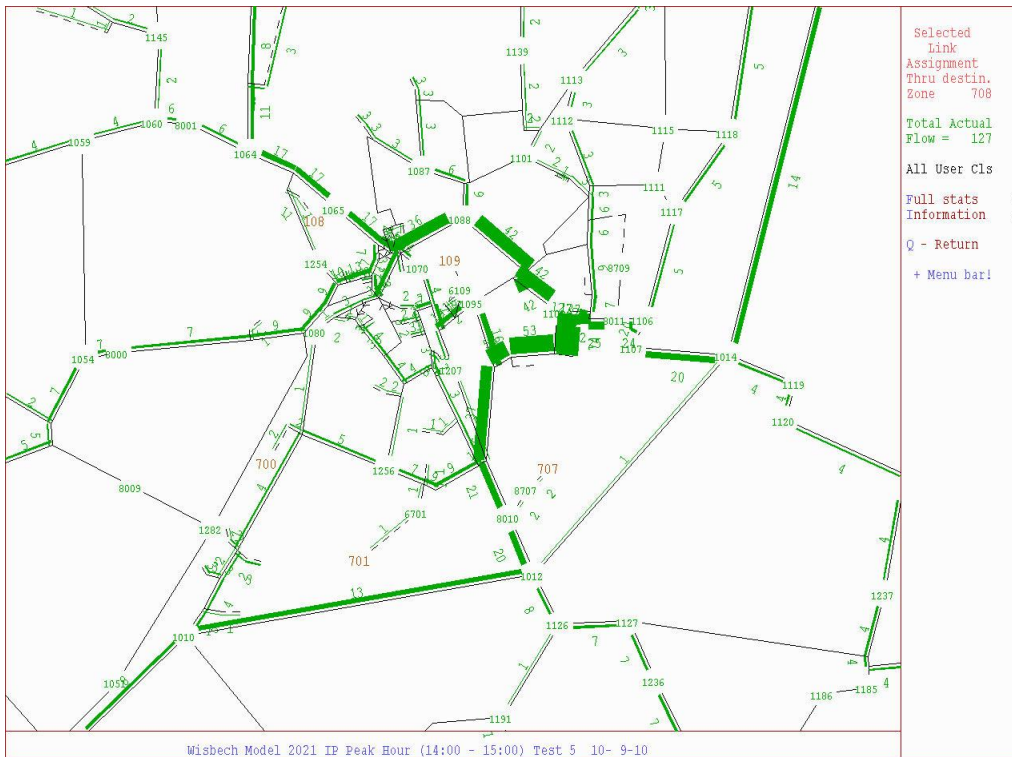


Figure 6.29 – Trips Originated from Residential Zone 709 (2021 – IP)

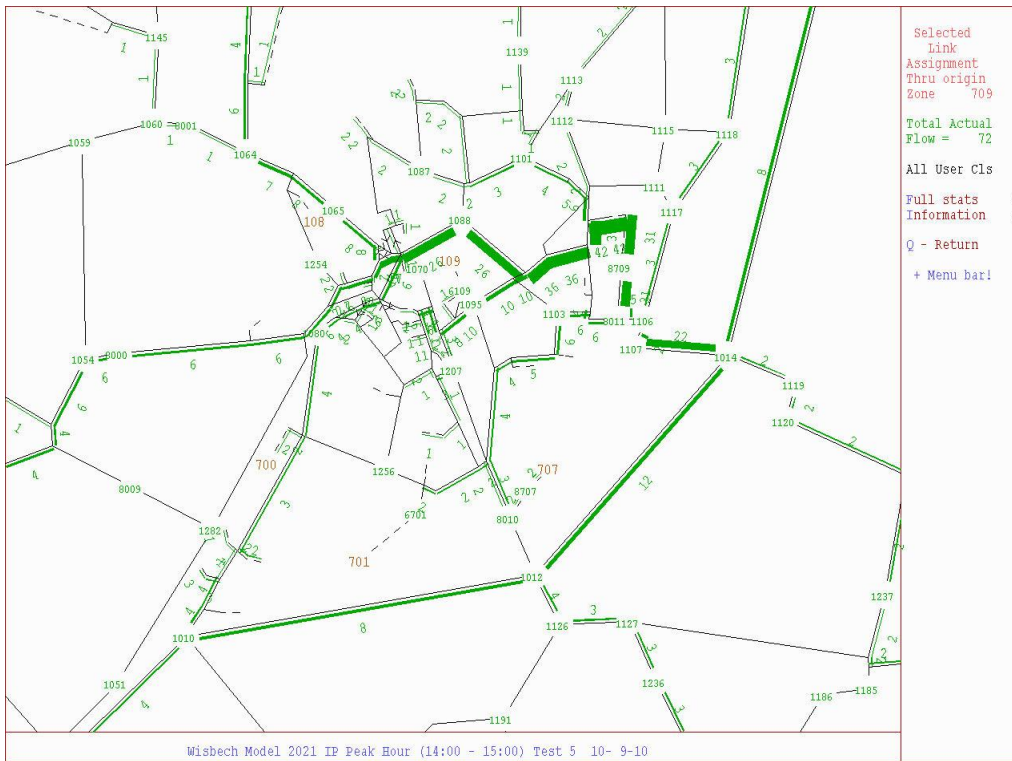


Figure 6.30 – Trips Ended at Residential Zone 709 (2021 – IP)

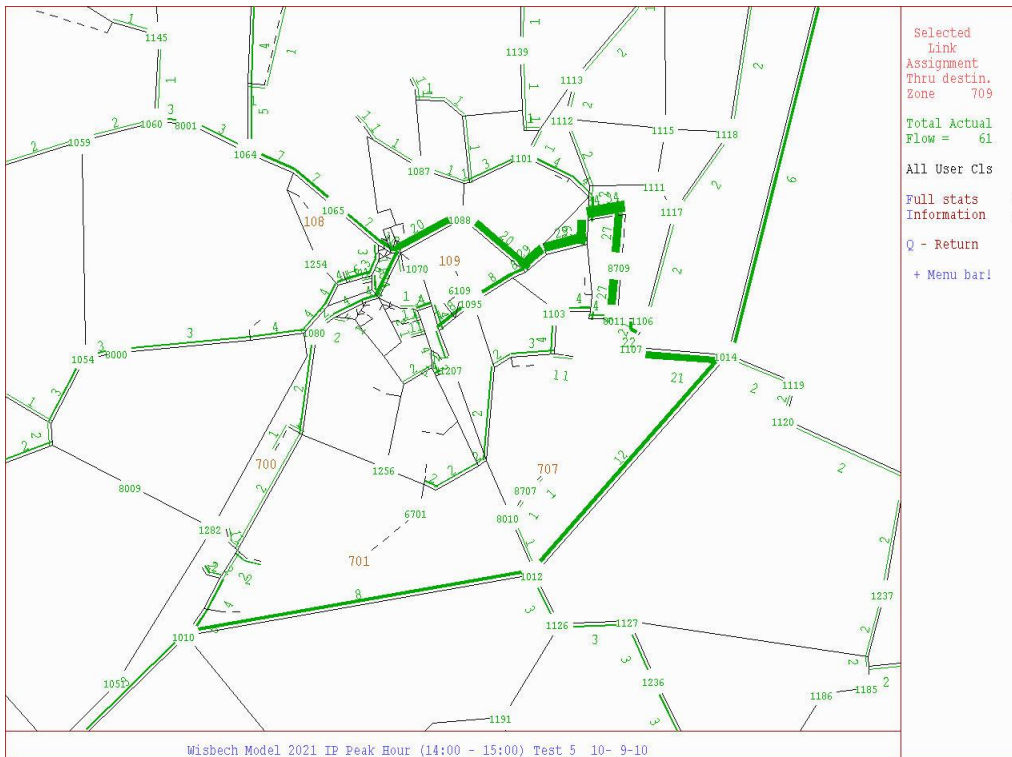


Figure 6.31 – Trips Originated from Employment Zone 707 (2021 – PM)

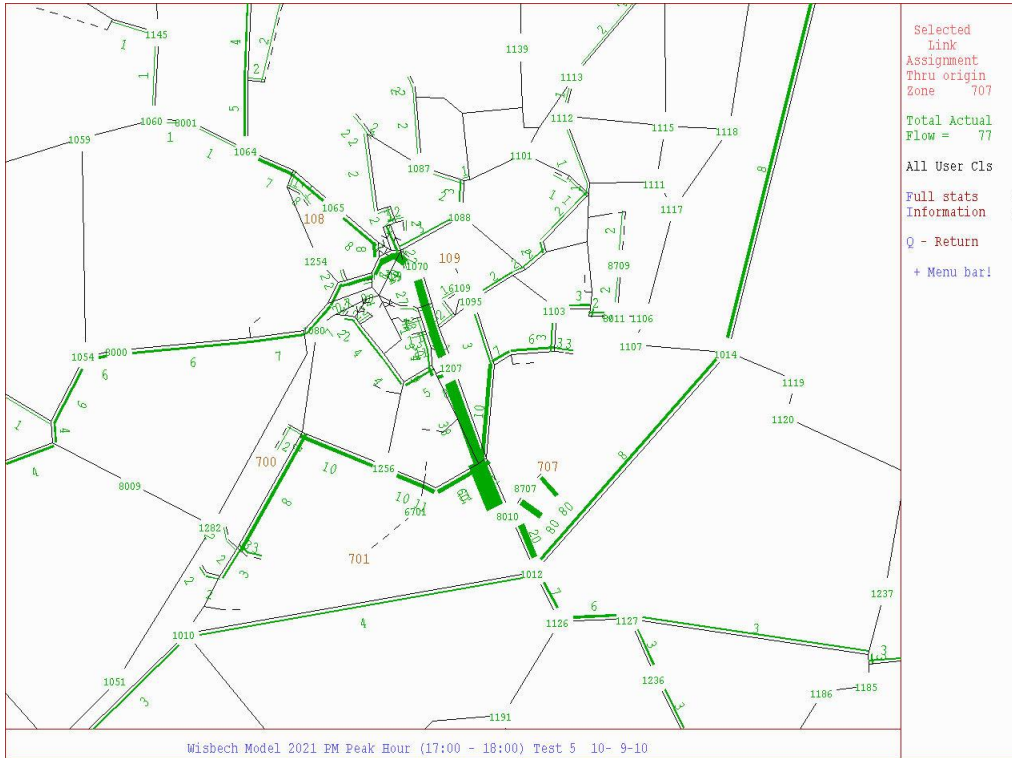


Figure 6.32 – Trips Ended at Employment Zone 707 (2021 – PM)

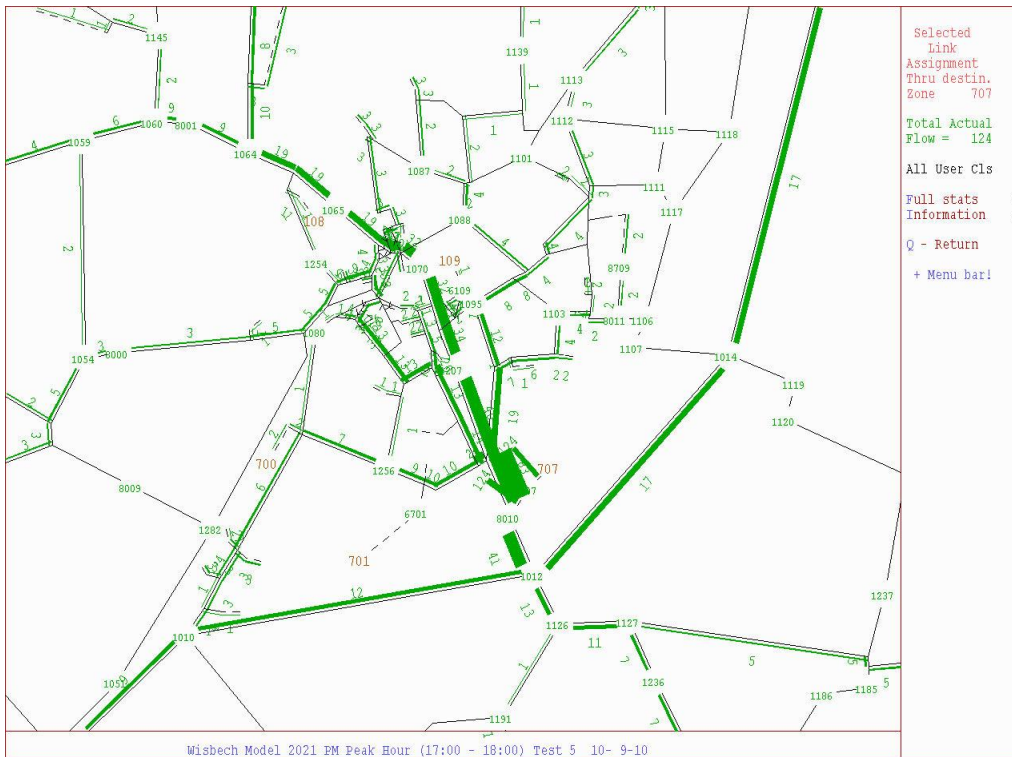


Figure 6.33 – Trips Originated from Residential Zone 708 (2021 – PM)

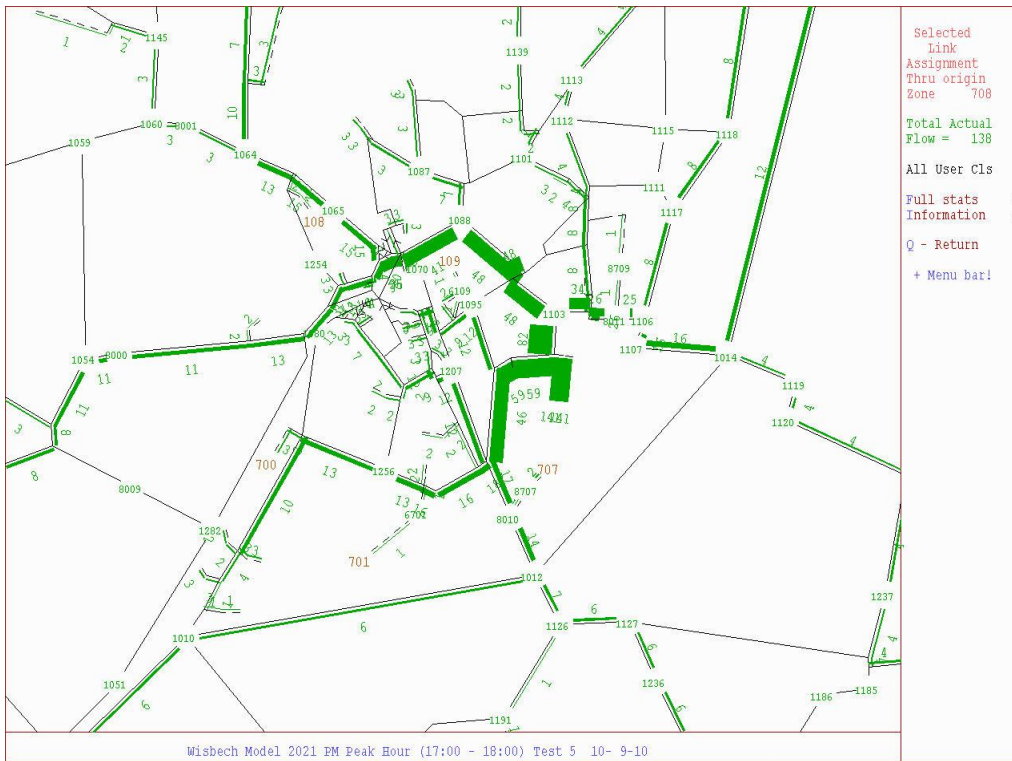


Figure 6.34 - Trips Ended at Residential Zone 708 (2021 – PM)

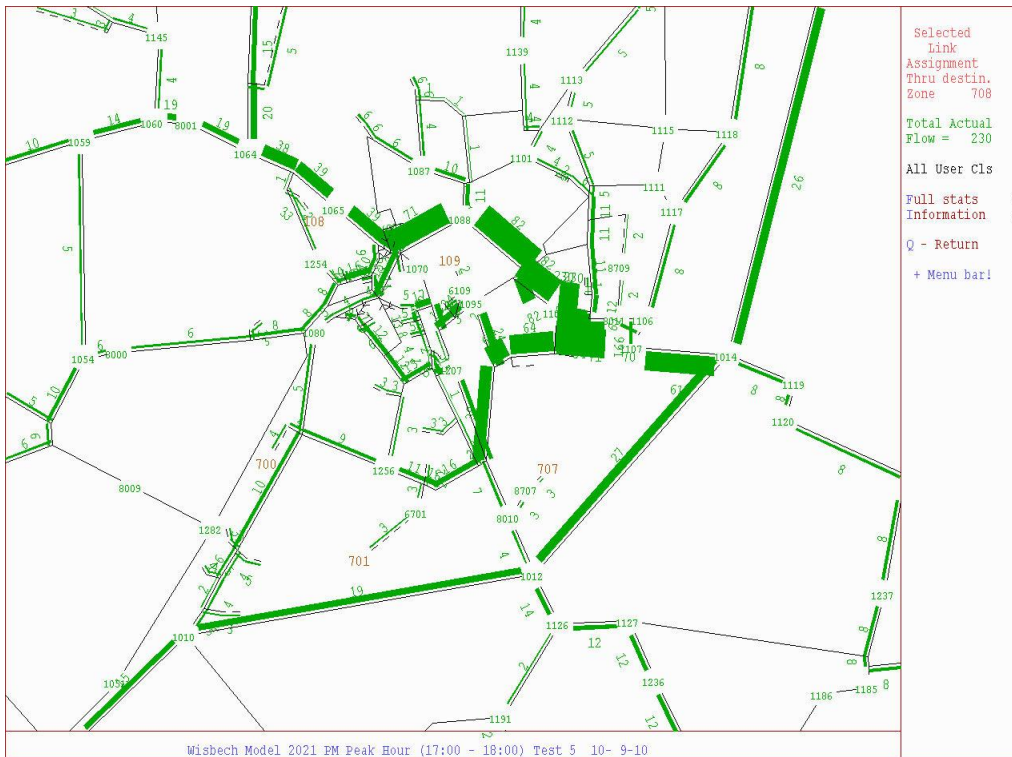


Figure 6.35 – Trips Originated from Residential Zone 709 (2021 – PM)

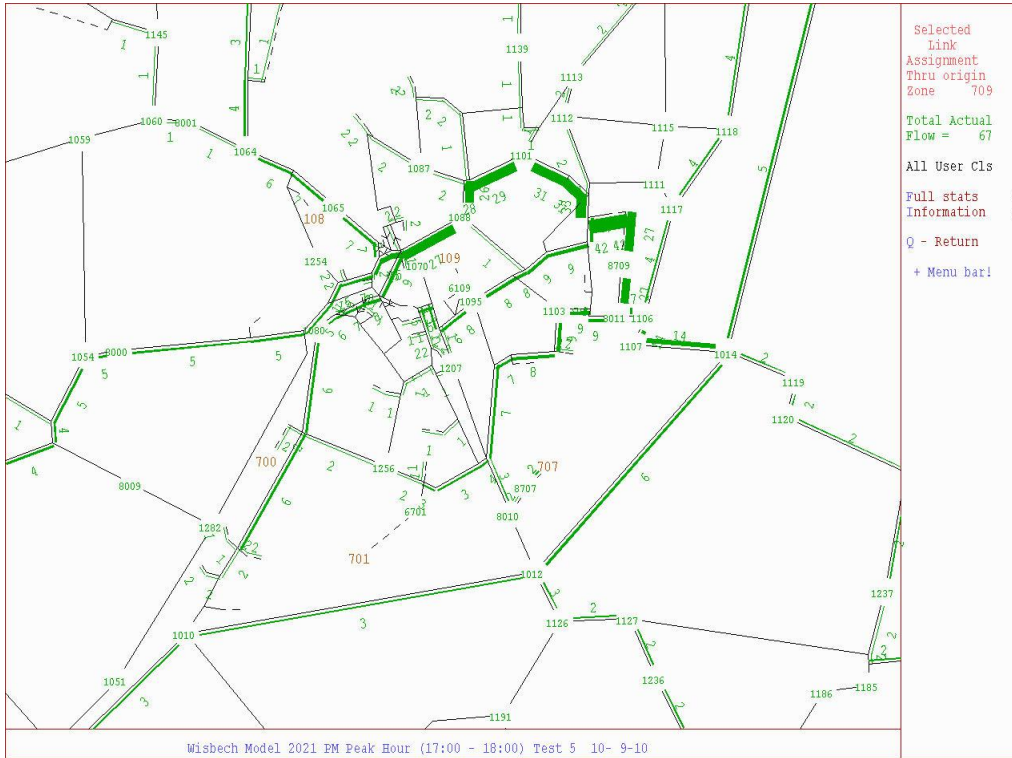


Figure 6.36 - Trips Ended at Residential Zone 709 (2021 – PM)

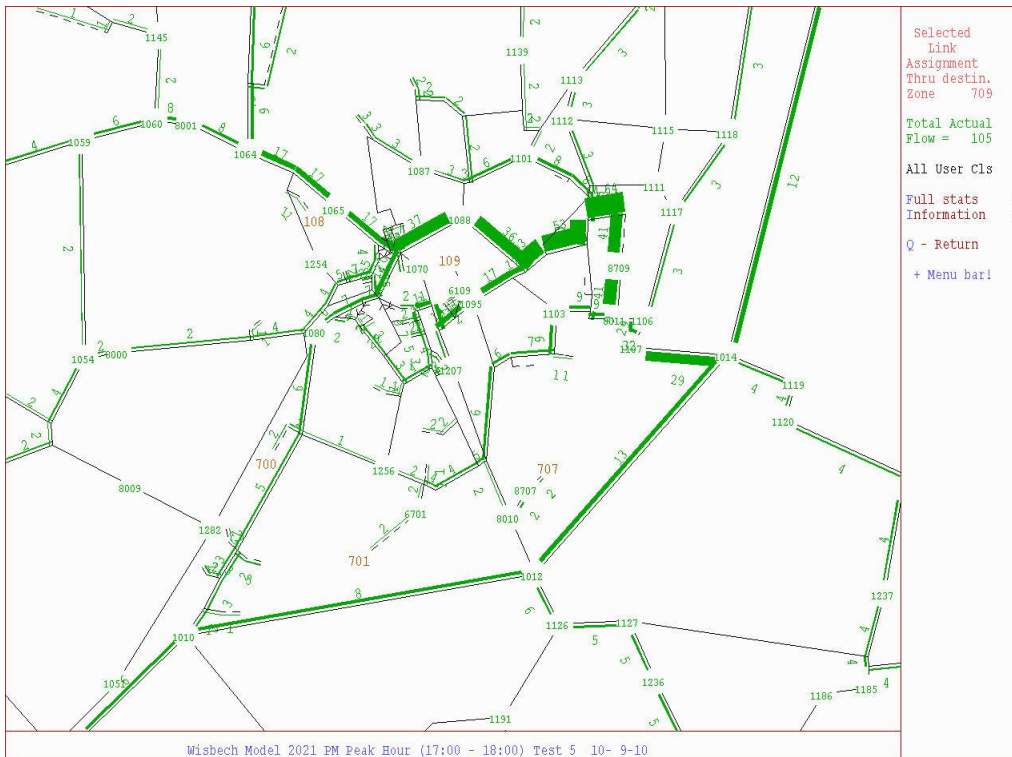


Figure 6.37 – Trips Originated from Employment Zone 707 (2026 – AM)

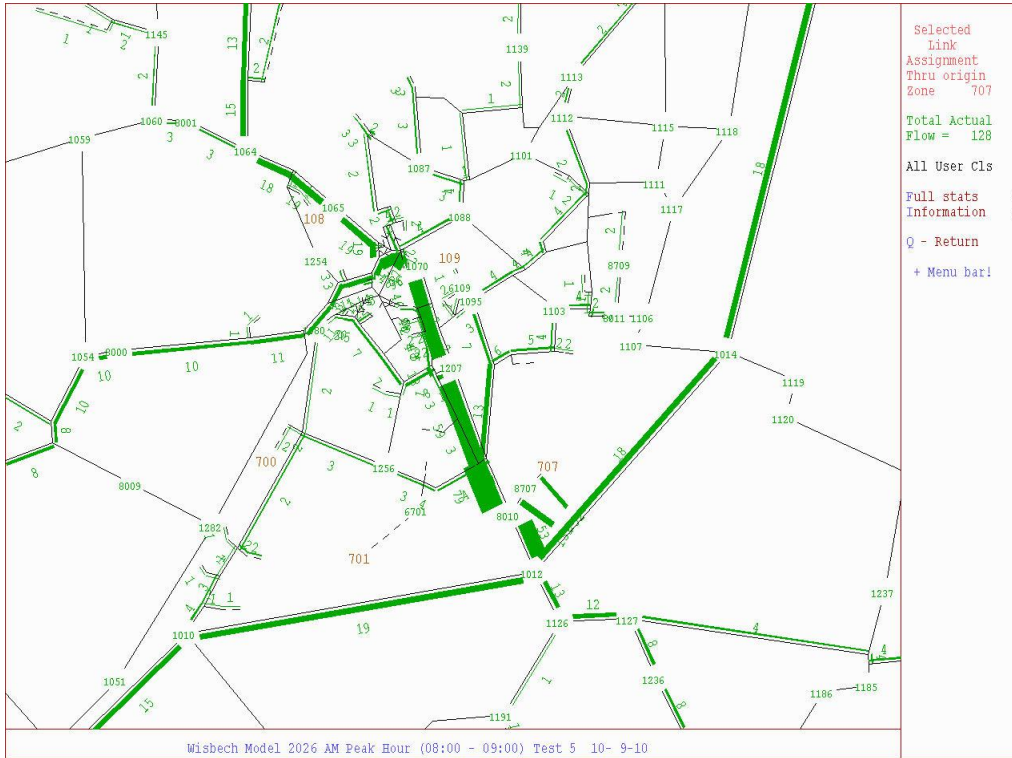


Figure 6.38 - Trips Ended at Employment Zone 707 (2026 – AM)

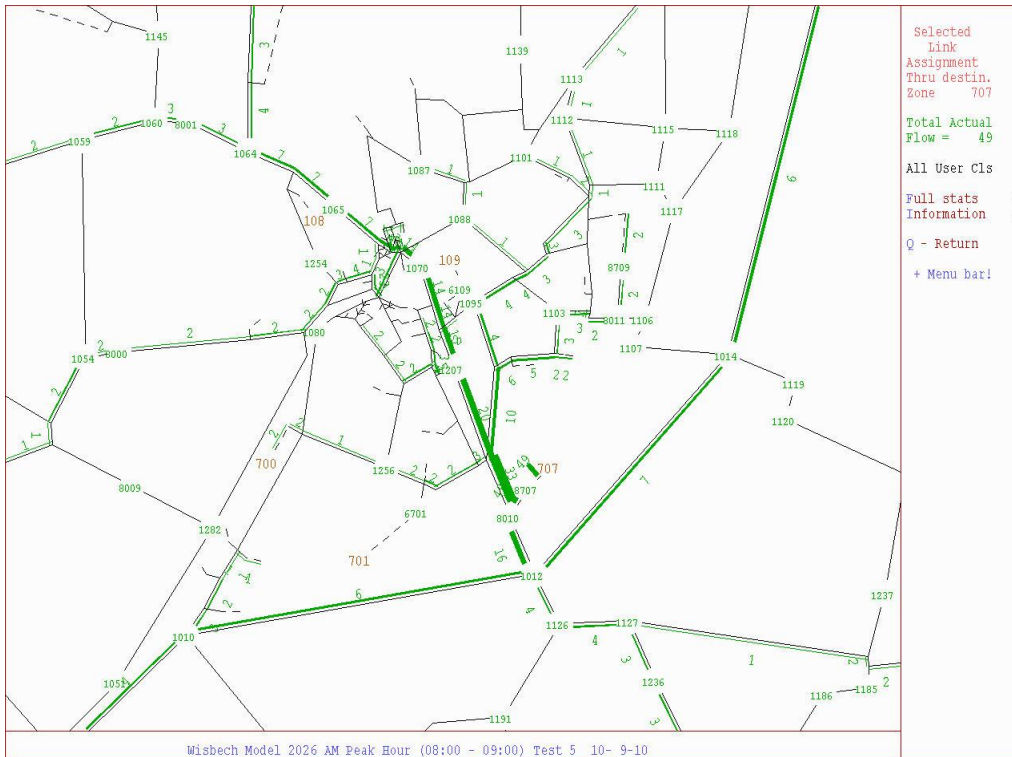


Figure 6.39 – Trips Originated from Residential Zone 708 (2026 – AM)

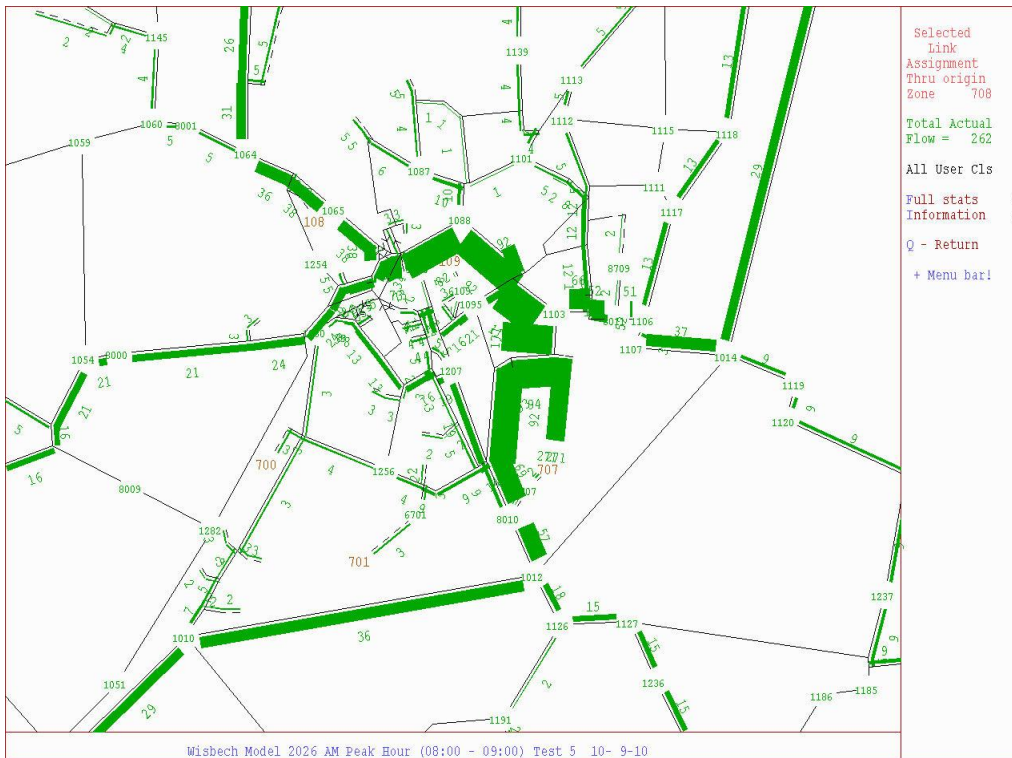


Figure 6.40 – Trips Ended at Residential Zone 708 (2026 – AM)

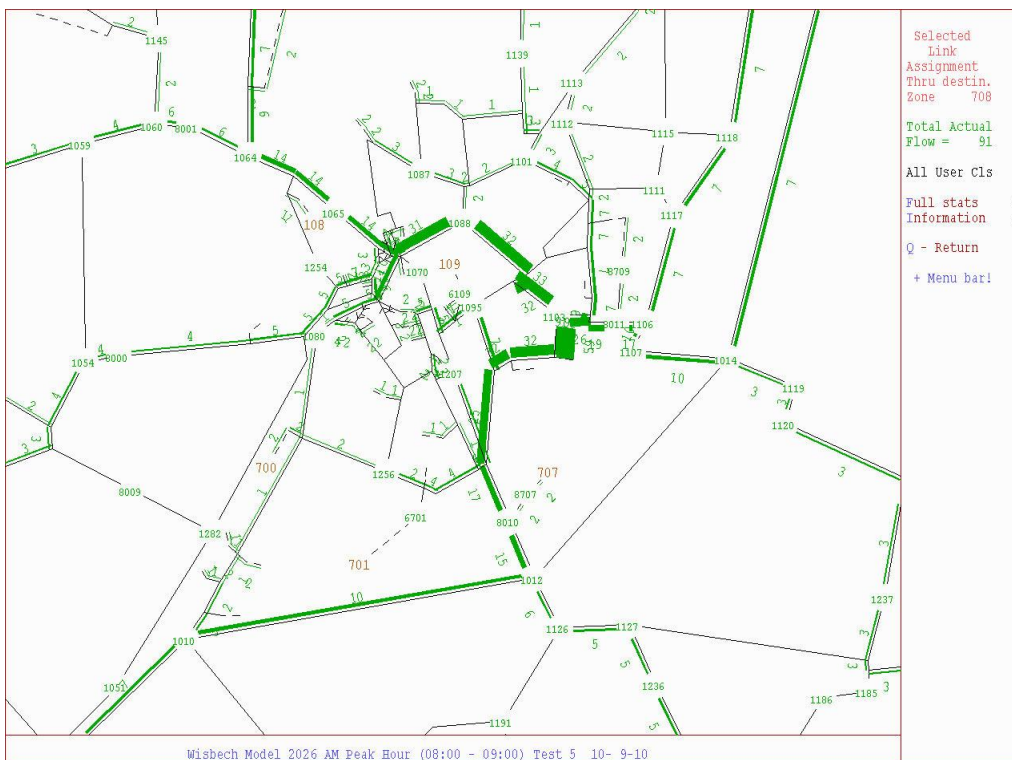


Figure 6.41 – Trips Originated from Residential Zone 709 (2026 – AM)

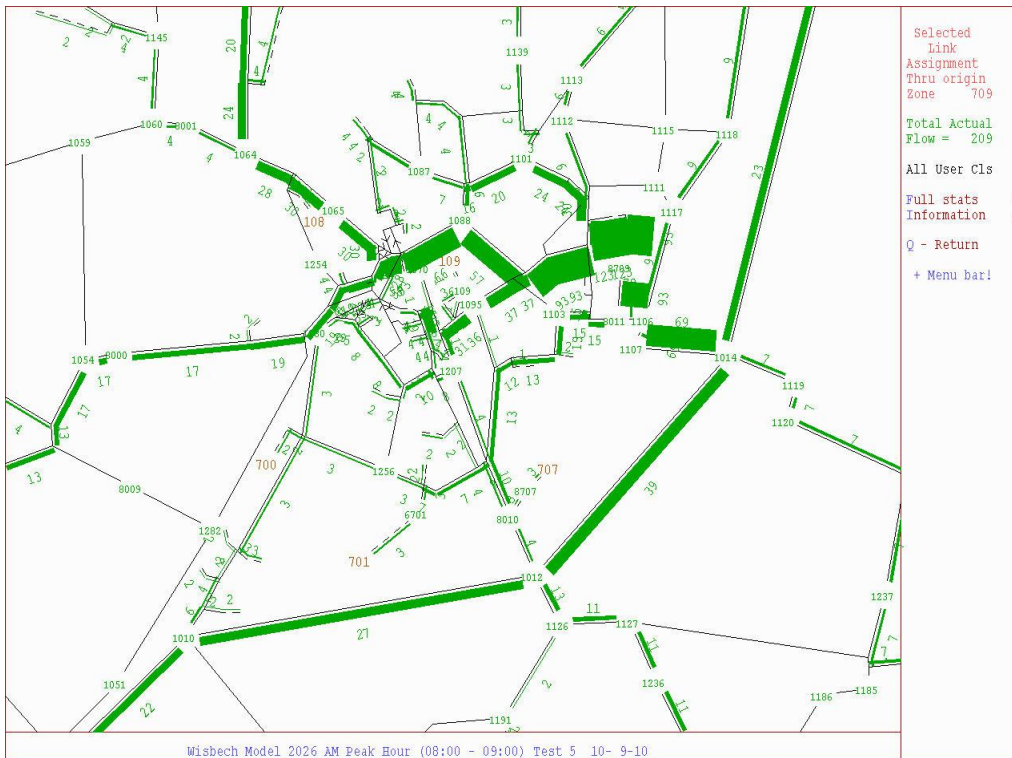


Figure 6.42 – Trips Ended at Residential Zone 709 (2026 – AM)

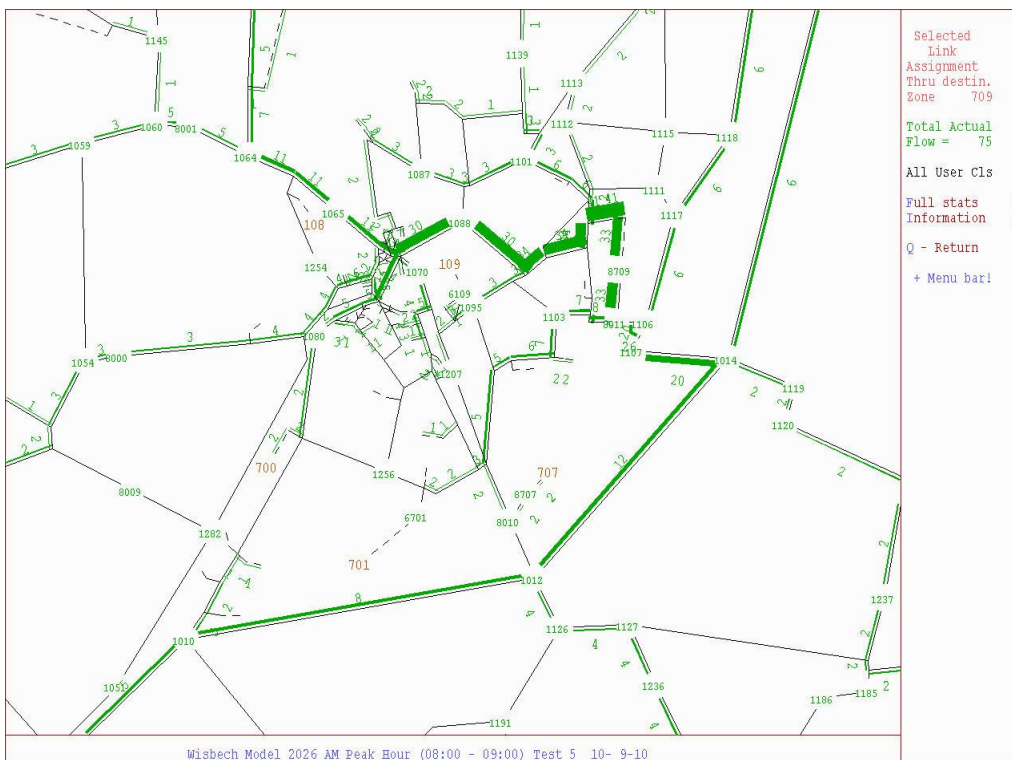


Figure 6.43 – Trips Originated from Employment Zone 707 (2026 – IP)

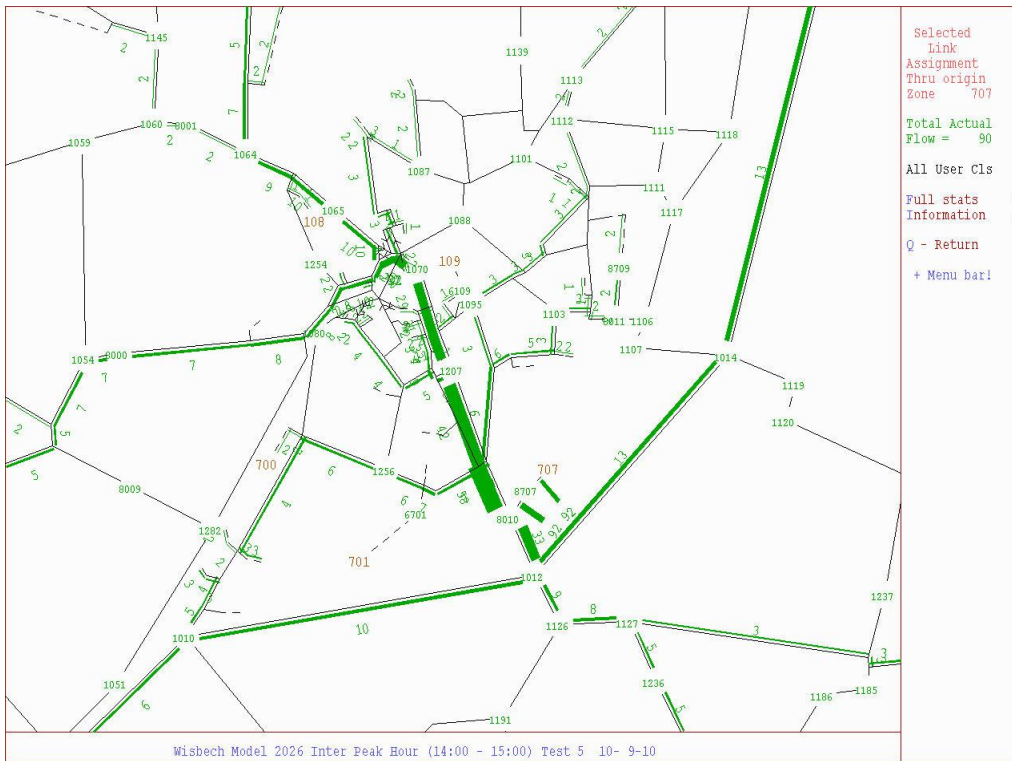


Figure 6.44 – Trips Ended at Employment Zone 707 (2026 – IP)

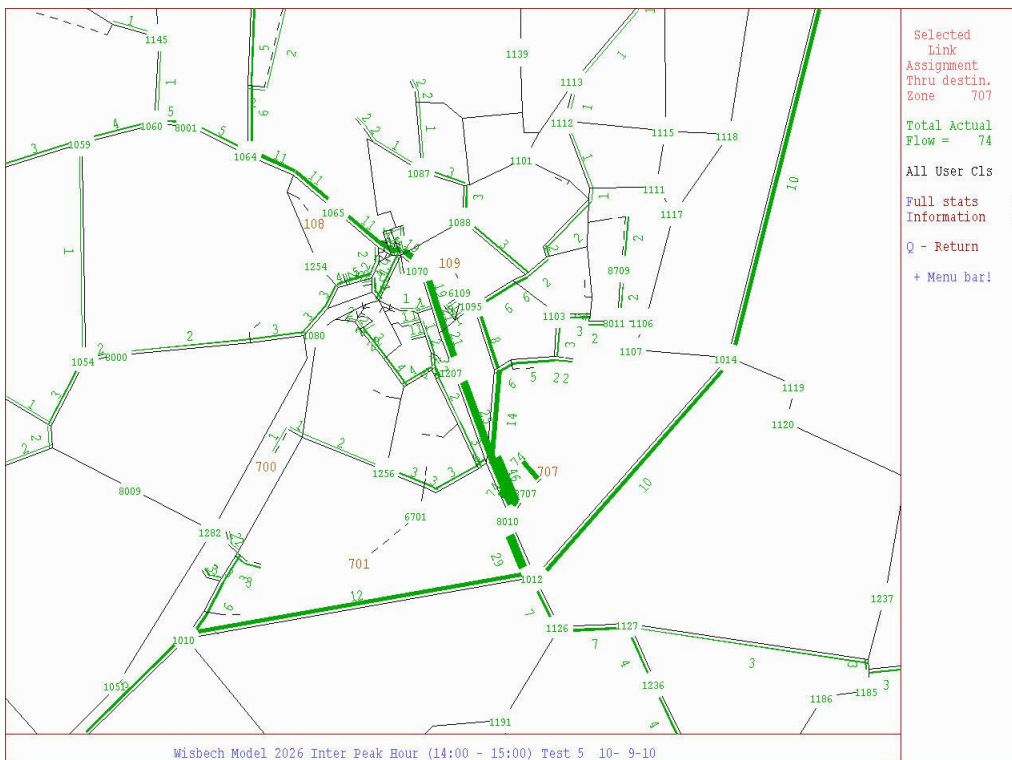


Figure 6.45 – Trips Originated from Residential Zone 708 (2026 – IP)

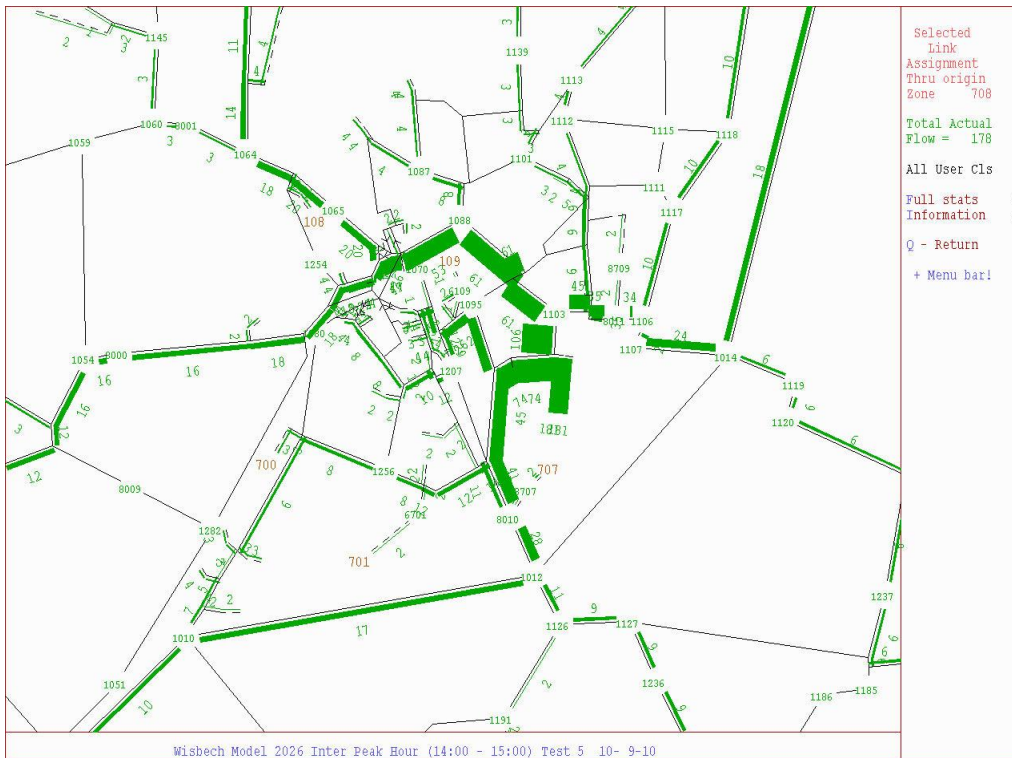


Figure 6.46 – Trips Ended at Residential Zone 708 (2026 – IP)

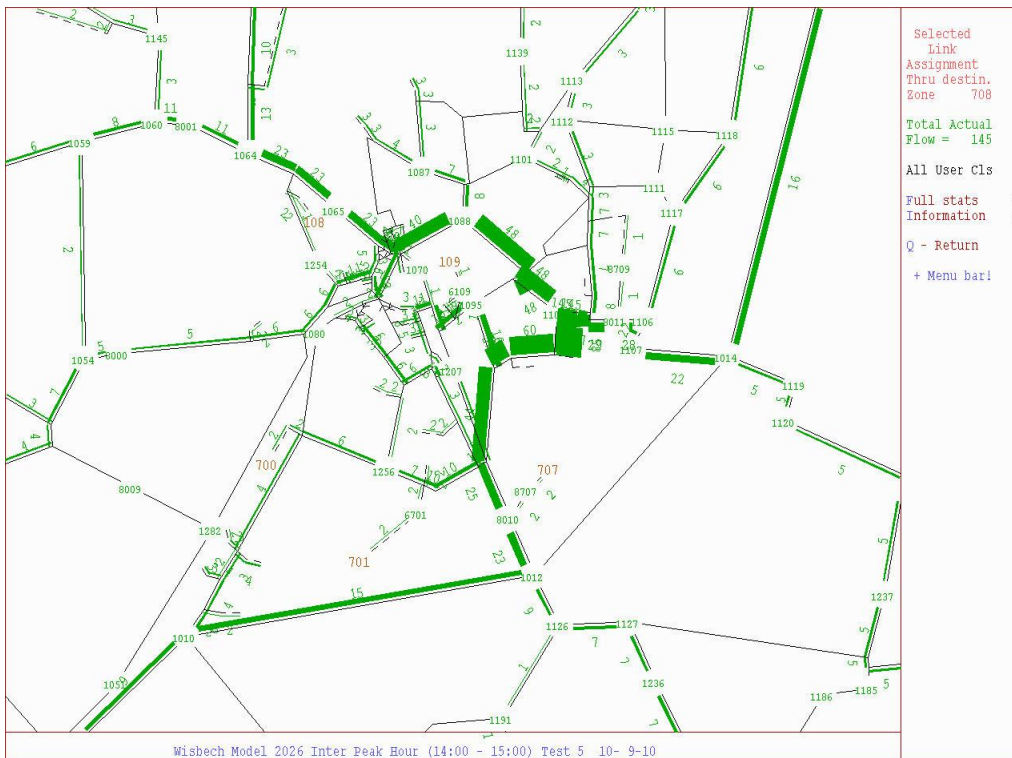


Figure 6.47 – Trips Originated from Residential Zone 709 (2026 – IP)

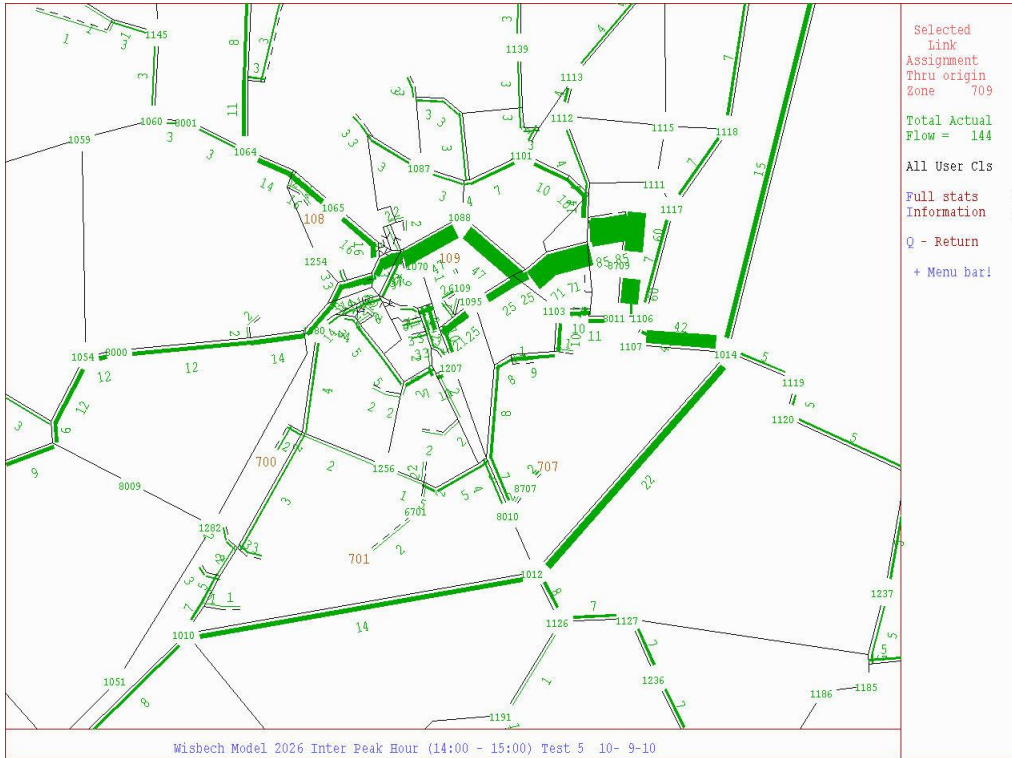


Figure 6.48 – Trips Ended at Residential Zone 709 (2026 – IP)

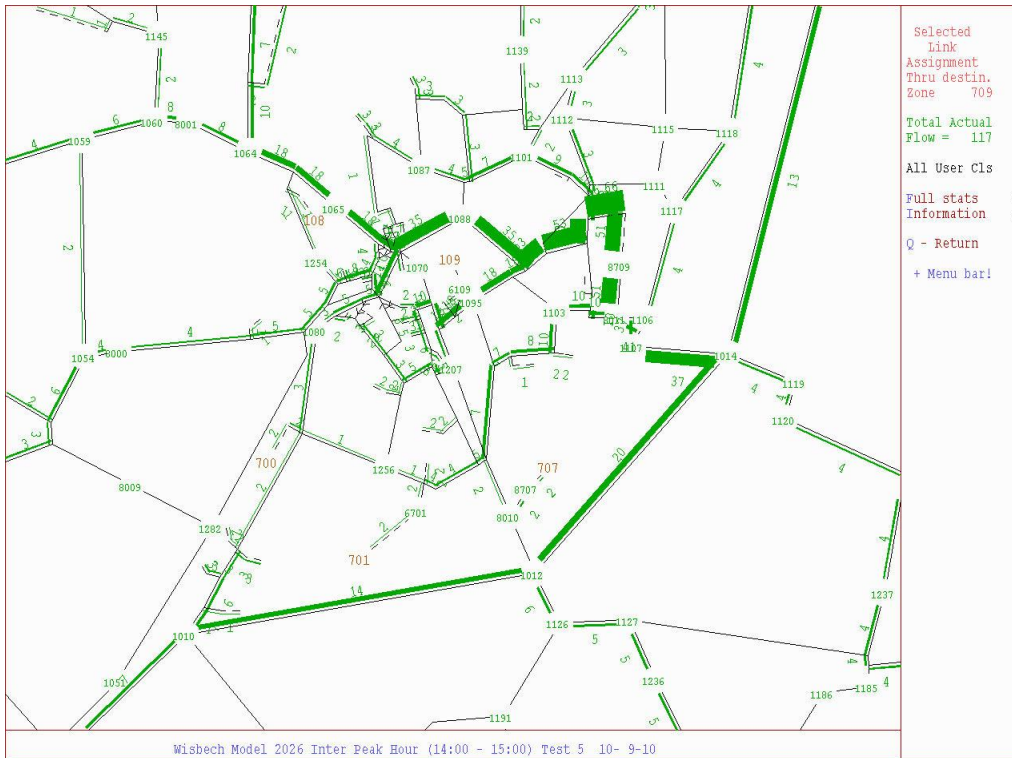


Figure 6.49 – Trips Originated from Employment Zone 707 (2026 – PM)

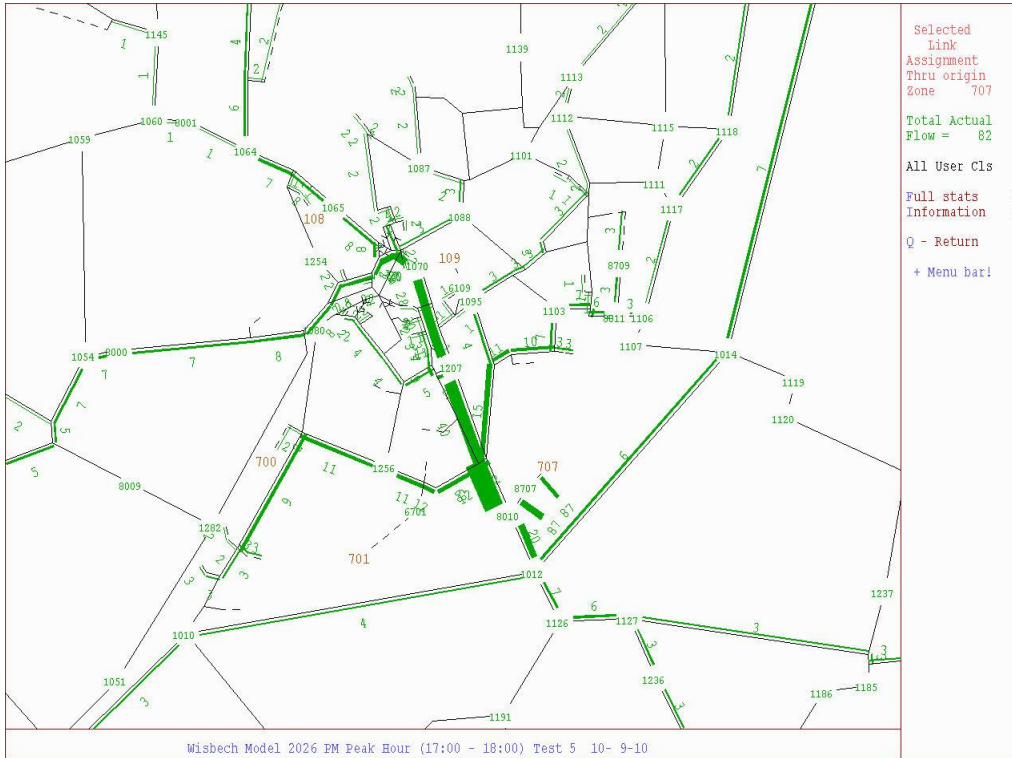


Figure 6.50 – Trips Ended at Employment Zone 707 (2026 – PM)

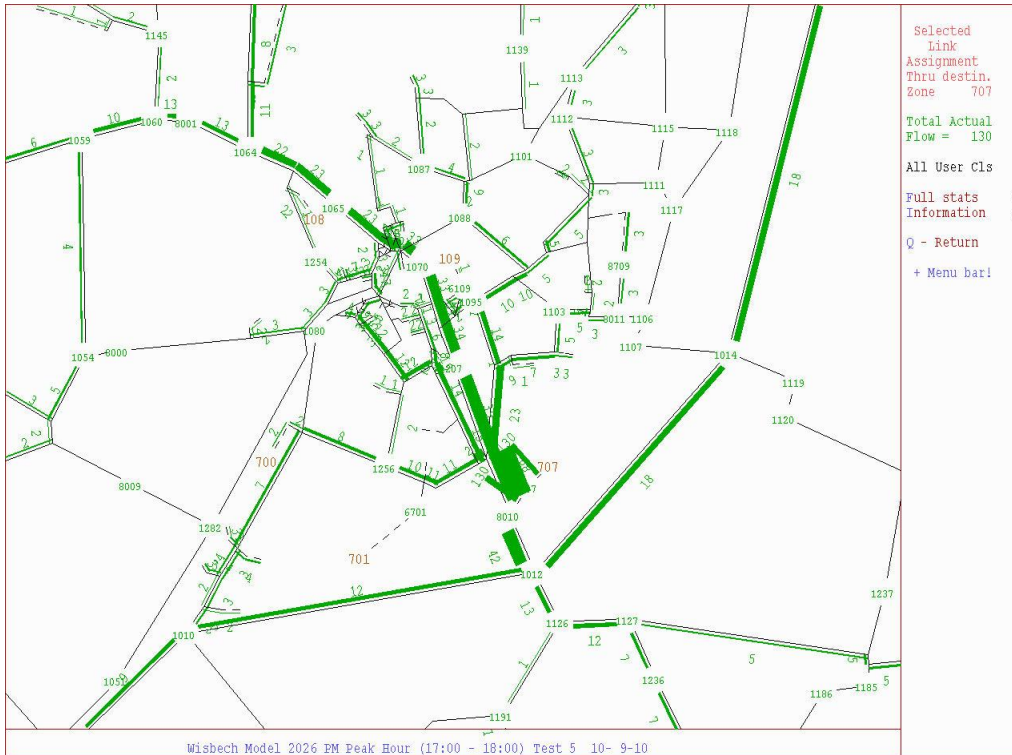


Figure 6.51 – Trips Originated from Residential Zone 708 (2026 – PM)

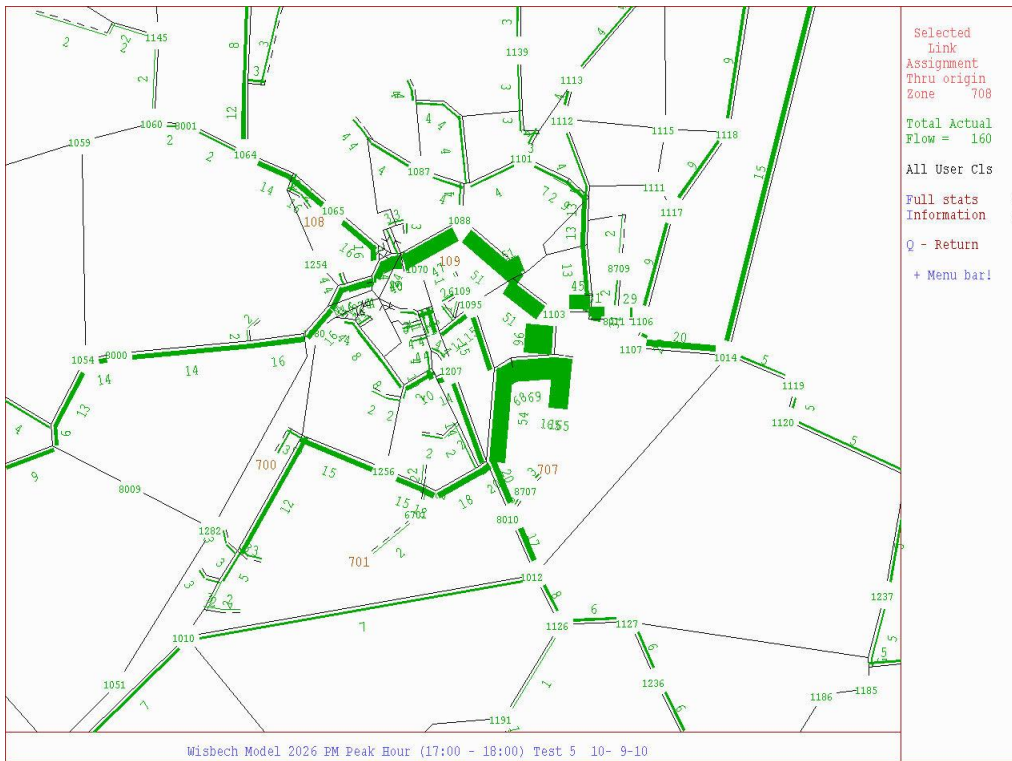


Figure 6.52 - Trips Ended at Residential Zone 708 (2026 – PM)

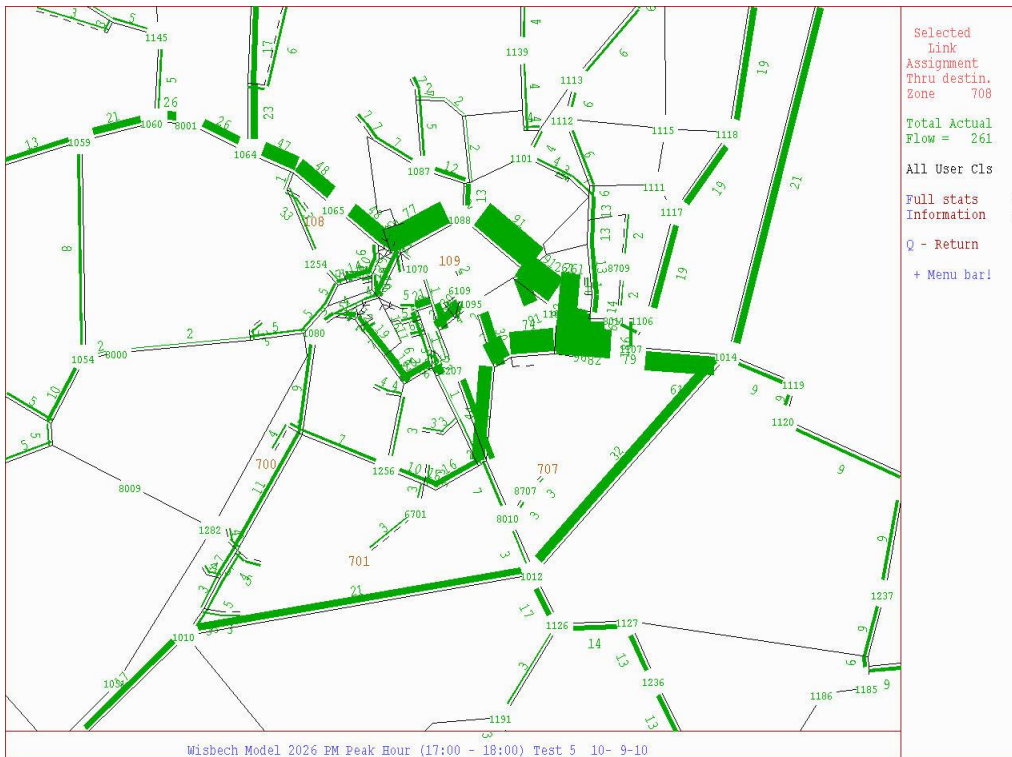


Figure 6.53 – Trips Originated from Residential Zone 709 (2026 – PM)

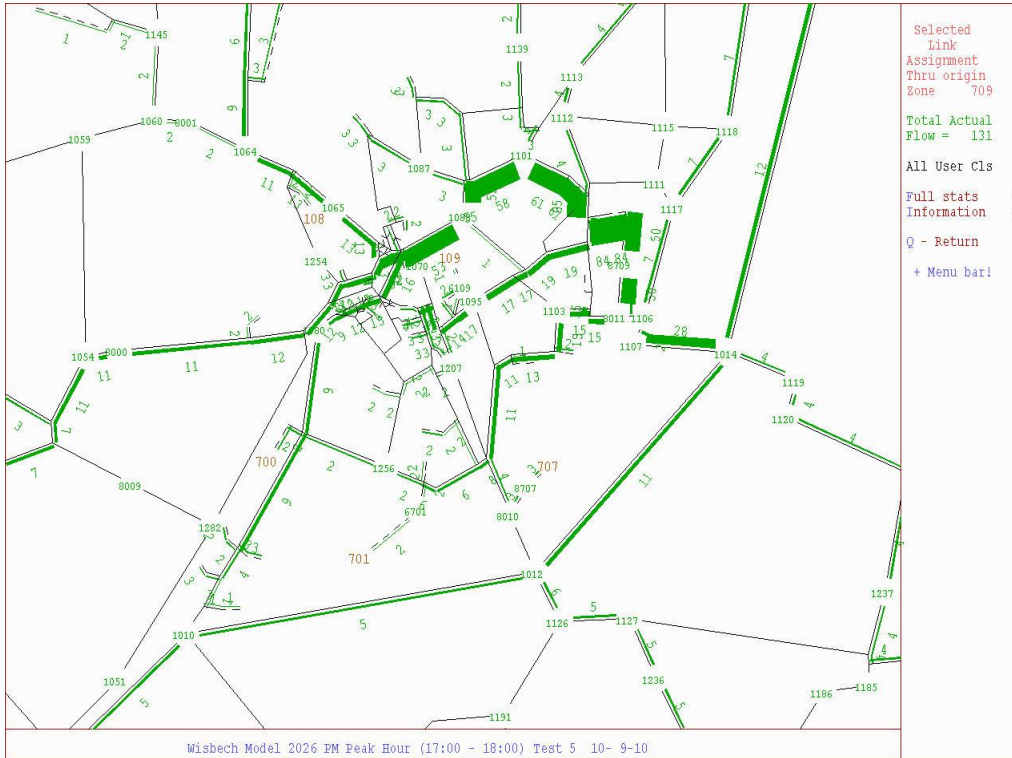


Figure 6.54 - Trips Ended at Residential Zone 709 (2026 – PM)

