

**CiViTAS**  
Cleaner and better transport in cities

**ARCHIMEDES**

AALBORG • BRIGHTON & HOVE • DONOSTIA-SAN SEBASTIÁN • IASI • MONZA • ÚSTÍ NAD LABEM

## Brighton & Hove

T71.1: Personalised Travel Information Website  
for Brighton & Hove

**Brighton & Hove City Council**

**January 2012**



THE CIVITAS INITIATIVE  
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# 1. Introduction

## 1.1 Background CIVITAS

CIVITAS - cleaner and better transport in cities - stands for Clty-VITAlity-Sustainability. With the CIVITAS Initiative, the EC aims to generate a decisive breakthrough by supporting and evaluating the implementation of ambitious integrated sustainable urban transport strategies that should make a real difference for the welfare of the European citizen.

**CIVITAS I** started in early 2002 (within the 5th Framework Research Programme);  
**CIVITAS II** started in early 2005 (within the 6th Framework Research Programme) and  
**CIVITAS PLUS** started in late 2008 (within the 7th Framework Research Programme).

The objective of CIVITAS-Plus is to test and increase the understanding of the frameworks, processes and packaging required to successfully introduce bold, integrated and innovative strategies for clean and sustainable urban transport that address concerns related to energy-efficiency, transport policy and road safety, alternative fuels and the environment.

Within CIVITAS I (2002-2006) there were 19 cities clustered in 4 demonstration projects, within CIVITAS II (2005-2009) 17 cities in 4 demonstration projects, whilst within CIVITAS PLUS (2008-2012) 25 cities in 5 demonstration projects are taking part. These demonstration cities all over Europe are funded by the European Commission.

### Objectives:

- to promote and implement sustainable, clean and (energy) efficient urban transport measures
- to implement integrated packages of technology and policy measures in the field of energy and transport in 8 categories of measures
- to build up critical mass and markets for innovation

### Horizontal projects support the CIVITAS demonstration projects & cities by :

- Cross-site evaluation and Europe wide dissemination in co-operation with the demonstration projects
- The organisation of the annual meeting of CIVITAS Forum members
- Providing the Secretariat for the Political Advisory Committee (PAC)
- Development of policy recommendations for a long-term multiplier effect of CIVITAS

### Key elements of CIVITAS

- CIVITAS is co-ordinated by cities: it is a programme “of cities for cities”
- Cities are in the heart of local public private partnerships
- Political commitment is a basic requirement
- Cities are living ‘Laboratories’ for learning and evaluating

## 1.2 Background ARCHIMEDES

ARCHIMEDES is an integrating project, bringing together 6 European cities to address problems and opportunities for creating environmentally sustainable, safe and energy efficient transport systems in medium sized urban areas.

The objective of ARCHIMEDES is to introduce innovative, integrated and ambitious strategies for clean, energy-efficient, sustainable urban transport to achieve significant impacts in the policy fields of energy, transport, and environmental sustainability. An ambitious blend of policy tools and measures will increase energy-efficiency in transport, provide safer and more convenient travel for all, using a higher share of clean engine technology and fuels, resulting in an enhanced urban environment (including reduced noise and air pollution). Visible and measurable impacts will result from significantly sized measures in specific innovation areas. Demonstrations of innovative transport technologies, policy measures and partnership working, combined with targeted research, will verify the best frameworks, processes and packaging required to successfully transfer the strategies to other cities.

### 1.3 Participant Cities

The ARCHIMEDES project focuses on activities in specific innovation areas of each city, known as the ARCHIMEDES corridor or zone (depending on shape and geography). These innovation areas extend to the peri-urban fringe and the administrative boundaries of regional authorities and neighbouring administrations.

The two Learning cities, to which experience and best-practice will be transferred, are Monza (Italy) and Ústí nad Labem (Czech Republic). The strategy for the project is to ensure that the tools and measures developed have the widest application throughout Europe, tested via the Learning Cities' activities and interaction with the Lead City partners.

#### 1.3.1 Leading City Innovation Areas

The four Leading cities in the ARCHIMEDES project are:

- Aalborg (Denmark);
- Brighton & Hove (UK);
- Donostia-San Sebastián (Spain); and
- Iasi (Romania).

Together the Lead Cities in ARCHIMEDES cover different geographic parts of Europe. They have the full support of the relevant political representatives for the project, and are well able to implement the innovative range of demonstration activities.

The Lead Cities are joined in their local projects by a small number of key partners that show a high level of commitment to the project objectives of energy-efficient urban transportation. In all cases the public transport company features as a partner in the proposed project.

## 2. Brighton & Hove

Brighton & Hove is an historic city, in the south-east of England, known internationally for its abundant Regency and Victorian architecture. It is also a seaside tourist destination, with over 11km of seafront attracting eight million visitors a year.

In addition, it is a leading European Conference destination; home to two leading universities, a major regional shopping centre, and home to some of the area's major employers. All of this, especially when set against the background of continuing economic growth, major developments across the city and a growing population, has led the city council to adopt a vision for the city as a place with a co-ordinated transport system that balances the needs of all users and minimises damage to the environment.

The sustainable transport strategy that will help deliver this vision has been developed within the framework of a Local Transport Plan, following national UK guidelines. The ARCHIMEDES measures also support the vision, which enables the city to propose innovative tools and approaches to increase the energy-efficiency and reduce the environmental impact of urban transport.

### 3. Background to the Deliverable

Brighton & Hove developed and launched a travel information website with a journey planner in 2006. [www.journeyon.co.uk](http://www.journeyon.co.uk).

The site includes information on best routes, required time for the trip, calories burnt (by transport mode), topography and more. The website also introduces personal walking and cycling routes and calculators which citizens can use to keep a record of their travel habits and observe benefits to their health and well-being.

The main task of this project has been to make the site available on mobile phones so that people can actually access real time bus and train information and journey planning whilst there're on the move.

Brighton & Hove hopes that the travel information website will make information about alternative modes of transport more easily accessible and hence increase the share of sustainable modes.

The second task of this project has been to install two interactive bicycle counters in the city that display the number of cyclists passing. The hope is that this will promote cycling further and enable the city to demonstrate that cycling levels are increasing. Implementation of the bicycle counters is documented in ARCHIMEDES Deliverable T71.2.

#### 3.1 Summary Description of the Task

##### **Task 8.4: Personalised Travel Information Website.**

The main task of this project has been to make the website available on mobile phones so that people can actually access real time bus and train information and journey planning whilst they are on the move.

The mobile version of the website includes a journey planner which compares mode of travel, calories burned, distance, time, costs and carbon emissions for all travel modes (walk, cycle, public transport, and car) for each trip that is requested by the user.

The new elements of the website enable the website and the journey planner to be accessed on hand-held devices whilst people are on the move, and offer users a choice of functions in terms of either journey planning, real time bus and/or real time train information.

The measure has been implemented as outlined in the following sections.

## 4. Personalised Travel Information Website for Brighton & Hove

### 4.1 Description of the Work Done

This section provides an overview of all work completed within this deliverable:

- Brighton & Hove City Council commissioned Atkins Limited to provide an evaluation of options for enhancements to the travel and transport information website, [journeyon.co.uk](http://journeyon.co.uk). The report was completed in September 2010<sup>1</sup>.
- The benefits and risks of each option were considered, along with their suitability for implementation using CIVITAS funding, which is aimed at improving transport information available through mobile web devices, such as smart phones, for example. After consideration of those options, three recommendations were identified.
  1. Establish a social media presence using Facebook and /or Twitter.
  2. Create a device-adapted version of the JourneyOn site to deliver a simplified version of the pages, more suited to the limitations of mobile web-devices and focusing on providing functions most beneficial to users on the go, specifically, real-time bus information and journey planning,
  3. In the real-time bus info iphone application, use the GPS functionality available to offer directions from the user's current location to their selected bus stop.

It was estimated that all of these changes could be implemented within a timescale of three to six months.

### 4.2 Summary of Activities Undertaken

The measure was implemented in the following stages:

**Stage 1: Develop specification for Web & WAP services:** 15 September 2008 – 15 December 2010.

#### 1.1 Scoping / procurement / corporate branding

This involved the commissioning of a scoping exercise of potential travel and transport options for mobile sites across the UK. This technical review<sup>2</sup> focussed on other websites which offer similar functionality to [www.journeyon.co.uk](http://www.journeyon.co.uk) and in particular those which had already established mobile versions. The recommendations from this report informed Measure direction. In particular the recommendations suggested users would benefit from real time bus info, with GPS functionality and mobile journey planning which included the site's functionality of calories burned, time, cost, and carbon emissions. The full report is available on request.

<sup>1</sup> BHCC Traffic and Transport Website Review (v3), Atkins, 9 September 2010

<sup>2</sup> BHCC Traffic and Transport Website Review (v3), Atkins, 9 September 2010



The council's ICT team have been brought in to advise on the Measure, in line with the council's ICT procurement guidelines and to ensure the site is delivered with technical specifications and user accessibility. The city council's communications team were also consulted in order to provide the appropriate branding guidelines for mobile web.

### *1.2 Development of technical brief:*

Using the technical review cited above, local developers were offered a brief along with the current site developer. With the advice of ICT team, two suppliers were appointed to share responsibility for delivery of the mobile site. The suppliers provided a joint proposal, but with separate, and confidential budgets. Supplier one (Bite Studio) was appointed for design and user interface and Supplier 2 (SDG) to deliver the technical integration of the design proposals. The Measure was delivered as a joint venture, with each company working to their own terms and conditions. See figure 1 which indicates a draft proposal from Bite Studio.



Figure 1.2.1 – visual concept **mock up** for mobile web Measure



### 1.3 Wireframes development

Each stage of the mobile interface requires a ‘wireframe’ which provides the user with a mock up of the aspects of the site to be made mobile (journey planning, real time bus and real time train information). Supplier one (Bite Studio) produced and revised 9 versions before sign off was agreed. The detail of functionality for the site was explored via these wireframes, which formed the basis of user testing. User testing took place with 10 users.

Ten Brighton & Hove members of staff who specialise in the public transport, communication, marketing, real-time bus information, cycling / walking were chosen to test the wireframes.

Results of this informed further amendments to wireframes. Throughout this process Supplier two (SDG) were consulted to ensure interface matched ‘back end’ functionality. Sample wireframes are pictured below in figures1, 2 and 3.

Figure 2: Real time train information wireframe



Figure 3.2: Journey planning wireframe

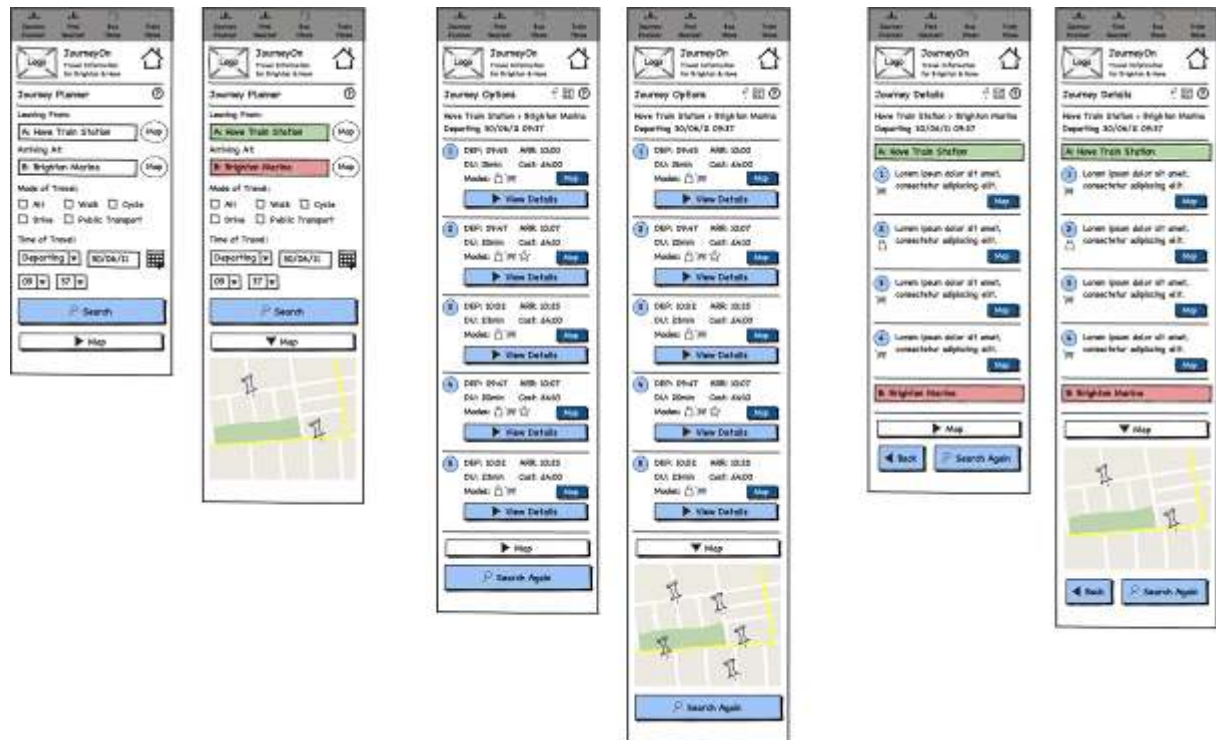
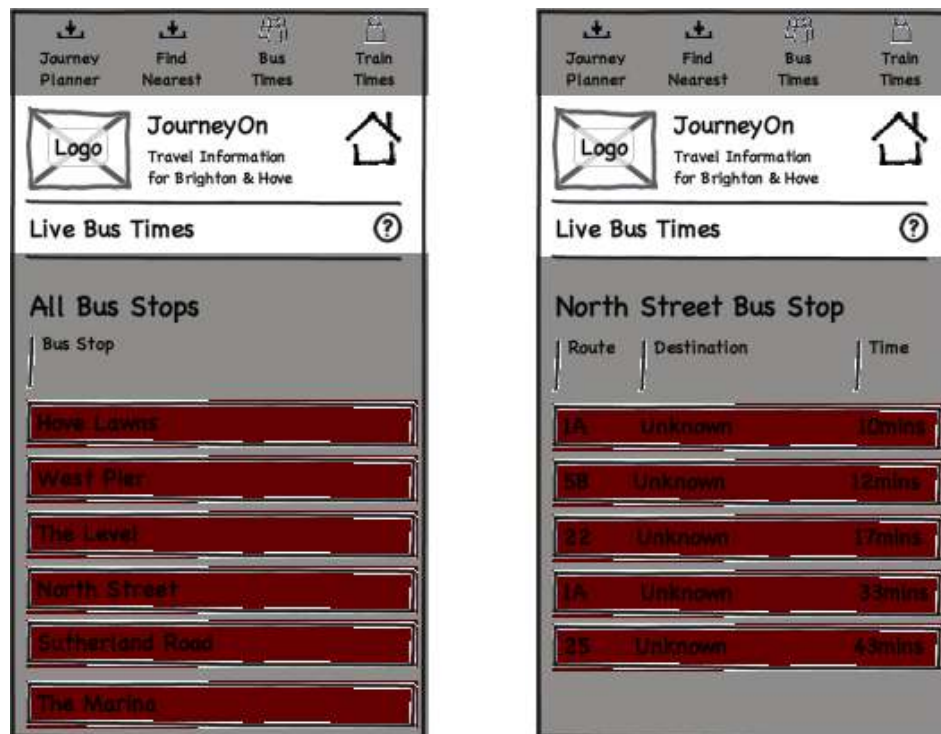


Figure 4: Real time bus wireframe



User testing

Ninety five users across the city council were given a ‘virtual’ mock up of the site to test, and asked to perform functions as if they were using the mobile site on the move. A request for volunteers to test JourneyOn mobile was put on the Brighton & Hove City Council Intranet ‘The Wave’ and ninety five members of staff replied offering their services. Responses from this informed the layout and final designs generated by Bite Studio (Supplier 1) see below. The wireframes seen above were then transformed into graphics for use on mobile devices which included the corporate branding employed by the city council.

1.5 Design implementation

Figure 5: Design images of the mobile options home screen, journey planner and real time bus information.





The mobile phone interface (the look and feel of the on-screen menu system, how it works, its colour scheme, how it responds to button presses, for example) was designed by Bite Studio on behalf of Brighton & Hove City Council.

### 4.3 Main Outcomes (from 12 December 2011)

Since the project began the following outcomes have been achieved:

- JourneyOn mobile was launched on 12 December 2011.
- The mobile version will be launched via the JourneyOn website itself, Brighton & Hove City Council website and via social networking such as Facebook, Twitter and yammer (council in-house social media site).
- The site underwent a recent design refresh, which ties in with the mobile Measure – thereby raising the profile of the site and the mobile offer to new users across the city.
- The social media aspects of the mobile site have been incorporated into the new design of the site.
- When the site launched on 12.12.2011, the Measure leader worked with the council's press and marketing teams and alongside colleagues in Transport to promote the site and the mobile Measure to as many users as possible. The site across the city via the council's corporate intranet which reaches 8,000 staff; Council newsletter 'the Channel'; City News (free council magazine which goes out to 125,000 households quarterly) and other media outlets including working with Health partners to promote mobile site in doctors surgeries and hospitals as appropriate.
- 12.12.2011: Brighton & Hove City Council launched a beta version which is an approach commonly used by companies including Microsoft when new software is launched onto the market for the first time.
- 12.12.2011 – 12.02.2012 Brighton & Hove City Council are monitoring JourneyOn mobile (beta) to see if/where improvements can be made before the site goes live in Spring 2012.
- 12.12.2011: To celebrate the launch, JourneyOn is giving away a new smartphone. To register for a chance to win people were asked to visit: [www.journeyon.co.uk](http://www.journeyon.co.uk). The competition closing date was 6 January 2012.
- 06.02.2011: 357 people entered the competition. A winner will be picked and given the prize of a Smartphone w/c 16 January 2012.
- 12.12.2011 – 12.04.2011: The site is being monitored and evaluated.

### 4.4 Problems Identified

The main problems that caused delay to this measure were not technical, but related to changes to processes within Brighton and Hove Council and the need to adjust the timing and scope of the measure in light of restrictions on the match funding available for the measure within Brighton and Hove Council's budgets.

The procedural issue referred to above relates to an internal review of ICT policy of web-based material that was conducted at Brighton and Hove Council which coincided with the start of the project. This meant that the process for obtaining approval for an ICT based project such as this became much longer than had been envisaged.

## 4.5 Mitigating Activities

- 12.12.11 – 12.02.12: Feedback from JourneyOn mobile users is currently being collated, where any reoccurring problems will be identified and looked into. This is part of the project evaluation.
- At the time of writing no issues have been identified so far

## 4.6 Future Plans

Once BHCC has monitored JourneyOn mobile (beta) and made any improvements it can to rectify any identified problems, the 'Beta' logo will be removed and the mobile site will go live. It is hoped JourneyOn mobile will go live in Spring 2012.