

*Measure title:* **Efficient Goods Distribution in Brighton & Hove**

*City:* **Brighton & Hove**

*Project:* **Archimedes**

*Measure number:* **64**

## **Executive Summary**

### Measure description and implementation process

The work carried out within the measure comprised four tasks:

- Provide a review and elaboration of Freight Quality Partnership (FQP) activity, taking into account best practice from European and United Kingdom cities.
- Perform surveys with businesses and freight carriers located within four distinct areas of central Brighton.
- Initiate an agenda to form either a formal or informal Freight Quality Partnership.
- Implement a hard measure, comprising of a part-pedestrianisation in the East Street area of Brighton to reduce the impact of freight.

### Evaluation approach and key results

Evaluation focussed on surveys of local businesses and before and after counts of traffic, pedestrians and air quality.

The measure resulted in a significant reduction in traffic, including freight. Light goods vehicle numbers reduced by 13%, heavy goods vehicles by 6% and traffic in general by 42%.

Weekday pedestrian numbers increased by 66% and at weekends increased by 24%.

Satisfaction levels amongst local business increased by 7%.

Air quality improved slightly but not by a significant amount.

### Lessons learned

This measure could be taken up in other cities where city centre freight is an issue. The principle of amending the road network to reduce traffic whilst, in parallel, implementing a freight partnership is transferable, although the individual road layout of each city will dictate how applicable it will be.

The measure showed that freight levels can be reduced through a measure of this type. The hard measure was more successful than the Freight Quality Partnership and to achieve even greater results a more effective method for engaging with freight operators could be used.

To successfully initiate a Freight Quality Partnership it is necessary to have an incentive to offer the freight operators. In this measure the initial engagement with operators was unsuccessful as there was only the promise of a forum for discussion, not the opportunity to make improvements.

Dialogue with stakeholders is essential. The East Street part-pedestrianisation scheme was successful in reducing freight movements. However its acceptance by local businesses only occurred due to prolonged dialogue with them and many amendments to the scheme to ensure that it worked for all.

## **A Introduction**

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### **A1 Objectives and Target Groups**

#### **A1.1 Objectives**

The measure objectives were:

(A) High level / longer term:

- To increase the efficiency of goods transport in the city in order to reduce the number of commercial vehicles travelling within a particular retail and business area of Brighton called the Old Town or also know as Unique Brighton.

(B) Strategic level:

- To establish a freight strategy that will:
  - a. support efficient and reduced freight vehicle activity;
  - b. improve demand management of scarce road space;
  - c. link measures to meet Environmental Zone criteria; and
  - d. promote the economic development of Brighton and Hove and support the Council's environmental objectives.

(C) Measure level:

- Research Freight Quality Partnership (FQP) best practice
- Engage with stakeholders to formulate a freight forum framework
- Initiate an informal freight forum
- Identify potential realistic freight best practice solutions which include hard measures delivered via the Environmental Zone

#### **A1.2 Target groups**

Three key target groups have been identified:

- Retailers and businesses
- Logistics service providers
- Freight sector associations

An early engagement with these groups was identified as being important to ensure that the private sector proffers the necessary support and commitment to potential freight traffic easing solutions. The area of attention for the freight forum was the streets encompassed by “Unique Brighton” area. (Unique Brighton is a collection of over 350 independent shops, bars and restaurants in the North Laine, North Street and The Lanes of Brighton).

### **A2 Description**

The work carried out within the measure comprised four tasks:

- Provide a review and elaboration of FQP activity, taking into account best practice from European and United Kingdom cities
- Perform surveys with businesses and freight carriers located within four distinct areas of central Brighton
- Initiate an agenda to form either a formal or informal FQP
- Implement a hard measure to reduce the impact of freight.

#### Review and elaboration of FQP activity

This task involved carrying out desk research to establish the organisational set up of existing FQPs and the actions, programmes and measures FQPs typically participate in or initiate. In addition, a high level analysis of exiting traffic flow data was completed in order to establish the overall level of freight traffic as a component of all traffic. The final deliverable presented an overview of freight traffic flows, detailed information on the various measures and best practice that FQPs might support, and a review the effectiveness of these in terms of their ability to deliver long lasting results and impacts.

#### Survey of businesses and freight carriers

Before a decision could be made on the type of FQP that might best suit businesses and the Brighton & Hove City Council (BHCC) it was agreed to gather more information on freight activity in the City centre. The aim was to provide BHCC officers with a better understanding of the prevailing freight activity taking place in the business areas of central Brighton. It was agreed to collect information by way of two surveys, one with businesses and the other with freight operators and delivery drivers. The results of the surveys were presented to BHCC in the form of a report.

#### Agenda to form an FQP

Information from the FQP review was considered in the context of the results from the survey. This helped identify potential urban freight measures that could be taken that could potentially improve the circulation of freight traffic, reduce the number of delivery vehicles working in the central area and would hopefully form the basis for forming an FQP.

With respect to initiating an FQP, a series of attempts were made to engage with retailers, logistic providers and freight sector associations, each being invited to attend workshops in order to discuss the issues affecting central Brighton and agree an agenda for taking an FQP forward. The response from the business community was somewhat disappointing and the one workshop took place with very low attendance demonstrating that there was little interest from stakeholders relating to the issues around freight in the city.

#### Implement a complementary hard measure

A highways scheme was installed on East Street, a busy shopping street in the centre of Brighton. The scheme involved closing off the southern end of East Street to traffic, creating a partially-pedestrianised area.

A map showing the location of the Environmental Zone is attached as Appendix A.

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## **B Measure implementation**

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### **B1 Innovative aspects**

The innovative aspects of the measure are:

- **New organisational arrangements or relationships** - the formulation of a freight forum framework would permit a closer working between the business community and local authority in order to identify ways to reduce the level of freight vehicle activity in CIVITAS area. It would help with focusing on actions and interventions (e.g. hard and soft measures) which can be implemented either at an area or specific street level.
- **New physical infrastructure solutions** - based on the outcomes of the FQP discussions, interventions that would change the pattern of freight activity in the target area would be developed. These could include, for example, alterations to traffic flow either by redirection or physical changes, establishing a local freight distribution point or incentives to change delivery and collection practices, or use of no or low emission vehicles.

### **B2 Planning of Research and Technology Development Tasks**

The measure reviewed best practice and experience from the UK and the rest of Europe, research into the existing state of freight activity in the target area by conducting a survey of businesses and freight carriers, and sought to develop an agenda for the establishment of formal or informal FQP. Through this approach it was considered possible to build strong relationships with business and the freight community serving the target area and develop ideas to improve freight delivery and collection operations of these stakeholders. From this process it was an aim to disseminate information and provide guidance to other CIVITAS partners such that refer to real-life experience when setting up and delivering Efficient Goods Distribution in the locality.

#### **Task 11.7.1 Freight Quality Partnership (FQP):**

This task involved carrying out desk research to establish the organisational set up of existing FQPs and the actions, programmes and measures FQPs typically participate in or initiate. In addition, a high level analysis of exiting traffic flow data was completed in order to establish the overall level of freight traffic as a component of all traffic. The final deliverable (T64.1 Freight Quality Partnership in Brighton & Hove) presented an overview of freight traffic flows, detailed information on the various measures and best practice that FQPs might support, and a review the effectiveness of these in terms of their ability to deliver long lasting results and impacts.

Before a decision could be made on the type of FQP that might best suit businesses and the Brighton & Hove City Council (BHCC) it was agreed to gather more information on freight activity in the City centre. The aim was to provide BHCC with a better understanding of the prevailing freight activity taking place in the CIVITAS area of central Brighton. It was agreed to collect information by way of two surveys, one with businesses and the other with freight operators and delivery drivers. The results of the surveys were presented to BHCC in the form of a report.

#### **Task 7.2 Freight Quality Partnership (FQP)**

Armed with a better understanding of the status quo, BHCC contacted local trade and larger business associations, and local businesses inviting them to attend an evening workshop at which the results of the survey would be presented. One of the main findings of the Best Practice Review was that long term momentum and interest from stakeholders in a FQP is difficult to maintain without a shared tangible problem and/or shared solutions. Since the initial meeting was to canvas people's opinions on the local freight issues, and identify those which should be considered for closer

examination, there were no tangible interventions for stakeholders to review. Thus the aim of the action was to obtain feedback on businesses concerns, develop a list of interventions that could be considered further and identify stakeholders who wanted to participate in the FQP process.

### **Task 7.3 Environmental Zone**

It was BHCC's aim to introduce an Environmental Zone as part of wider Clear Zone. This task would restrict freight vehicle access to specific roads or areas and would use clear and consistent entry, loading and collection times. The aim was to develop the principles of the zone in co-operation with the FQP and would be developed under the banner of improving air quality in the inner area of Brighton and Hove.

## **B3 Situation before CIVITAS**

Brighton and Hove previously had a low-key approach to freight vehicle activity in the CIVITAS area and the control of goods vehicles occurred through parking, loading and street management strategies, some of which have been applied on an *ad hoc* basis. The last concerted effort to improve freight vehicle circulation took place 3 years prior to the start of the CIVITAS Project, when a major parking and Traffic Regulation Order review was performed in the city. Although these actions have helped ease bottlenecks in the vicinity of key loading and unloading points, they have not addressed the issue of overall increases in freight vehicle activity, which is the objective of the CIVITAS measure.

No FQP existed and interventions tended to occur as a reaction to problems as they arose, although local consultation would occur as due process. At a policy level BHCC had stated in its Local Transport Plan 2006-2011 in Policy 12 it would "*promote the most appropriate mechanism for the securing of efficient distribution of goods, including making more use of Freight Quality Partnership.*" Therefore participation in CIVITAS aims to comply with the last aim of the policy.

As a result of a FQP Best Value Review and the low response rates at site level, it was decided the measure should have a much stronger emphasis on the physical interventions that would be delivered via the Environmental Zone. It was felt that stakeholders would respond more constructively if they knew that there was a possibility that physical changes were to take place in their locality that could subsequently effect freight movement or access to business.

The implementation of the Environmental Zone was due to be delivered in early 2010, but alterations to the Council budget meant the scheme had to be delayed by a year, with implementation planned for completion by January 2012.

## **B4 Actual implementation of the measure**

The measure has been implemented in the following stages, after consideration of the actions outlined in section B2.

### **Stage 1: FQP Best Practice Review**

Completed FQP Best Practice Review which formed the basis of what has effectively worked elsewhere in other parts of the UK and urban area in Europe and would inform the next stage of the FQP implementation.

### **Stage 2: Implementation of FQP (Task 7.2)**

BHCC carried out a survey to gain a better understanding of the level of deliveries and collections and freight activity that were taking place in the CIVITAS area. In total 120 face-to-face interviews were carried out. Of these, 99 interviews were conducted using one version of the questionnaire, while 21 interviews on East Street had an additional question regarding pedestrianisation of this

street. This was included to measure businesses attitude to the potential of changing the vehicular access regime to this stretch of road. The overall view was that pedestrianisation of East Street would be a benefit to the area, as there traffic related problems due to drivers ignoring the existing partial access restrictions.

The creation of a formal FQP did not occur in its intended form due to lack of interest by the business community within the CIVITAS area. Whilst some had concerns regarding deliveries, there was a general view that their deliveries and collections were satisfactory. There was also concern that any measures introduced would impose a cost on the business and this would be unwelcome at a time when there was economic uncertainty due the banking crisis.

It was clear that progress on an FQP would be difficult and after due consideration it was decided to merge the lesson learnt from the research at the pre-FQP stage with the aspirations of the Environmental Zone.

The aspiration for the Environmental Zone (Task 7.3) was developed as part of a wider Clear Zone Strategy, which aimed to reduce private car use and improve the movement of freight vehicles in the Old Town. The rationale for this was local traders and freight operators would show greater interest in a more localised FQP measure as it would introduce a hard intervention and that physical enforcement would take place. This corresponds with the findings of the FQP Best Practise Review, which indicated that interest in an FQP is difficult to generate and maintain without the existence of tangible problems and solutions that benefit the local business community.

The Environmental Zone included proposals to close the southern section of East Street between Kings Road and Grand Junction Road, which would impact on drivers' ability to cut through this section of road from other roads such as Ship Street. This hard measure also aimed to provide an improved pedestrian crossing to the seafront.

### Stage 3: Implementation of Environmental Zone measure (Task 7.3)

The plan for the East Street closure proceeded to a detailed design process and safety audit to ensure that the scheme was technically viable. However, due to budgetary constraints the installation of the scheme was delayed for a year.

However, the scheme received newly agreed funding and was implemented between November 2011 and January 2012. Once the scheme had an opportunity to establish itself further data collection excises were conducted to examine how the scheme is performing against the baseline data.

East Street is the major pedestrian route between three of the city's key tourist destinations; the Royal Pavilion, the Lanes and the seafront. The scheme essentially included improving the layout, together with a single stage pedestrian crossing, providing a more direct link to the seafront.

The major changes implemented were:

- The closure of the East Street / Grand Junction Road junction to motorised traffic.
- A new 'straight across' pedestrian and cyclist crossing point on Grand Junction Road aligned with East Street.
- The reversal of the one-way flow on the section of King's Road between East Street and the seafront.

## **B5 Inter-relationships with other measures**

The measure is related to other measures as follows:

- At the site level: The Efficient Goods Distribution (Measure BH64) will exchange information and experiences with other cities implementing Freight Quality Partnerships within the consortium, i.e. Donostia – San Sebastian (Measure DSS 65) and Iasi (Measure IAS 66).

- At the measure level: There will be exchange of experiences and knowledge across the cities involved in WP7. Other closely linked measures include the following:
    1. Environmental Zone - The implementation in Brighton & Hove will help drive the actions that will arise from the Freight Quality Partnership in looking at ways to reduce freight vehicle activity in the Old Town Area.
    2. Electric Vehicle Charging Points (Measure 2) - Installation of electrical recharging points along key corridors throughout the city centre will again act as an engineering incentive for local businesses to consider operating goods vehicles that exploit clean fuels.
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## **C Planning of Impact evaluation**

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### **CI Measurement Methodology**

#### **CI.1 Impacts and Indicators**

##### **CI.1.0 Scope of Impact**

The indicators selected on this measure covered the following:

Economy – Economic costs for operating and maintaining the measure, as well as capital costs, will be used to evaluate the benefits in contrast to financial outlay.

Environment – Air and noise pollution will be surveyed along with vehicle emissions before and after the intervention to assess any positive impact on the environment.

Society – Awareness and acceptance of the policies and measures of the intervention will be surveyed. Spatial and economic accessibility and the perception of security will all be surveyed with the stakeholders.

Transport – Safety, and surveying of the transport system will all be monitored before and after the intervention.

Baseline data was provided by measurements undertaken in the first two years of the CIVITAS project. Repeat surveys were undertaken after the completion of the measure in summer 2012.

**CI.1.1 Selection of indicators**

NO.	EVALUATION CATEGORY	EVALUATION SUB-CATEGORY	IMPACT	INDICATOR	DESCRIPTION	DATA /UNITS
	<b>ECONOMY</b>					
1a		<b>Costs</b>	Capital Costs	Capital costs	Costs per vehicle	Euros/veh, quantitative, derived or measurement
1b			Capital Costs	Capital costs	Cost per pedestrian	Euros/ped, quantitative, derived or measurement
2a			Maintenance costs	Maintenance costs	Costs per vehicle	Euros/veh, quantitative, derived or measurement
2b			Maintenance costs	Maintenance costs	Cost per pedestrian	Euros/ped, quantitative, derived or measurement
	<b>ENVIRONMENT</b>					
5		<b>Pollution/Nuisance</b>	Air Quality	CO levels	CO concentration	Ppm or g/m3, quantitative, measurement
6				NOx levels	NOx concentration	Ppm or g/m3, quantitative, measurement
7				Particulate levels	Particulate PM10 and/or PM2.5 concentration	Ppm or g/m3, quantitative, measurement
8			Emissions	CO2 emissions	CO2 per vkm by type	G/vkm, quantitative, derived
9				CO emissions	CO per vkm by type	G/vkm, quantitative, derived
10				NOx emissions	NOx per vkm by type	G/vkm, quantitative, derived
11				Particulate emissions	PM10 and/or PM2.5 per vkm by type	G/vkm, quantitative, derived
12			Noise	Noise perception	Perception of noise	Index (%), qualitative, collected, survey
	<b>SOCIETY</b>					
13		<b>Acceptance</b>	Awareness	Awareness level	Awareness of the policies/measures	Index (%), qualitative, collected, survey

NO.	EVALUATION CATEGORY	EVALUATION SUB-CATEGORY	IMPACT	INDICATOR	DESCRIPTION	DATA /UNITS
14			Acceptance	Acceptance level	Attitude survey of current acceptance of the measure	Index (%), qualitative, collected, survey
15		<b>Accessibility</b>	Spatial Accessibility	Perception of accessibility	Perception of physical accessibility of service	Index(%), qualitative, collected, survey
17		<b>Security</b>	Security	Perception of security	Perception of security when using service	Index, qualitative, collected, survey
	<b>TRANSPORT</b>					
20		<b>Safety</b>	Transport Safety	Injuries and deaths caused by transport accidents	Number of accidents, fatalities and casualties caused by transport accidents	No, Quantitative, measurement
21		<b>Transport System</b>	Traffic Levels	Traffic flow by vehicle type - peak	Average vehicles per hour by vehicle type – peak	Veh per hour, quantitative, measured
22				Traffic flow by vehicle type - off peak	Average vehicles per hour by vehicle type – off peak	Veh per hour, quantitative, measured
25			Freight Movements	Goods vehicles moving in demo areas	Daily number of goods vehicles moving in area	Quantitative, derived or measurement

### CI.1.2 Methods for evaluation of indicators

No.	INDICATOR	TARGET VALUE	Source of data and methods	Frequency of Data Collection
1-2	Cost data	BHCC	The capital investment value supplied by BHCC and acquisition of vehicle and pedestrian data obtained from pre and post surveys of street activity. The value of the measure was divided by the number of recorded vehicles and pedestrians. A higher value per	Pre and post scheme intervention

No.	INDICATOR	TARGET VALUE	Source of data and methods	Frequency of Data Collection
			vehicle implies a positive return on the investment since few vehicles are using the route. A lower value per pedestrian also implies a positive return on the investment since an increased footfall is experienced on the route.	
5-11	Emissions	AQM data	Derived calculation based on existing AQM monitoring in the city	Pre and post intervention
13-17	Societal indicators	Stakeholders	Qualitative information to confirm whether changes in vehicle and pedestrian numbers are reflected by perceptions of businesses	Pre and post intervention
20-25	Transport indicators	Traffic Volume and flow	Traffic Counts – via existing traffic monitoring and specific surveys.	Pre and post annual intervention

## CI.2 Establishing a baseline

The focus of the freight project has been to implement a hard measure that would influence driver behaviour and reduce the amount of freight traffic circulating in East Street. Therefore the baseline data collection aims to provide information on the situation prior to its introduction.

BHCC has not been a pro-active authority in developing freight measures of the type it is embracing in the CIVITAS Project, and consequently has not collected information regarding freight activity in the CIVITAS area. It was therefore necessary to gain a better understanding of the freight best practice, FQPs and the types of delivery and servicing activity taking place CIVITAS area.

The approach in Task 11.7.1 Freight Quality Partnership required the collection of information through desk research such that BHCC had a much better idea of:

- what was involved in setting up an FQP
- the type of actions and measures that could be taken
- collating information on freight flows and likely generation points
- conduct a survey of businesses in the area where an FQP would function in order to gain an understanding of what freight was being generated and moved, the impacts being created and experienced by freight traffic, identify specific problems and make the business community aware that BHCC was actively seeking support for the formation of an FQP.

The latter survey was completed with the preliminary action to Task 7.2 Freight Quality Partnership.

As Task 7.3 Environmental Zone would overlap and shape future freight activity in the CIVITAS area with soft and hard measures, it was necessary to gather data on the existing state. This undertaking involved carrying out street level data gather, covering a range of topics that would be affected by the introduction of measures that would change access to streets and the area, and that would mean businesses and freight operators having to reconsider the way they operate.

To obtain baseline data the following criteria were included:

- Capital budget
- Vehicle counts
- Pedestrian counts
- Air quality
- Accident data
- Capital expenditure on measure

### Vehicle Counts

Vehicle origin and destination surveys were carried out on Wednesday 10 June 2009 between the hours of 07:00 and 19:00 and again on Saturday 13 June 2009 also between the hours of 07:00 and 19:00. This survey measured the number of vehicles entering and exiting East Street from three adjoining roads. A summary of the results is provided in Table 1.

**Table 1: Vehicle Counts**

<b>Vehicles Exiting Little East Street</b>					
<b>Wednesday 10/06/09 (Total 201)</b>			<b>Saturday 13/06/09 (Total 131)</b>		
<b>Destination</b>			<b>Destination</b>		
A259 (W)	A259 (E)	King's Road	A259 (W)	A259 (E)	King's Road
125	51	25	90	23	18

<b>Vehicles Exiting East Street</b>					
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Wednesday 10/06/09 (Total 1748)		Saturday 13/06/09 (Total 1218)	
Destination		Destination	
A259 (W)	A259 (E)	A259 (W)	A259 (E)
65	1683	72	1146

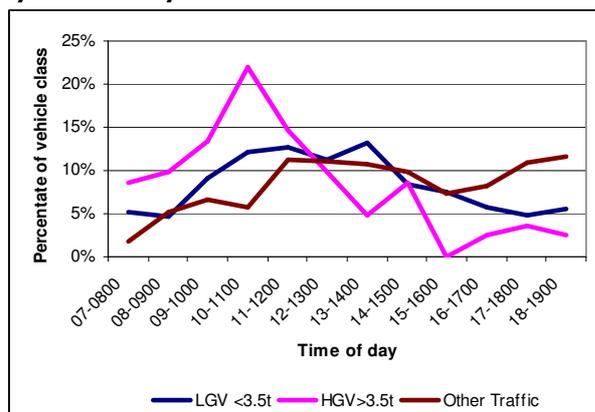
Vehicles Entering from the Thistle Hotel					
Wednesday 10/06/09 (Total 397)			Saturday 13/06/09 (Total 394)		
Destination			Destination		
A259 (W)	A259 (E)	King's Road	A259 (W)	A259 (E)	King's Road
112	141	144	90	169	135

### Composition of traffic

Using the survey data, an analysis was completed that examined the composition of the traffic using the street and the time of day that vehicles classes were visiting the street.

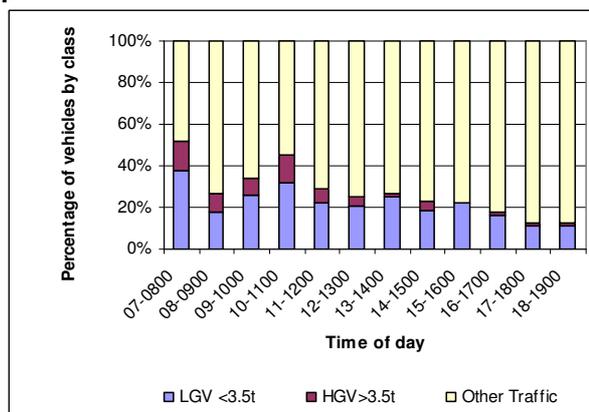
Figures 1 and 3 show the distribution of vehicles by class across the Wednesday and Saturday. It reveals that the greatest proportion of heavy goods vehicles (HGVs) is using East Street between 1000 and 1100 on the Wednesday, and 0800 and 0900, while light goods vehicles (LGVs) have a fairly constant presence between 1000 and 1400, and 0900 and 1000 on Saturday.

**Figure 1: Distribution of vehicles on East Street by time of day**



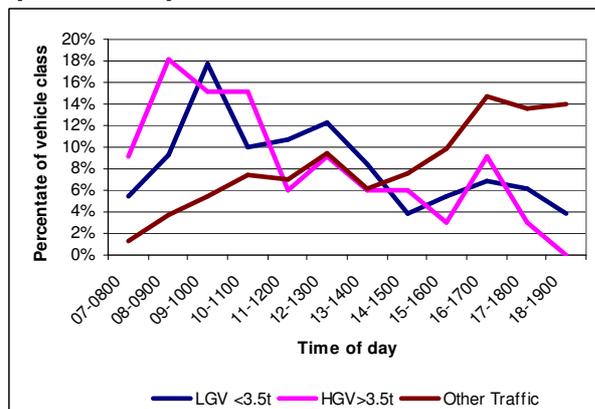
Wednesday 10/06/09

**Figure 2: Composition of traffic by vehicle class per hour**

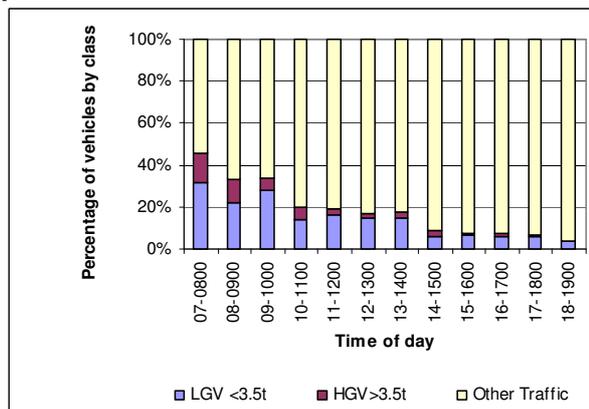


Wednesday 10/06/09

**Figure 3: Distribution of vehicles on East Street by time of day**



**Figure 4: Composition of traffic by vehicle class per hour**



Saturday 13/06/2009

Saturday 13/06/2009

In terms of the proportion of vehicles present on the street in any one hour, Figures 2 and 4 indicate that commercial vehicles (LGVs and HGVs) compared with all traffic were most present between the hours of 0700 and 0800, and 1000 and 1100 on the Wednesday and 0700 and 0800 on the Saturday.

### Use of loading bays

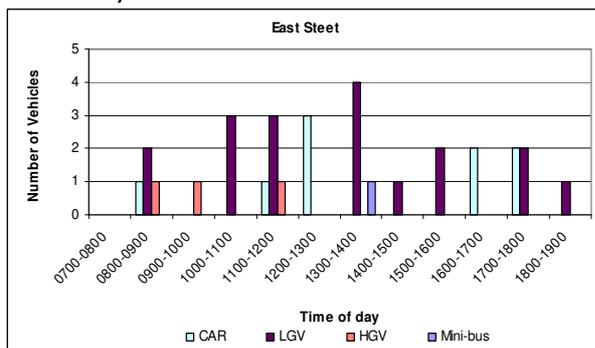
As part of the survey, a count of vehicles using on-street loading bays was carried out to establish what and when vehicles were using them on 10.6.09 and 13.6.09. Two locations were surveyed, the loading bays on East Street and King's Road. Figure 5 shows the results of the survey.

Over the day, the vehicles that used the bay on East Street the most were LGVs, with a total 18 visits. For the King's Road bay, cars used the bay the most with 8 visits compared with 7 LGVs.

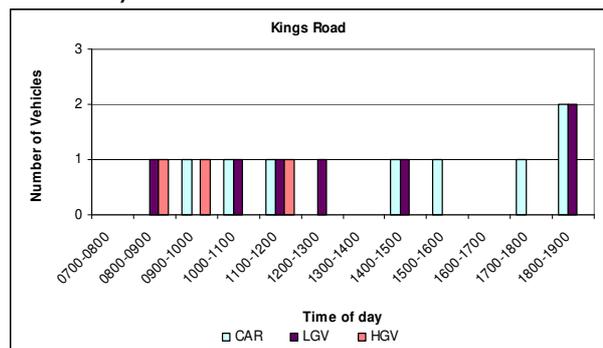
On the Saturday there were a total of 17 vehicles using the East Street bay, the largest number of which was LGVs. On the King's Road 9 vehicles used the bay, of which 9 were LGVs. It cannot be distinguished from the survey whether the cars were stopping in the loading bays to load/unload goods or illegal parking.

**Figure 5: Use of East Street and King's Road loading bay**

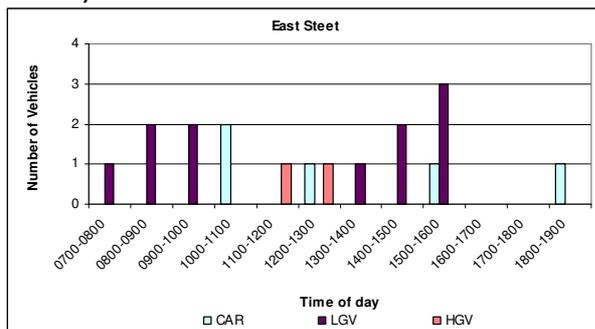
Wednesday 10.6.09



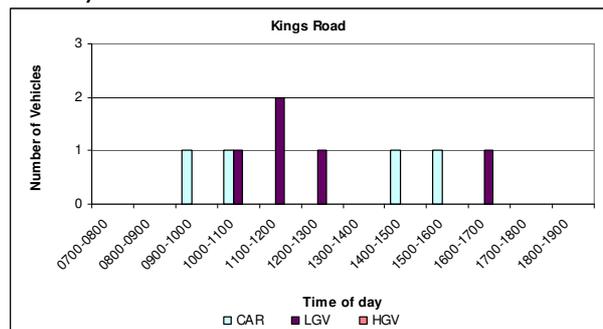
Wednesday 10.6.09



Saturday 13.6.09



Saturday 13.6.09



### Pedestrian Counts

Pedestrian counts were obtained on Wednesday 10 June 2009 (07:00-19:00) and Saturday 13 June 2009 (07:00-19:00) for East Street, Kings Road and the Thistle Hotel.

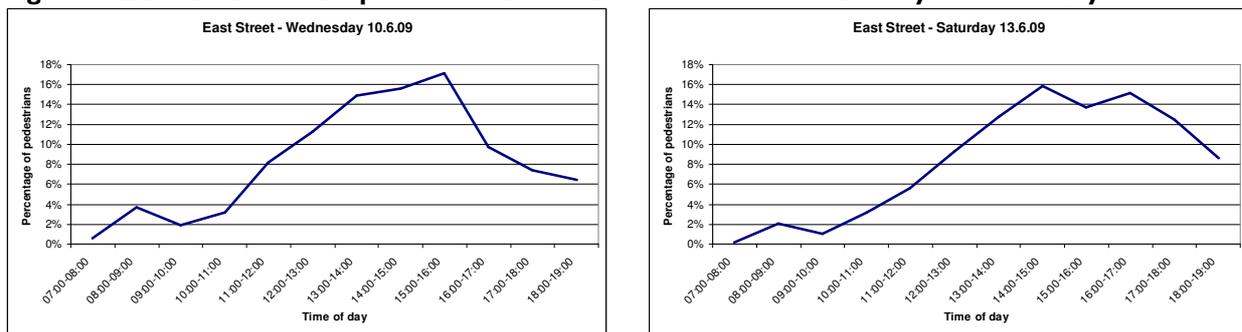
The results of the survey revealed that on the Wednesday around 3,600 pedestrians were recorded using East Street. On the weekend this number increased four fold with almost 14,400 pedestrians recorded. The main findings from the survey can be summarised as follows:

- The greatest flows were experienced on the Saturday in East Street.

- For both survey periods, the eastern pavement of East Street was most popular for southbound movements, with 68% of flows on the Wednesday and 65% on the Saturday. The western pavement experienced greater flows for northbound movements; accounting for 60% of such flows on the Wednesday and 67% on the Saturday.
- The lowest flows were experienced on King’s Road.
- For both survey periods, the northern pavement of King’s Road was most popular, accounting for 82% of movements on the Wednesday and 85% on the Saturday.

The peak period for pedestrian activity for the weekday was between 15:00 and 16:00 hours and on the weekend 14:00 and 15:00. The charts in Figure 6 illustrate the total flow of pedestrians in East Street for the two survey periods.

**Figure 6: Distribution of the pedestrian flow in East Street for Wednesday and Saturday**



From the freight survey completed as part of the FQP measure, it was learnt that there are often conflicts between pedestrians and other vehicles on this section of East Street. Business tenants felt that pedestrians were not always aware that the lower section of East Street was a ‘normal’ road, because the northern pedestrianised section ends by Bartholomews. Consequently, pedestrians tend to stray into the road or continue walk along the centre of the road without realising the road priority has changed. Obviously this has implications for potential accidents, data for which is discussed later.

### Air Quality

Prior to implementing the closure of the East Street junction with Grand Junction Road, an air quality diffusion tube monitor was installed to measure Nitrogen Dioxide (NO<sub>x</sub>) levels. The installation of the recording equipment took place in 2010 and has stayed in place such that it could provide the baseline data, which is discussed below, and post implementation data.

**Table 2: Nitrogen dioxide average in 2010 and 2012**

Nitrogen Dioxide average 2010	40.3 µg/m <sup>3</sup>
Nitrogen dioxide average 2012	35.1 µg/m <sup>3</sup>

### Perceptions of noise

A survey was undertaken in summer 2009 which included a question on people’s ‘perceptions of noise’. The main findings were as follows:

- Out of 561 responses, 491 people felt that daytime noise was “not a concern at all”. Four people felt that it was a “big concern” and 22 saw it as a “fairly big concern”.
- Out of 551 responses, 298 people felt that nighttime noise was “not a concern at all”. 25 people felt that it was a “big concern” and 35 saw it as a “fairly big concern”.
- Out of 545 responses, 311 people felt that noise at weekends was “not a concern at all”. 26 people felt that it was a “big concern” and 31 saw it as a “fairly big concern”.

- The majority of concerns about noise related to pubs and late night visitors. However, 16 people were concerned about noise from “general traffic” and 14 were concerned about noise from “lorry deliveries”.
- Of those respondents citing noise as a concern, the majority of responses came from residents. With respect to noise from “lorry deliveries”, the proportion of respondents that raised concerned is around 2 per cent. However, there is no indication of the types of deliveries or whether their concerns might have been related to waste collections.

### Safety

It was mentioned above that business tenants on the lower section of East Street felt that there were frequent incidents of pedestrians coming into conflict with traffic on this section of road. Using accident data it is possible to determine whether many incidents are serious enough to be registered as an ‘accident’ and their level of seriousness. The data is continuously recorded, but normally published annually.

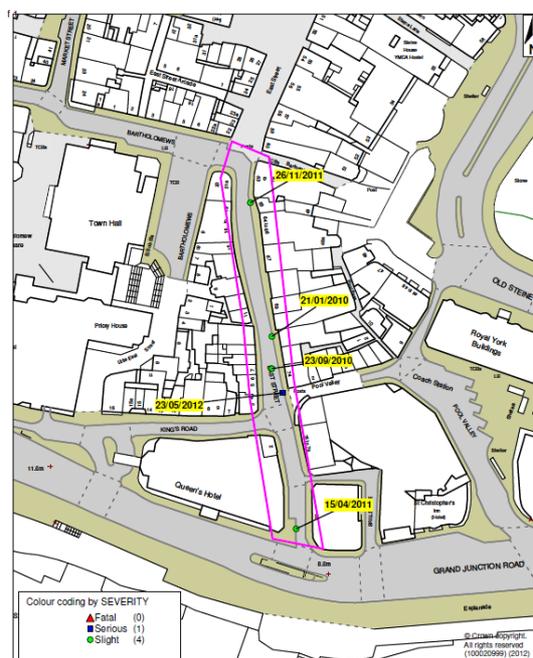
In the period from 1<sup>st</sup> December 2006 and 30<sup>th</sup> November 2011 (60 months) there were fifteen reported accidents resulting in casualties. Of these, two were recorded as serious, while thirteen were assessed as slight. A breakdown of the data is provided in Table 3.

**Table 3: Recorded accident data for East Street (lower), Bartholomews, King's Road - 01/12/2006 and 30/11/2011**

	2006	2007	2008	2009	2010	2011	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	0	0	2	0	2
Slight	0	2	1	1	5	4	13
Total	0	2	1	1	7	4	15

Figure 7 provides an illustration of the locations at which accident have occurred in East Street. Over the period of review, four accidents have been recorded in East Street, which represents about 27 per cent of all accidents reported. The classification of the accident is ‘slight’ injury, which is defined by the Depart for Transport as: *An injury of a minor character such as a sprain (including neck whiplash injury), bruise or cut which are not judged to be severe, or slight shock requiring roadside attention. This definition includes injuries not requiring medical treatment.* It is unknown how many incidents have taken place which were not officially recorded.

**Figure 7: Accident plots for East Street (lower), Bartholomews, King's Road - 01/12/2006 and 30/11/2011**



## Acceptance & Awareness

A survey of local businesses was carried out in September 2009. The main findings were:

- Lack of places to park/unload was the most common on-street problem, followed by pedestrian conflict with traffic.
- 15% thought current delivery arrangements worked satisfactorily.
- 15% thought pedestrianisation would improve the area.
- 58% of deliveries occurred before midday.
- Average time taken per delivery was 12 minutes.
- 85% of deliveries brought to premises by hand or using a hand trolley.

### **CI.3 Methods for Business as Usual scenario**

At the start of the CIVITAS Project, the Council's approach was to address freight issues on a relatively *ad hoc* basis and to remedy localised problems with measures such as provision of loading bays, restricting access, or at a higher level changing traffic flows. Any measures introduced had to be considered broadly in line with the Council's policy statements in the prevailing Local Transport Plan 2. Had this approach continued, only measures to remedy local problems would have been implemented and little consideration given to best practice or the implications to the wider road network or overall freight vehicle activity.

#### Related measures and their potential impacts

##### **Measure No. 2 - Electric Vehicle Charging Points**

Installation of electrical recharging points along key corridors throughout the city centre will again act as an engineering incentive for local businesses to consider operating goods vehicles that exploit clean fuels. However, this will only apply to those businesses that carry out their own deliveries in the vicinity of a charging point.

#### Related BHCC initiatives/works and their potential impacts:

- Local Sustainable Transport Fund (LSTF). New funding for sustainable transport initiatives focussed on the academic corridor. Most works will be post-CIVITAS timeframe however there could be some impact upon post data collection.
- Local Transport Plan (LTP). City targets for transport which include reducing single occupancy car journeys and increasing cycling. It also includes targets for improving air quality in Brighton & Hove. The work packages that are driven by the LTP will inevitably impact upon the findings of all of the CIVITAS measures.

#### External factors and their potential impacts

- National and international commitments to tackling global warming and reducing emissions – political support for sustainable transport solutions.
- Increasing cost of fuel – as standard forms of fuel become more and more expensive there is likely to be a shift to more sustainable transport usage. This factor will go hand in hand with the cost of electric vehicles reducing.

- Green administration newly elected in Brighton & Hove (May 2011) – on a local level, the new administration in Brighton & Hove are likely to look much more favourably on sustainable transport schemes

## C2 Measure results

Since the FQP was not established the focus of the measure results is on the Clear Zone measure implemented at the junction of East Street and Grand Junction Road.

### C2.1 Costs

The measure that was implemented in East Street involved the removal of the access into Grand Junction Road. The cost to implementation the scheme was €323,800. In measuring the cost of the scheme in terms of traffic and pedestrian flows the value has been divided by the numbers of these street users.

The tables below indicate the cost per vehicle and pedestrian only based on the traffic survey results that are presented in Section C2.5.

The cost per vehicle will increase the fewer vehicles use the street, and while this seems perverse, this result is positive as it indicates that fewer vehicles are using the street as a route.

If it were assumed that the original vehicle numbers stayed the same from the first survey after the implementation of the scheme, the cost per vehicle would remain or stay close to the East Street Survey - 10.6.09 values. However, since the values on a per vehicle basis have increased, it reflects that fewer vehicles are using the street.

**Table 4: Cost per vehicle on scheme investment**

Vehicle assessment	LGV <3.5t	HGV>3.5t	Other Traffic	Total
East Street Survey - 10.6.09	348	82	1,253	1,683
East Street Survey - 3.10.12	304	77	727	1,108
<i>Cost / vehicle</i>				
East Street Survey - 10.6.09	€ 930	€ 3,949	€ 258	€192
East Street Survey - 3.10.12	€ 1,065	€ 4,205	€ 445	€292

In the case of pedestrians the opposite is true. The more people that use the street, the lower the capital cost per pedestrian. Given the number of pedestrians has increased since the implementation of the scheme, the cost per pedestrian has reduced.

**Table 5: Cost per pedestrian on scheme investment**

Pedestrian assessment	Weekday	Weekend day	Total
East Street Survey - 6/09	3,600	14,400	18,000
East Street Survey - 6/12	6,000	17,900	23,900
<i>Cost / pedestrian</i>			
East Street Survey - 6/09	€ 90	€ 22	€18
East Street Survey - 6/12	€ 54	€ 18	€14

Thus in terms of desires affect and value for money the scheme is indicating a success as it is deterring drivers from using the East Street. The table below summarises the outcomes of this assessment.

### C2.1.1 Costs

Indicator	Before (date)	B-a-U (date)	After (date)	Difference: After-Before	Difference: After-BaU
Ia Capital costs -vehicles	€192	€0	€292	+€100	+€100
Ib Capital costs - pedestrians	€14	€0	€18	-€4	-€4

## C2.2 Environment

### C2.2.1 Air quality

Indicator	Before (2010)	B-a-U (2012)	After (2012)	Difference: After-Before	Difference: After-BaU
6 NOx levels	40.3	35.7	35.1	-5.2	-0.6

Although NOx levels reduced after implementation this is not significant as pollution levels throughout the city fell over this time and the difference from the Business as Usual scenario was only 0.6. Air quality was not an issue in this area before implementation and therefore the scheme was not designed to achieve air quality benefits.

## C2.3 Society

### C2.3.1 Acceptance

The awareness and acceptance survey was carried out in 2 ways;

- 1) An independent market researcher was commissioned to conduct on street surveys within the location of the target area.
- 2) Residential addresses were sent a postcard and invited to complete a questionnaire either on line or a paper copy could be sent (if requested).

Evidently these groups are not mutually exclusive.

On street questionnaires were conducted on 20-23 July 2009 between 9am and 7pm. There were 500 respondents.

There were 96 respondents to the online survey.

A full analysis of the survey is attached as Appendix B.

Indicator	Before (date)	B-a-U (date)	After (Sept 2012)	Difference: After-Before	Difference: After-BaU
13 Awareness level	0		100% (survey of local businesses)		
14 Acceptance level	15% (survey of local businesses)	15%	22% (survey of local businesses)	7%	7%

## C2.4 Transport

To gauge the extent of impact of the measure on traffic and pedestrian flows review surveys were conducted.

### Traffic Count

A follow up traffic count survey on East Street was carried out on 3<sup>rd</sup> October 2012. The results of the survey are provided in Table 6. The count recorded a total of 1108 vehicles passing along the road and revealed that the composition of vehicles was:

- 27% LGVs,
- 7% HGVs
- 66% Other traffic (combined all other road users)

**Table 6: East Street traffic count survey - 3.10.12**

<b>East Street Traffic Count Survey - 3.10.12</b>				
	<b>LGV &lt;3.5t</b>	<b>HGV&gt;3.5t</b>	<b>Other Traffic</b>	<b>Total</b>
0700-0800	17	6	16	39
0800-0900	21	8	47	76
0900-1000	38	6	56	100
1000-1100	38	15	51	104
1100-1200	38	9	68	115
1200-1300	37	7	55	99
1300-1400	27	8	77	112
1400-1500	32	6	71	109
1500-1600	22	5	62	89
1600-1700	17	4	67	88
1700-1800	10	2	96	108
1800-1900	7	1	61	69
<b>Total</b>	<b>304</b>	<b>77</b>	<b>727</b>	<b>1108</b>

### Comparison of before and after measure implementation

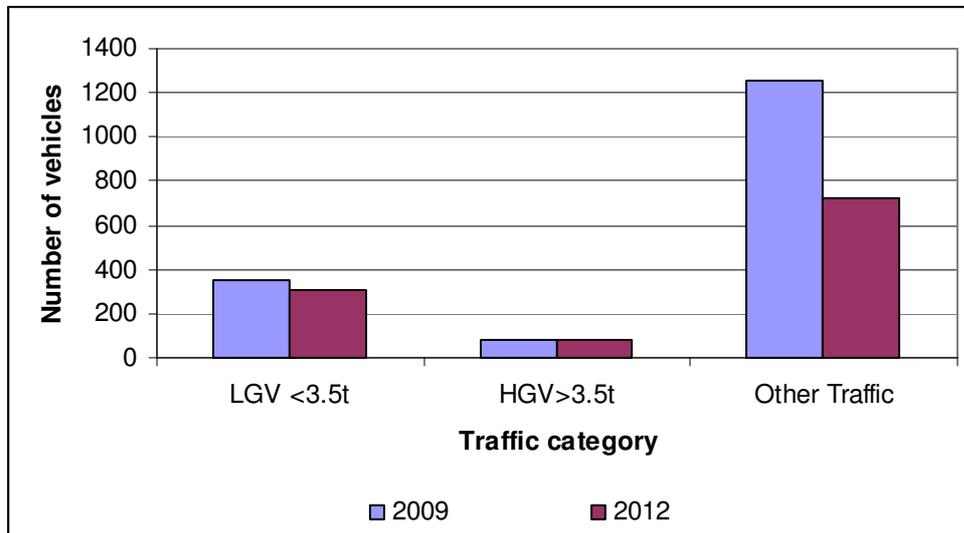
The new survey provided positive result in that the vehicle flow had reduced from a total 1683 vehicles in 2009 to 1108 in 2012. This represents an over decline of 34 per cent in traffic flow (see Table 7).

**Table 7: Percentage change in traffic flow between 2009 and 2012**

	<b>LGV &lt;3.5t</b>	<b>HGV&gt;3.5t</b>	<b>Other Traffic</b>	<b>Total</b>
Decline over 2009 survey results	-13%	-6%	-42%	-34%

Clearly there are factors which may also be contributing to the decline, notably the change in the economy. However, economic data for Brighton indicates that employment in the Accommodation and Food Service, and Retail sectors (which are the businesses most represented in the area) have remain relatively stable and during 2009/10 (latest data), experiencing, overall, a slight increase of 0.6 per cent. Transport and distribution over the same period experienced a decline of 5 per cent.

**Figure 8: Comparison of traffic flows on East Street at measure implementation**



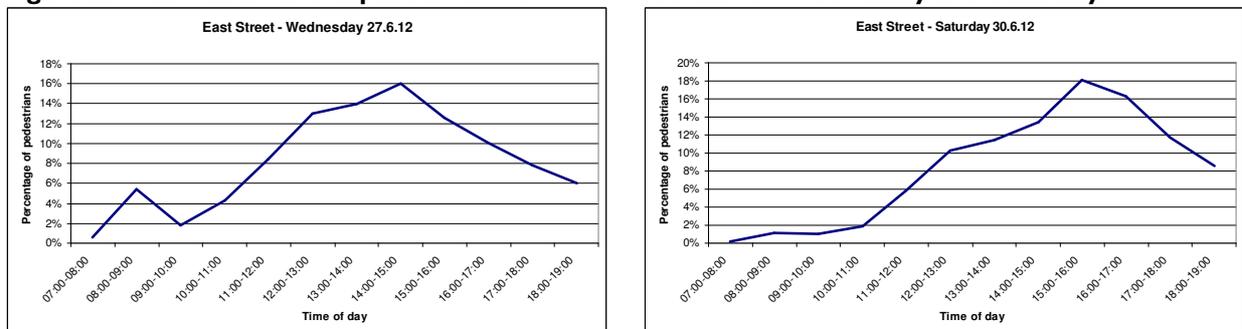
Methodology Issues

The before traffic count was carried out in June 2009 and the after count was carried out in October 2009. For some locations this may produce very different results, however, that is not the case in this location. Analysis of traffic flows in surrounding streets, such as Marine Parade, indicate that there is an average 5% reduction in traffic levels from June to October. The measure results show much larger reductions than this.

**Pedestrian count**

The follow up pedestrian counts were conducted on the Wednesday 27<sup>th</sup> and Saturday 30<sup>th</sup> June 2012. The results of the survey revealed that on the Wednesday around 6,000 pedestrians were recorded using East Street. On the weekend this number increased three fold with almost 17,900 pedestrian recorded. Figure 9 indicates the distribution of when pedestrians were in East Street.

**Figure 9: Distribution of the pedestrian flow in East Street for Wednesday and Saturday**

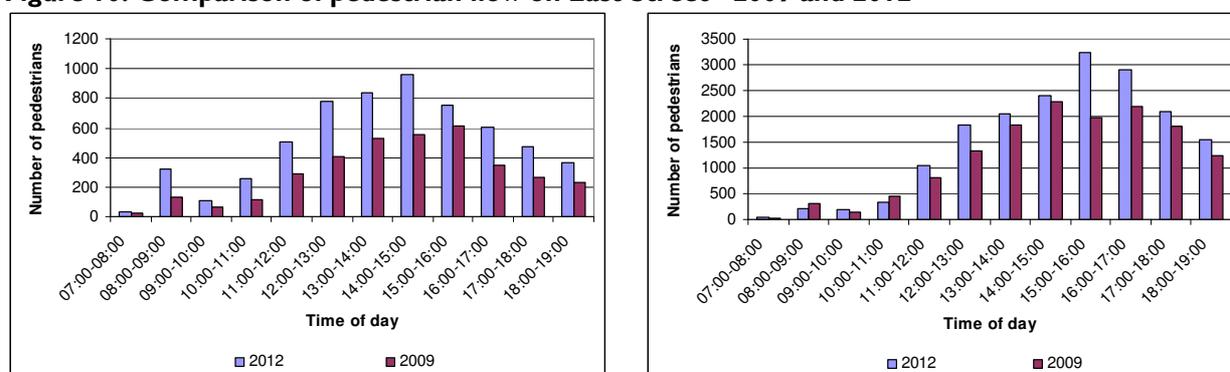


Comparison of before and after measure implementation

The flow of pedestrians in the 2012 survey was higher than in 2009. The numerical increase was approximately 2,400 on the week day and 3,500 on the weekend day. This represents a 66 per cent increase on the week day flow and a 24 per cent increase for the weekend day.

Figure 10 shows the comparison of absolute numbers of pedestrians using East Street over the two surveys.

**Figure 10: Comparison of pedestrian flow on East Street - 2009 and 2012**



Weekday pedestrian flow

Weekend day pedestrian flow

#### C2.4.2 Safety

Indicator	Before (date)	B-a-U (date)	After (date)	Difference: After-Before	Difference: After-BaU
20 Injuries and deaths	4	0	1	3	3

Since the installation of the scheme there has been one reported accident which appears in the accident statistics. This was classed as 'serious', but it is not clear whether this accident has occurred due the introduction of the scheme as it happened late at night when a car was reversing.

#### C2.4.3 Transport System

Indicator	Before (2009)	B-a-U (2012)	After (2012)	Difference: After-Before	Difference: After-BaU
21 Traffic flow	A weekday and weekend day traffic count completed in June 2009. W/d – 1,683 W/e – 1,146	No other measure were planned Result = 0	A weekday traffic count completed in October 2012. W/d – 1,108	W/d – -575	W/d – -575
22 Pedestrian flows	A weekday and weekend day traffic count completed in June 2009. W/d – 3,600	No other measure were planned Result = 0	A weekday and weekend day traffic count completed in June 2012. W/d – 6,000	W/d - +2,400 W/e - + 3,500	W/d - +2,400 W/e - + 3,500

	W/e – 14,400		W/e – 17,900		
25 Freight movements – Heavy Goods Vehicles (total vehicles between 7am and 7pm)	31		28		
25 Freight movements – Light Goods Vehicles (total vehicles between 7am and 7pm)	84		77		

### C3 Achievement of quantifiable targets and objectives

No.	Target	Rating
1	Research FQP best practice	**
2	Engage with stakeholders to formulate a freight forum framework	*
3	Initiate an informal freight forum	*
4	Implementation of Clear Zone hard measure that could potentially influence vehicle circulation in CIVITAS area	**
NA = Not Assessed      O = Not Achieved      * = Substantially achieved (at least 50%) ** = Achieved in full      *** = Exceeded		

### C4 Methods for Up scaling

Primarily through increased volume and shortening project timescales, directly related to resources made available.

### C5 Appraisal of evaluation approach

The major deviation from the original evaluation plan was that support for the freight quality partnership was low, meaning that surveying freight operators was not a suitable evaluation indicator. However the success of the scheme in reducing freight was still able to be evaluated through traffic counts. This meant that we could see how freight was affected by the scheme, however in depth analysis of why this was would have been possible had we been able to survey FQP members.

Air quality data was collected and was initially considered to be a key indicator for the measure. If this measure was upscaled and freight was reduced throughout the city then air quality would most likely improve. However on a measure of this scale it is difficult to affect air quality and it is hard to say that any changes can be down to the measure.

### C6 Summary of evaluation results

The measure resulted in a significant reduction in traffic, including freight: Light goods vehicle numbers reduced by 13%, heavy goods vehicles by 6% and traffic in general by 42%.

Weekday pedestrian numbers increased by 66% and at weekends increased by 24%.

Satisfaction levels amongst local business increased by 7%.

Air quality improved slightly but not by a significant amount.

## **C7 Future activities relating to the measure**

Further traffic reduction measures will be applied to the area surrounding East Street. At the request of local businesses East Street will be fully pedestrianised between 11am and 7pm each day. The streets surrounding the area will be restricted to business and resident use only.

A more detailed freight strategy will be produced and alternative methods of engaging with freight operators will be considered.

---

## D Process Evaluation Findings

### D0 Focused measure

X	0	No focussed measure
	1	Most important reason
	2	Second most important reason
	3	Third most important reason

### D1 Deviations from the original plan

The deviations from the original plan comprised:

- Deviation 1 – It was originally planned to deliver a city wide FQP, but lack of stakeholder interest made this impossible. It was decided to link the project to a physical measure with a localised impact on freight to generate much more stakeholder interest.
- Deviation 2 – The Environmental Zone encountered a series of delays due to need to council budgetary changes. As a result the East Street project suffered a delay of approximately 12 months. Funding was approved during 2010 and work began during November 2011 and completed by January 2012.
- Deviation 3 – The evaluation description measurement was changed as vehicle operators were no longer included in the reference group. Data collected from post vehicle and pedestrian counts and compared with numbers of vehicles and pedestrians.
- Deviation 4 – Evaluation sub-category cannot be included due to lack of data provided by businesses.
- Deviation 5 – Evaluation sub-category was no longer obtainable as freight operators were no longer an included stakeholder group due to abandonment of FQP.

### D2 Barriers and drivers

#### D2.1 Barriers

The main barriers encountered for the development of Efficient Goods Distribution were:

#### Preparation phase

- **1. Political / strategic.** The implementation of the complementary hard measure was delayed as the political leadership was initially concerned about the detrimental effect of the measure on drivers and businesses. Political approval was granted following thorough testing of the scheme plan.
- **5. Involvement / Communication.** Support amongst freight operators for the creation of the Freight Quality Partnership was disappointingly low and, although over 250 were invited, only one operator attended the initial meeting. This is likely to be because operators did not see the value in engaging with the process until firm actions were likely.

#### Implementation phase

- **5. Involvement / Communication.** Some local businesses were opposed (although the majority were in favour) as they felt it would have a negative effect for them.

### Operation phase

- **8. Operational.** Compliance with the new traffic regulations was not total in the first month of operation. It is possible that some drivers were not aware of the new regulations but is more likely that the majority of drivers chose to ignore the rules.

### **D2.2 Drivers**

As for the drivers, the main ones affecting the measure are:

### Preparation phase

- **5. Involvement / Communication.** The majority of local businesses were in favour of a pedestrianisation scheme on East Street. Some businesses lobbied the political leadership, helping the measure to be granted approval.
- **1. Political / Strategic.** Air quality is poor in some areas of Brighton & Hove and the issue of air quality was high profile locally at times during the CIVITAS Plus project. This measure sought to improve air quality and was therefore able to collect political and other local support.

### **D2.3 Activities**

In order to handle the above referred barriers and/or to make use of the drivers, the following activities were taken during the implementation of the measure:

### Implementation phase

- **5. Involvement / Communication.** In order to satisfy the local businesses that were opposed to the scheme it was necessary to maintain a meaningful dialogue to ensure the businesses were fully aware of the purpose and benefits of the scheme, and to ensure that the businesses could feedback their concerns and necessary changes to the scheme design could be made.
- **1. Political / Strategic.** In order to obtain political approval the benefits of the scheme needed to be tested thoroughly. Evidence of similar successful schemes was presented to politicians as well as deputations from local traders and vehicle tracking diagrams.

### Operation phase

- **4. Problem related.** Enforcement action was required to ensure compliance levels were raised during the first few weeks of operation. Some fines were issued to drivers ignoring the regulations and contact was made with distribution companies to ensure they were aware of the changes. After a month compliance was improved.

## **D3 Description of organisations and risks**

### **D3.1 Measure partners**

Following there is a brief description of all project partners and its level of involvement with the measure:

- **1. City, 1. Lead: Brighton & Hove City Council-** Sustainable Transport Department- Project lead and management.

- **5. Private Company, 2. Principle participant, Peter Brett Associates-** Surveys, freight forum organisation, freight initiative conceptualisation.
- **5. Private Company, 3. Occasional participant-** Local retailers and businesses receiving freight.
- **5. Private Company, 3. Occasional participant-** Logistic services providing freight.
- **4. Non-governmental organisation, 3. Occasional participant-** Freight Sector Associations
- **1. City, 3. Occasional participant-** Neighbouring local authorities, acting as consultees.

### D.3.2 Stakeholders

The main stakeholders involved in the measure were:

- **Local businesses.** The aim of the environmental zone was to improve the local area by reducing freight activity. Local businesses would benefit through an improved environment in which to operate. They also generated much of the freight activity and therefore any changes to freight movement could affect local businesses negatively.
- **Local residents.** The aim of the environmental zone was to improve the local area by reducing freight activity. Local residents would benefit through an improved living environment.
- **Freight operators.** Operators were, for obvious reasons, key stakeholders. Any change implemented as part of the measure needed to be acceptable to the operators.

## D4 Recommendations

### D.4.1 Recommendations: measure replication

This measure could be taken up in other cities where city centre freight is an issue. The principle of amending the road network to reduce traffic whilst, in parallel, implementing a freight partnership is transferable, although the individual road layout of each city will dictate how applicable it will be.

The freight quality partnership element of this measure was not as successful as was hoped. Therefore the measure should not be replicated in exactly the same way it was implemented in Brighton & Hove, particularly in regard to engaging freight operators. The lessons learned are detailed below.

- **Enforce traffic restrictions.**  
Attention should be paid to the way in which no entry restrictions are applied. In measures such as this, where access restrictions are applied to prevent freight using an area they had previously used, it is likely that vehicles will attempt to disobey the new restrictions.

In this measure minimal signage was installed in order to reduce street clutter. However this may have given vehicles the impression they could easily violate the new regulations. Increased enforcement of the regulations was used in the first few weeks of operation to reinforce the changes, however an increase in signage originally may have been effective too.

#### **D.4.2 Recommendations: process**

- **Engage Freight Operators.**

To successfully initiate a Freight Quality Partnership it is necessary to engage with freight operators. However freight operators need a reason to engage. Therefore it is necessary to offer an incentive to freight operators to participate.

In this measure the initial engagement with operators was unsuccessful as there was only the promise of a forum for discussion, not the opportunity to make improvements. An incentive such as the promise of highway improvements, or regulatory change would have helped to encourage operators to engage.

- **Stakeholder Dialogue.**

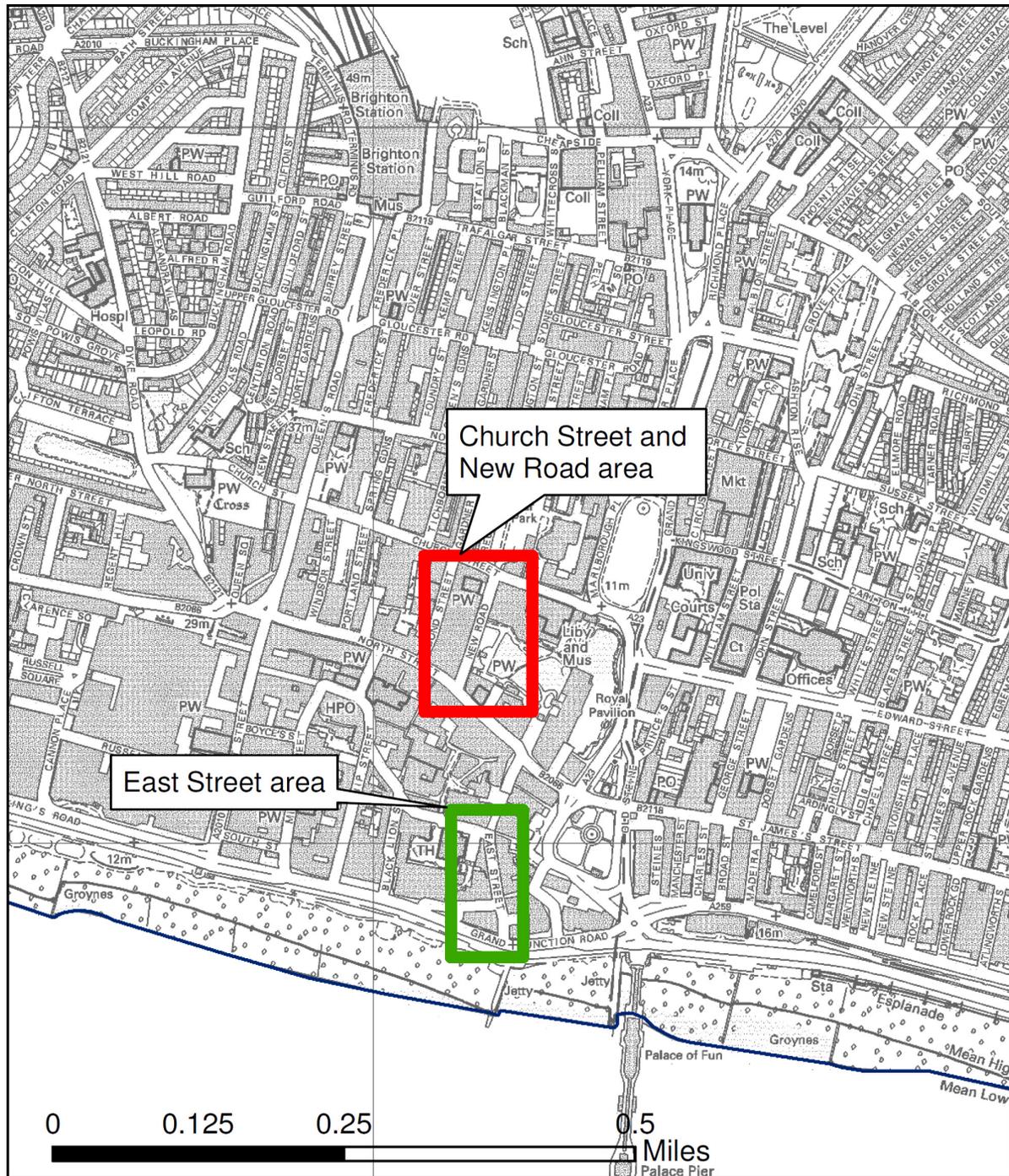
Dialogue with stakeholders is essential in order for them to accept the measure. Simply providing a good quality freight scheme is not necessarily sufficient to gain the support of stakeholders. The benefits need to be explained to them.

The East Street part-pedestrianisation scheme was successful in reducing freight movements. However its acceptance by local businesses only occurred due to prolonged dialogue with them, and many amendments to the scheme to ensure that it worked for all.

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## Appendix A – Map of Environmental Zone

The East Street area (green) is the location of the Environmental Zone (Measure 64). The New Road/ Church Street area (red) is the location of the Clear Zone (Measure 21).



**Location of Measures 21 and 64**

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## APPENDIX B – Awareness and Acceptance Survey

### Clear Zone

#### Background

As part of the CIVITAS Clear Zone measure it was necessary to gather baseline information on a number of social awareness & behaviour questions. This has been achieved in 2 ways;

- 3) An independent market researcher was commissioned to conduct on street surveys within the location of the target area.
- 4) Residential addresses were sent a postcard and invited to complete a questionnaire either on line or a paper copy could be sent (if requested).

Evidently these groups are not mutually exclusive.

#### What do you think of The Lanes? Questionnaire

On street questionnaires were conducted on 20-23 July between 9am and 7pm. There were 500 respondents.

There were 96 respondents to the online survey.

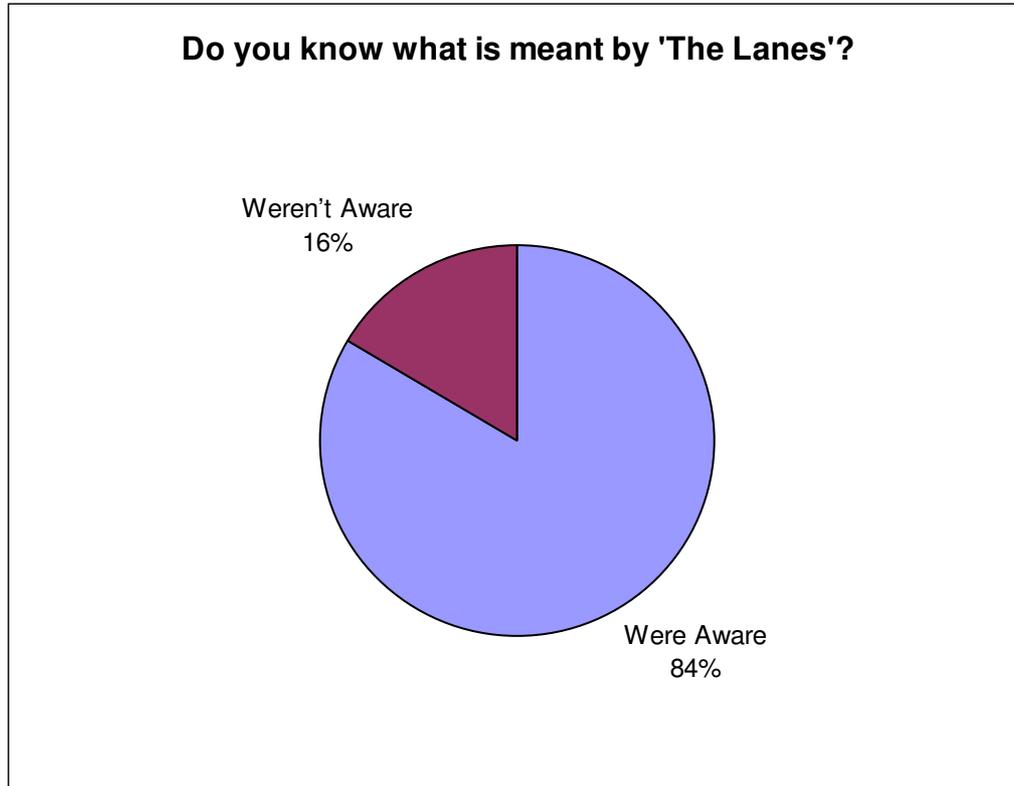
Location	No. of Responses	%
Market Street	333	56
East Street	75	13
Brighton Place	44	7
East Street Arcade	14	2
Duke Street	12	2
Brighton Square	6	1
Meeting House Lane	5	1
Nile Street	3	0.5
Prince Albert Street	2	0.5
Location not recorded	6	1
Online Survey	96	16
Total	596	100

Out of 500 on street responses there were 6 where the time wasn't recorded.

	No. of Responses	%
9:00 – 9:59	4	1
10:00 – 10:59	53	11
11:00 – 11:59	80	16
12:00 – 12:59	87	17
13:00 – 13:59	39	8
14:00 – 14:59	99	20
15:00 – 15:59	52	10
16:00 – 16:59	62	13
17:00 – 17:59	15	3
18:00 – 18:59	3	1
Total	494	100

**Q.1 Do you know what I mean by 'The Lanes'?**

On Street respondents were shown a map of the area and asked to indicate on the map. (See Appendix I)

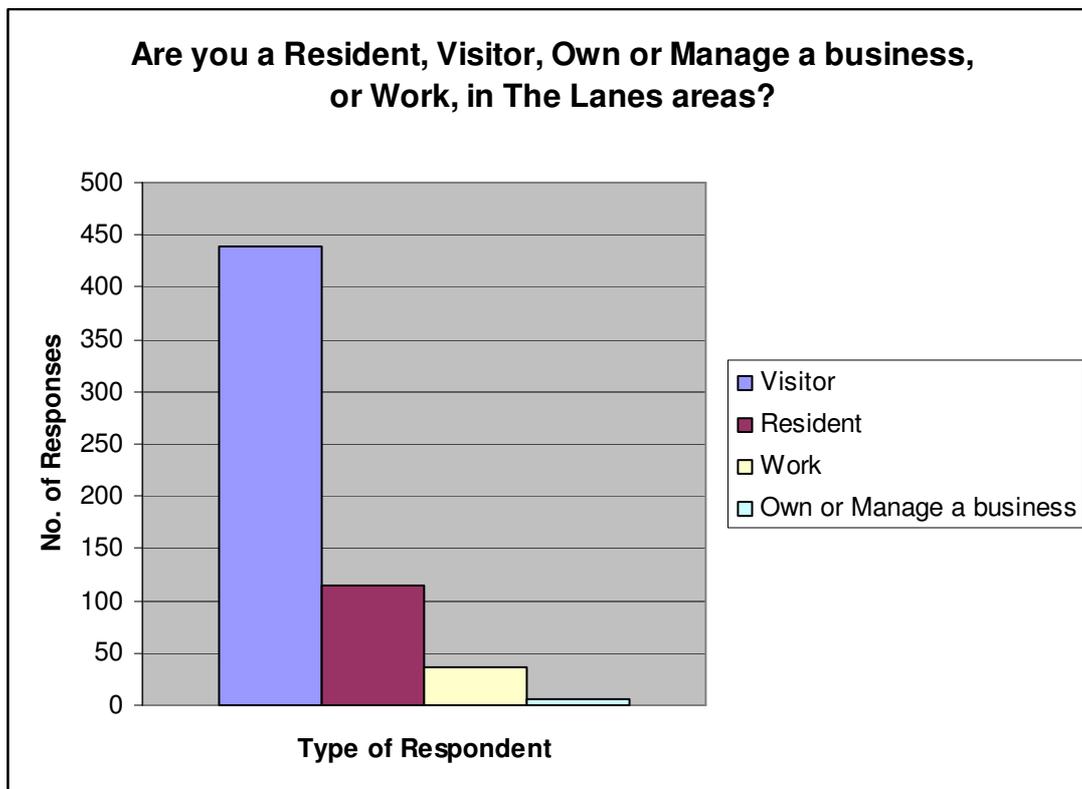


	No. of Responses	%
Were Aware	418	84
Weren't Aware	82	16
Total	500	100

**Q.2 Are you a Resident, Visitor, Own or Manage a business, or Work, in The Lanes areas?**

Out of the 596 respondents, 595 replied to this question.

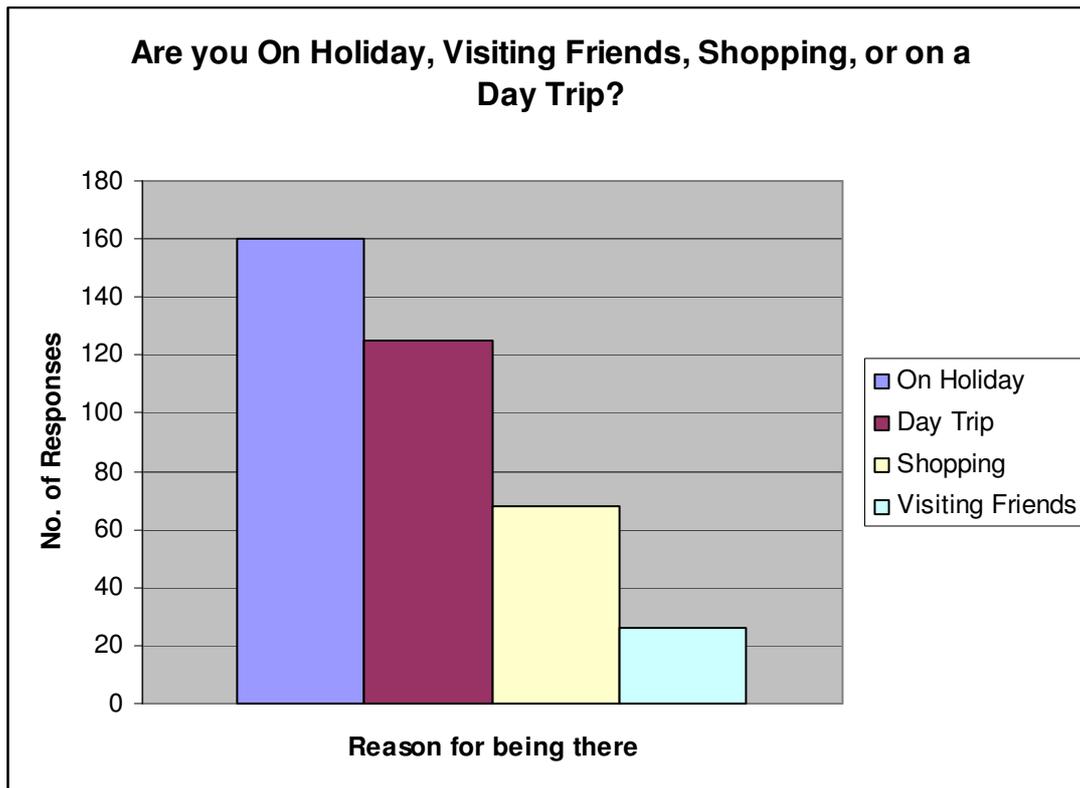
Online respondents were asked whether they live in the Lanes area. Only those that answered yes were prompted to continue with the survey. Therefore of the 96 online respondents, all were residents.



	No. of Responses	%
Visitor	438	74
Resident	114	19
Work	37	6
Own or Manage a business	6	1
Total	595	100

**Q.3 Are you On Holiday, Visiting Friends, Shopping, Day Trip?**

Only those that said they were a visitor to The Lanes were prompted to answer this question. Out of 438 respondents, 436 replied to this question.

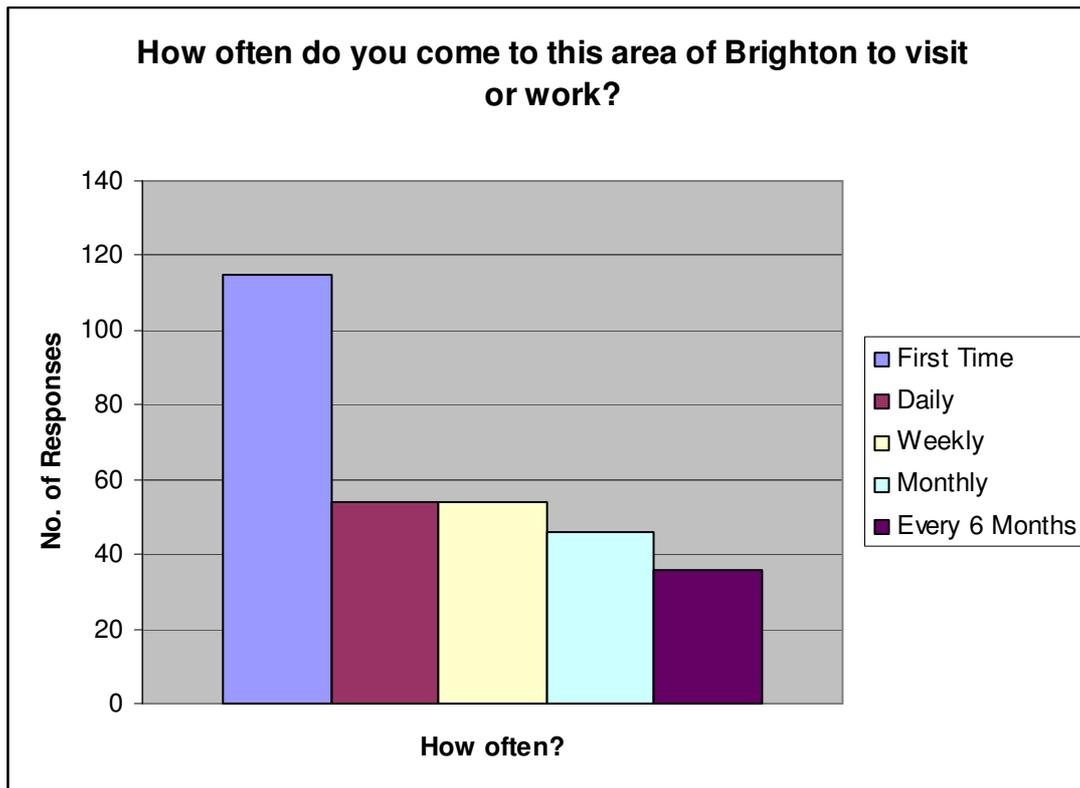


	No. of Responses	%
On Holiday	160	37
Day Trip	125	29
Shopping	68	15
Visiting Friends	26	6
Other	57	13
<b>Total</b>	<b>436</b>	<b>100</b>

Other comments included:  
 Food/Drink: 18  
 Work Related: 16  
 Student/education: 4

**Q.4 How often do you come to this area of Brighton to visit or work?**

Only those that said they were a visitor, work, or own or manage a business in the area were prompted to answer this question. Out of 481 respondents, 480 replied to this question.



	No. of Responses	%
First Time	115	24
Daily	54	11
Weekly	54	11
Monthly	46	10
Every 6 Months	36	7.5
Other	175	36.5
Total	480	100

Other responses included:  
 Once a year: 27  
 Second time ever: 14  
 Twice a year: 10  
 (various other specific amounts)

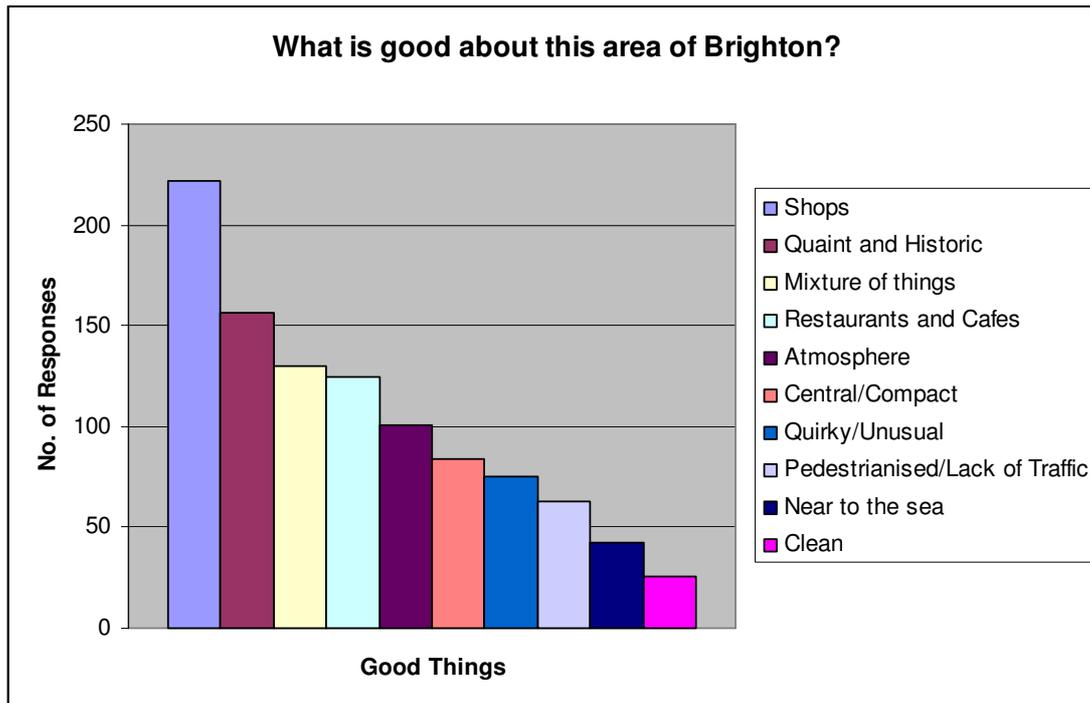
**Q. 5 If you are visiting for shopping and restaurants what do you think you will spend today?**

Only those that said they were a visitor, work, or own or manage a business in the area were prompted to answer this question. Out of 481 respondents, 398 replied to this question. Responses ranged from nothing at all to over £1000.



Money spent (£)	No. of Responses	%
0-25	160	40
30-50	139	35
55-100	73	18
115+	26	7
Total	398	100

**Q. 6** As a city centre location can you tell me what is good about this area and what is not so good?



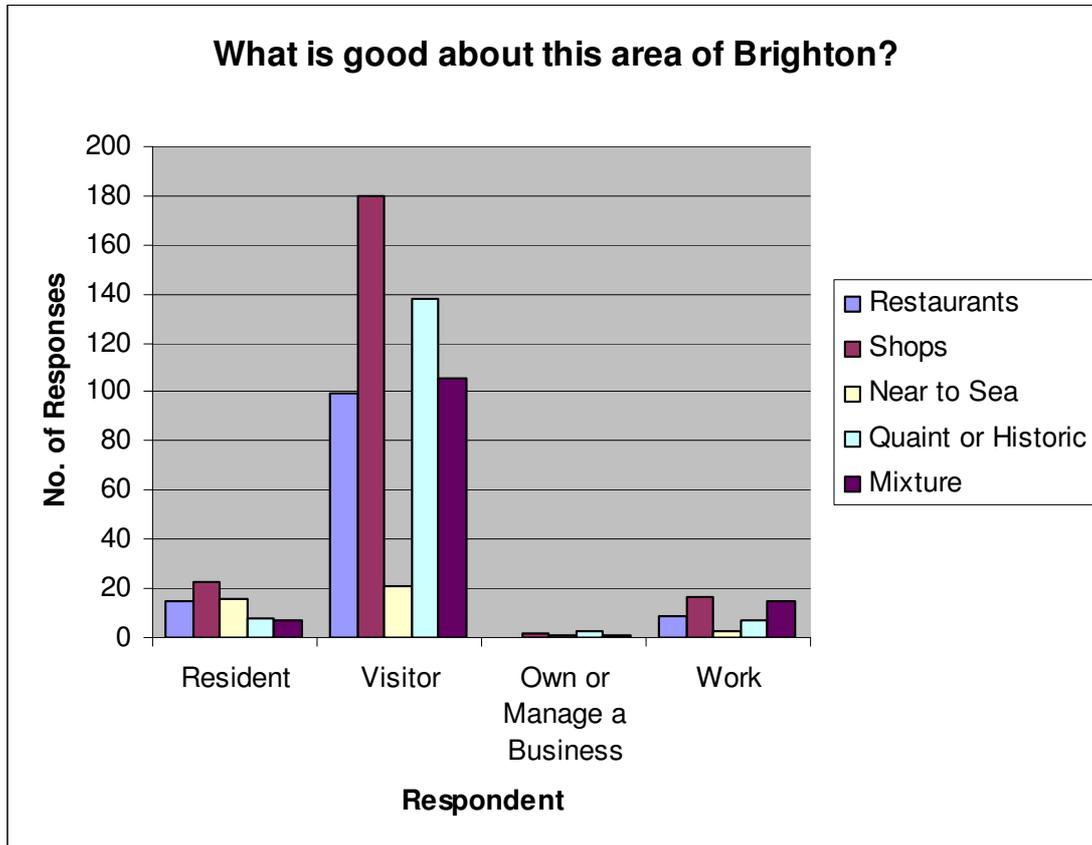
**Good Things**

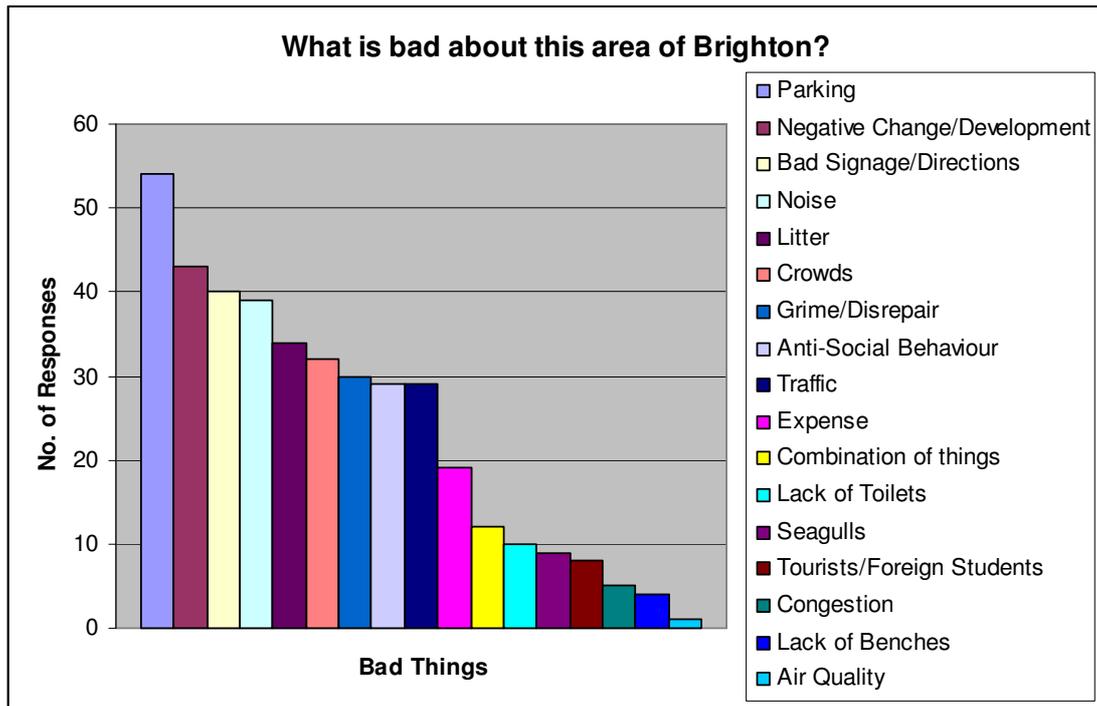
	<b>No. of Responses</b>	<b>%</b>
Shops	222	22
Quaint and Historic	156	15
Mixture of things	130	13
Restaurants and Cafes	125	12
Atmosphere	101	10
Central/Compact	84	8
Quirky/Unusual	75	7
Pedestrianised/Lack of Traffic	63	6
Near to the sea	42	4
Clean	26	3
<b>Total</b>	<b>1,024</b>	<b>100</b>

There were over 50 other assorted comments. (see Appendix 2)

	<b>No. of Responses</b>			
	<b>Resident</b>	<b>Visitor</b>	<b>Own or Manage a Business</b>	<b>Work</b>
<b>Restaurants</b>	15	100	0	9

<b>Shops</b>	23	180	2	17
<b>Near to Sea</b>	16	21	1	3
<b>Quaint or Historic</b>	8	138	3	7
<b>Mixture</b>	7	106	1	15
<b>Total</b>	69	545	7	51





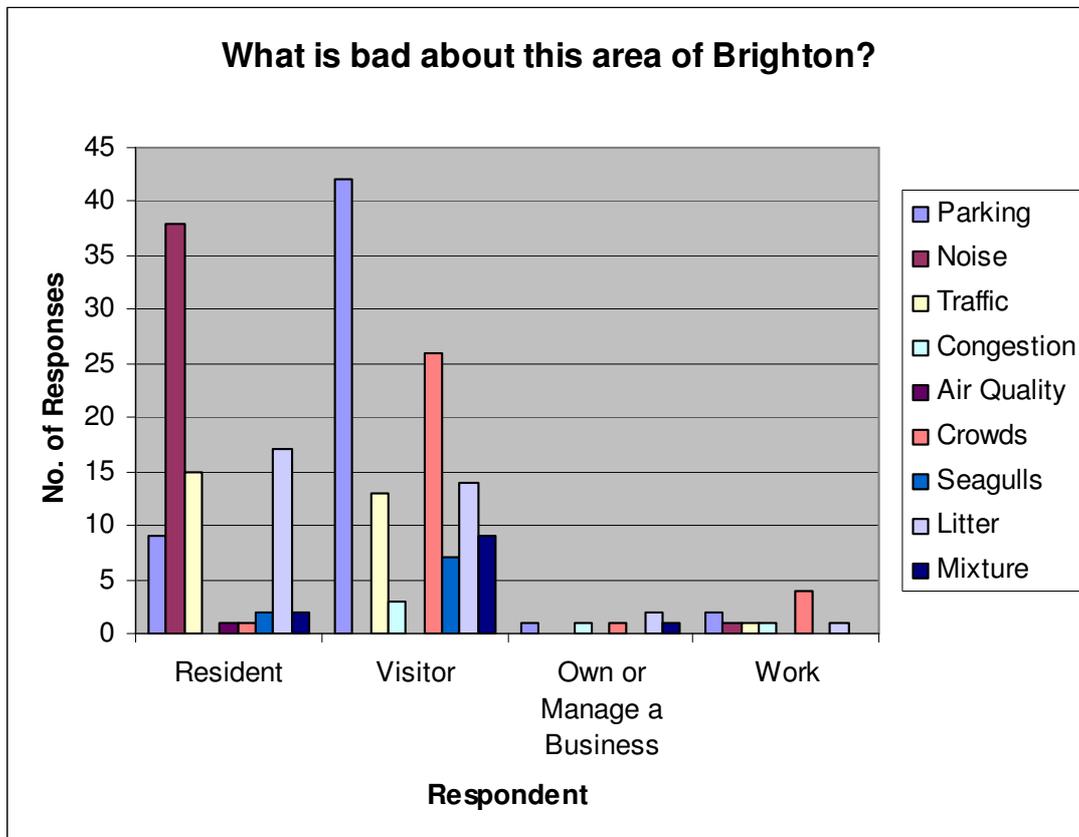
**Bad Things**

	No. of Responses	%
Parking	54	14
Negative Change/Development	43	11
Bad Signage/Directions	40	10
Noise	39	10
Litter	34	9
Crowds	32	8
Grime/Disrepair	30	8
Anti-Social Behaviour	29	7
Traffic	29	7
Expense	19	5
Combination of things	12	3
Lack of Toilets	10	2
Seagulls	9	2
Tourists/Foreign Students	8	2
Congestion	5	1
Lack of Benches	4	1
Air Quality	1	0
<b>Total</b>	<b>398</b>	<b>100</b>

There were nearly 50 other assorted comments. (see Appendix 3)

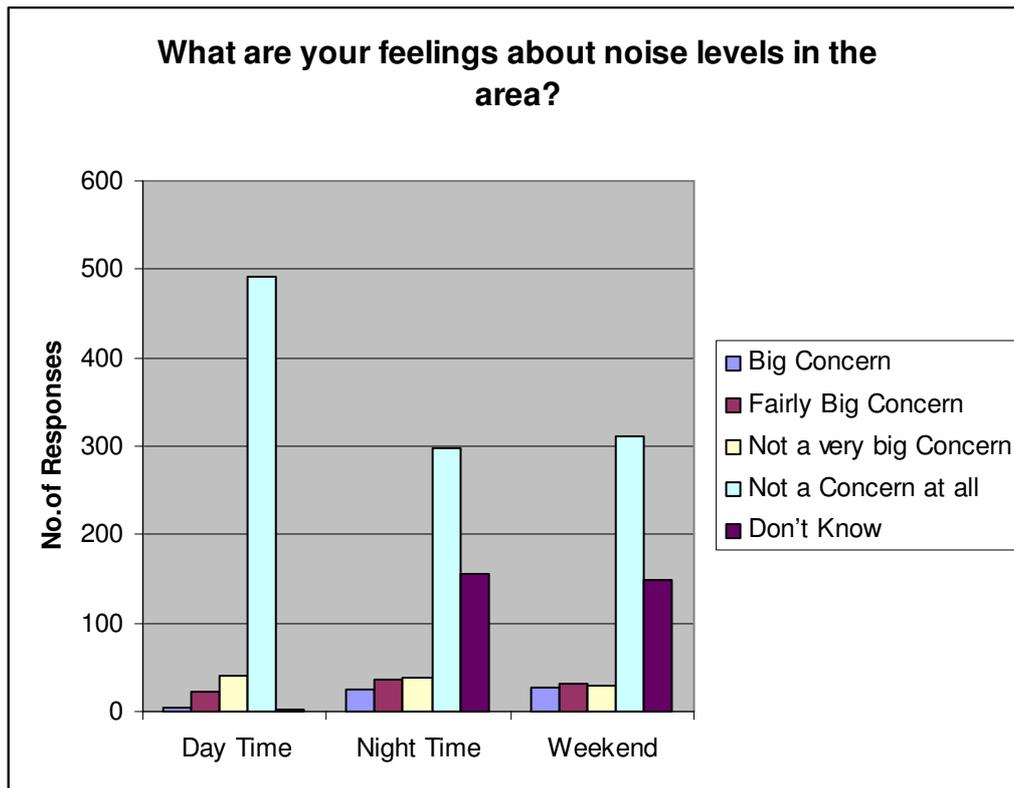
	No. of Responses			
	Resident	Visitor	Own or	Work

			Manage a Business	
<b>Parking</b>	9	42	1	2
<b>Noise</b>	38	0	0	1
<b>Traffic</b>	15	13	0	1
<b>Congestion</b>	0	3	1	1
<b>Air Quality</b>	1	0	0	0
<b>Crowds</b>	1	26	1	4
<b>Seagulls</b>	2	7	0	0
<b>Litter</b>	17	14	2	1
<b>Mixture</b>	2	9	1	0
<b>Total</b>	85	114	6	10



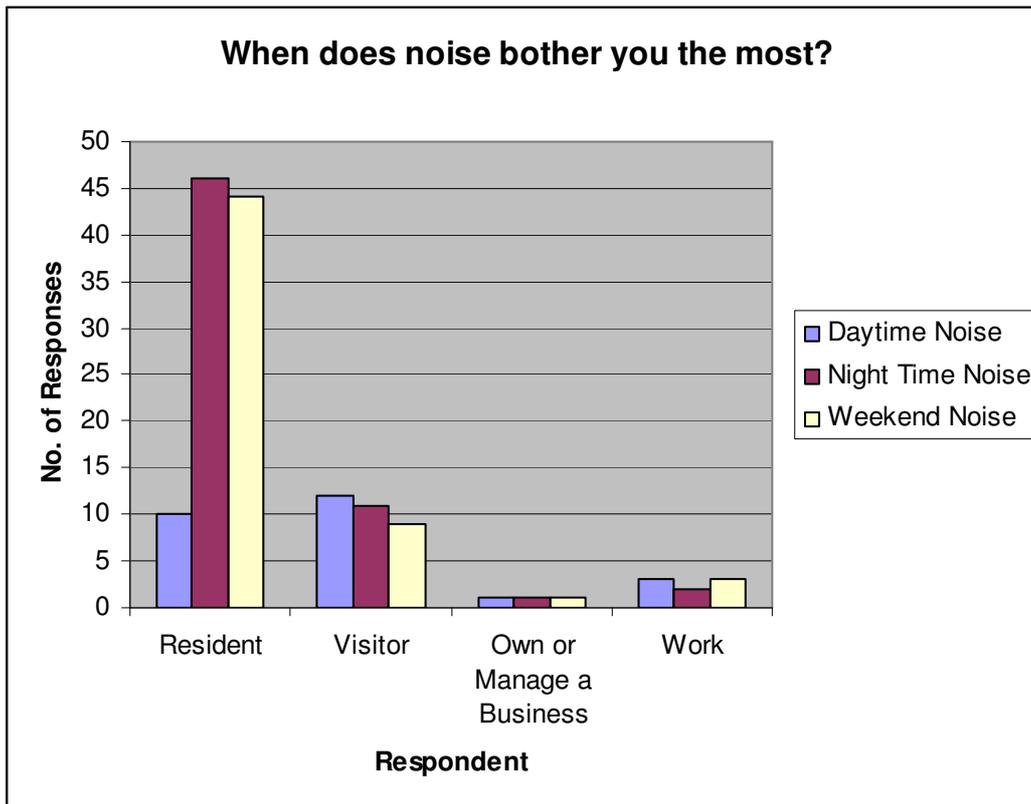
**Q. 7 What is your feeling about noise levels in the area?**

Out of 596 respondents, 561 replied to the Day Time question, 551 replied to the Night Time question, 545 replied to the Weekend question.



	No. of Responses		
	Day Time	Night Time	Weekend
Big Concern	4 (1)	25 (5)	26 (5)
Fairly Big Concern	22 (4)	35 (6)	31 (6)
Not a very big Concern	41 (7)	38 (7)	29 (5)
Not a Concern at all	491 (87.5)	298 (54)	311 (57)
Don't Know	3 (0.5)	155 (28)	148 (27)
<b>Total</b>	<b>561</b>	<b>551</b>	<b>545</b>

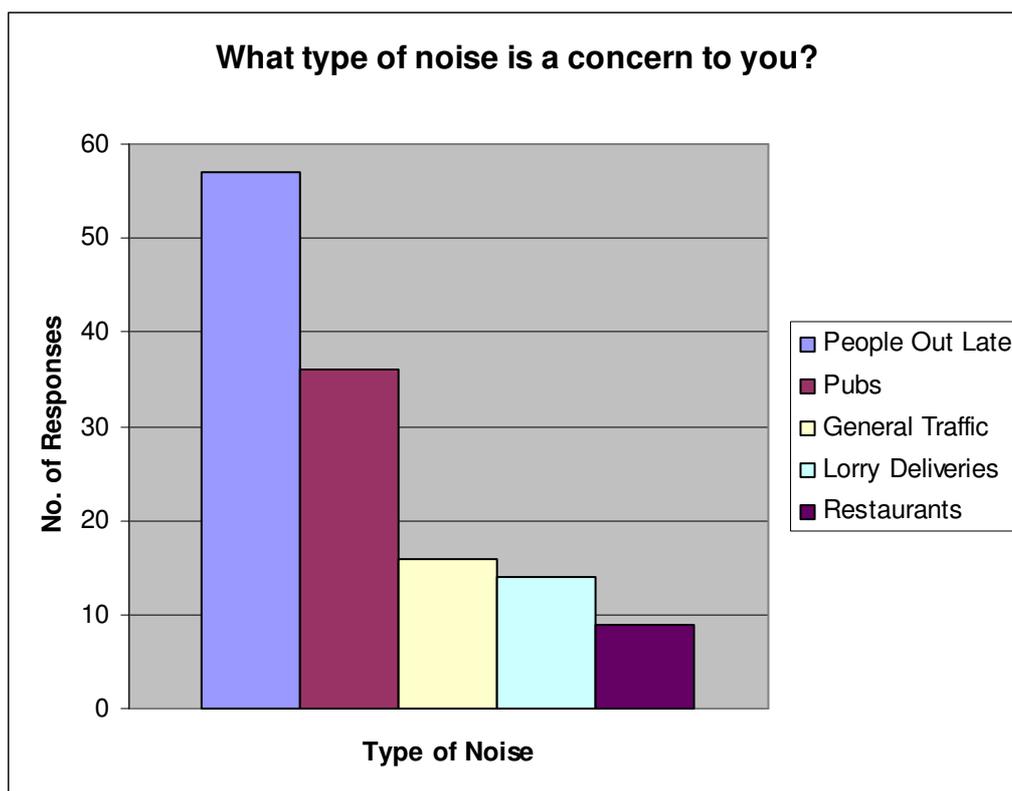
How many residents, visitors, business owners or managers, and workers, felt noise levels in the area is a big or fairly big concern?



	No. of Responses			
	Resident	Visitor	Own or Manage a Business	Work
<b>Daytime Noise</b>	10	12	1	3
<b>Night Time Noise</b>	46	11	1	2
<b>Weekend Noise</b>	44	9	1	3
<b>Total</b>	100	32	3	8

**Q. 8 What type of noise is a concern to you?**

Those who felt noise was a big or fairly big concern were prompted to answer this question. 132 people replied to this question.



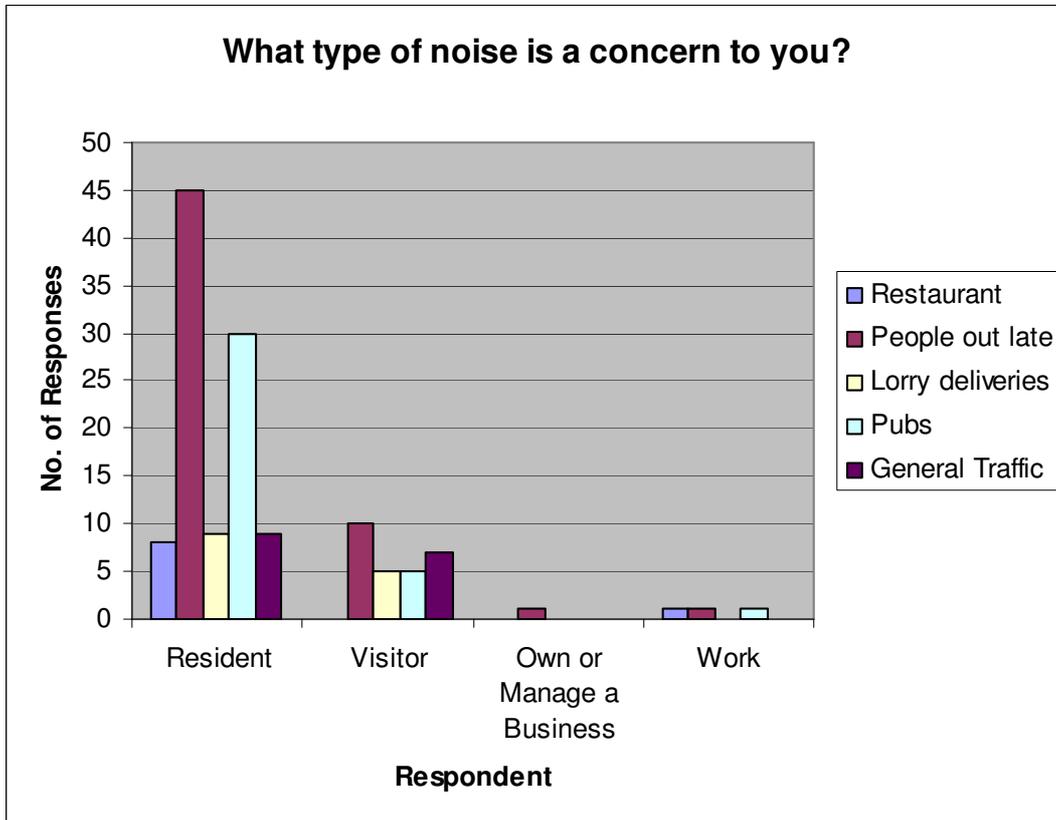
	No. of Responses	%
People Out Late	57	43
Pubs	36	27
General Traffic	16	12
Lorry Deliveries	14	11
Restaurants	9	7
<b>Total</b>	<b>132</b>	<b>100</b>

There were 19 additional comments:

Seagulls: 5  
 Road/Building works: 4  
 Refuse collection: 4  
 Buskers: 4  
 Building Alarms: 1

	No. of Responses			
	Resident	Visitor	Own or Manage a Business	Work
<b>Restaurant</b>	8	0	0	1
<b>People out late</b>	45	10	1	1

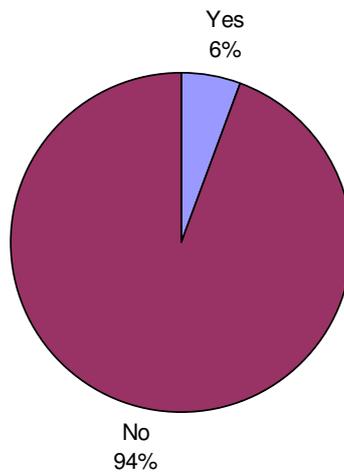
<b>Lorry deliveries</b>	9	5	0	0
<b>Pubs</b>	30	5	0	1
<b>General Traffic</b>	9	7	0	0
<b>Total</b>	101	27	1	3



**Q. 9 Are you aware of plans to improve the area?**

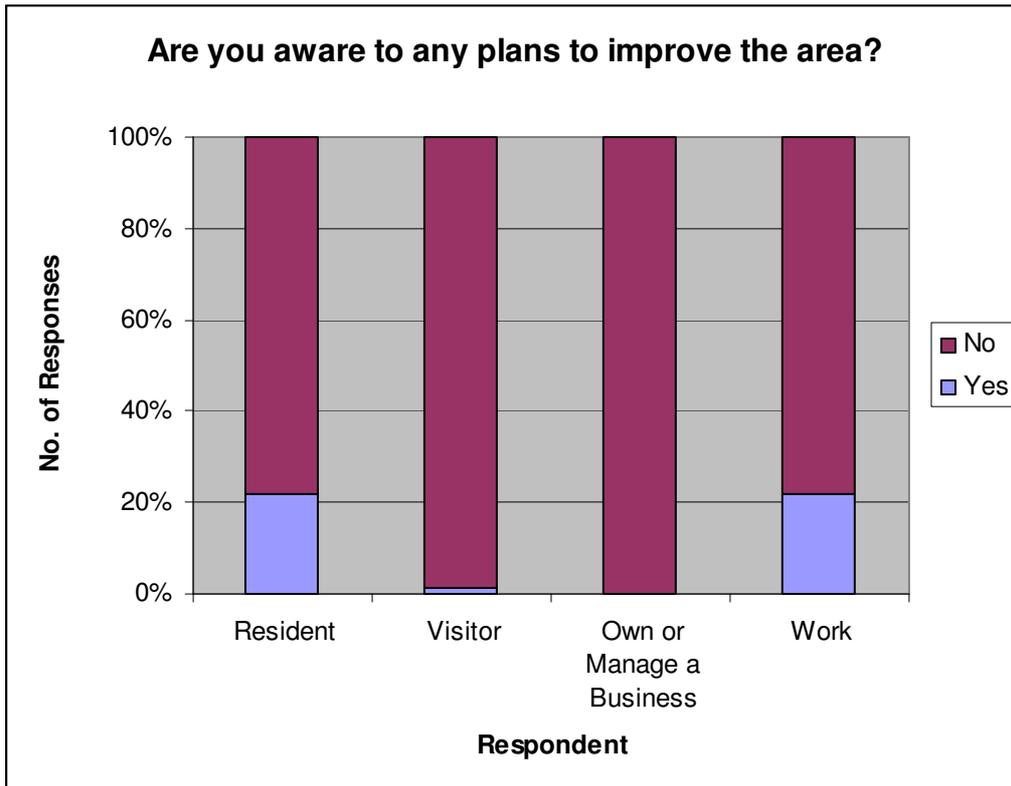
557 people answered this question.

**Are you aware of any plans to improve the area?**



	<b>No. of Responses</b>	<b>%</b>
Yes	31	6
No	526	94
<b>Total</b>	<b>557</b>	<b>100</b>

	<b>No. of Responses</b>			
	<b>Resident</b>	<b>Visitor</b>	<b>Own or Manage a Business</b>	<b>Work</b>
Yes	18	5	0	8
No	65	425	6	29
<b>Total</b>	<b>83</b>	<b>430</b>	<b>6</b>	<b>37</b>



**Q. 10 Do you know what these plans are?**

People that answered 'Yes' to Q.9 were prompted to answer this question. 27 people made 35 responses, these have been grouped accordingly.

	No. of Responses	%
Ship Street	9	26
Traffic calming/general improvements	6	17
North Street	4	11
General Pedestrianisation	3	8
East Street	2	6
No	2	6
Other	9	26
Total	35	100

**Demographic Information**

## Gender

	No. of Responses	%
Male	263	46
Female	301	54
Total	564	100

**With Children** (only on street respondents were prompted to answer this question)

	No. of Responses	%
Yes	72	15
No	418	85
Total	490	100

## Age

	No. of Responses	%
Under 18	11	2
18-24	56	10
25-34	100	18
35-44	93	16
45-54	117	21
55-64	115	20
65-74	51	9
75+	21	4
Total	564	100

## Disability

	No. of responses	%
Yes	39	7
No	503	93
Total	542	100

## Ethnicity

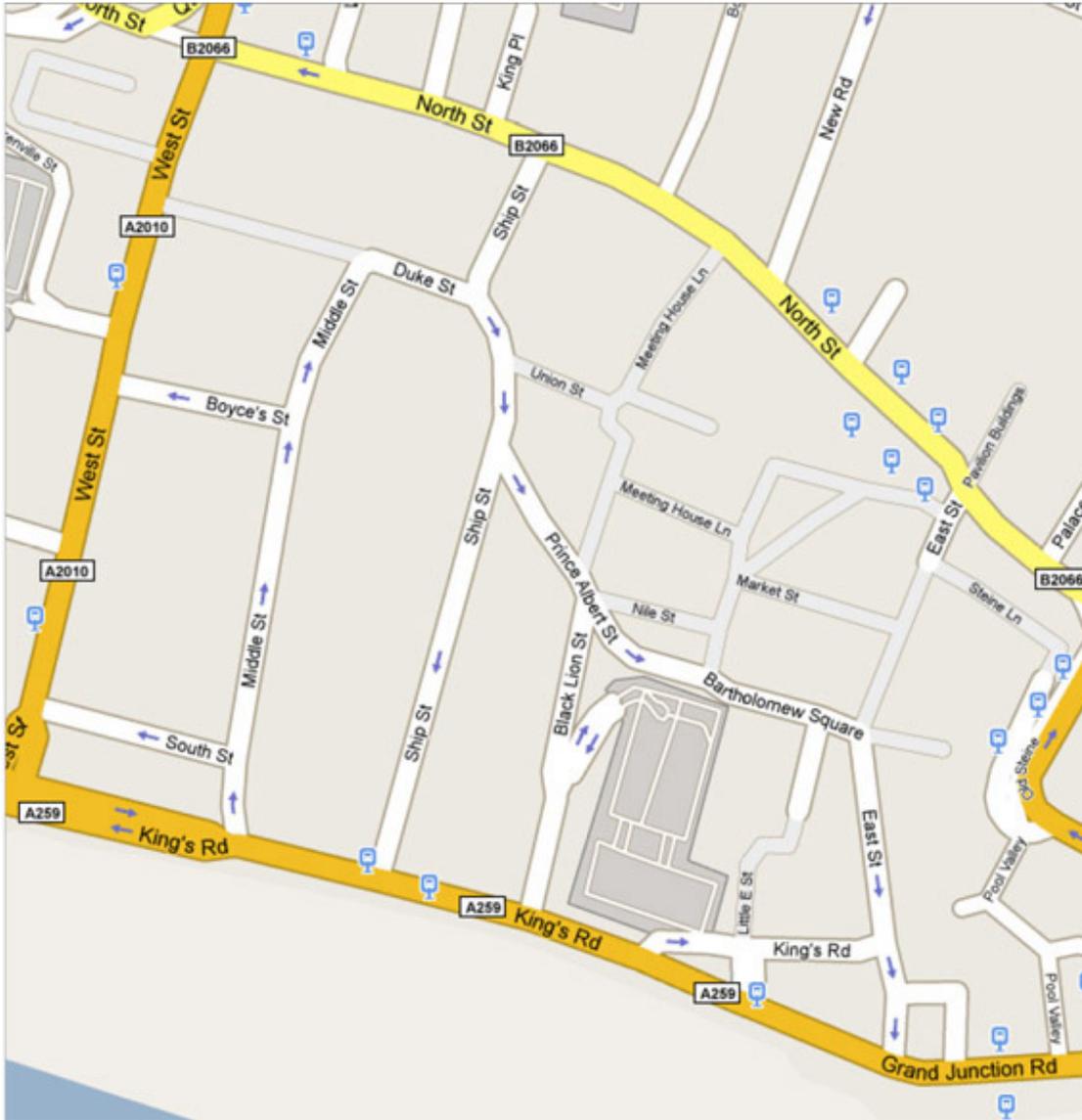
	No. of responses	%
White British	455	81
White Irish	24	4
Other White	68	12
Indian	3	0.5
Pakistani	1	0.125

Other Asian	1	0.125
Caribbean	2	0.5
African	2	0.5
Other Black	3	0.5
White and Asian	2	0.5
Chinese	1	0.125
Other	1	0.125
Total	563	100

### **Postcode**

Approximately a quarter of the respondents gave their postcode as Brighton & Hove (BN1 – BN3).

### **Appendix I**



## Appendix 2

Additional “Good” comments included:

- Bands
- Buskers
- Casino
- Child Friendly
- City Living
- Everything
- Memories
- Parking
- Safe
- Windiness

### **Appendix 3**

Additional “Bad” comments included:

- Bands
- Beggars
- Bicycles are dangerous
- Buildings
- Lack of internet cafes
- Not enough bicycle parking
- Pigeons
- Poor road/pavement surfaces
- Too touristy
- Weather