# **CABINET**

# Agenda Item 221

**Brighton & Hove City Council** 

Subject: Development of Transport Model

Date of Meeting: 7 April 2011

Report of: Strategic Director, Place

Contact Officer: Name: Tom Campbell Tel: 29-3328

E-mail: tom.campbell@brighton-hove.gov.uk

Key Decision: No Wards Affected: All

#### FOR GENERAL RELEASE

#### 1. SUMMARY AND POLICY CONTEXT:

1.1 As one of the Council Leader's '10 in '2010' priorities set in January 2010, significant work has been undertaken during 2010/11 in developing a new computer-based transport model for the city. The model will provide a consistent and accurate basis on which to assess the potential effects of changes to road layouts, changes in policy approaches and the wider implications of major transport projects or development proposals. Outputs from the model will help inform and assist decision-making on key issues by forecasting the likely effects of change, both now and in the future, by indicating how travel patterns could change and how the transport network as a whole will operate.

#### 2. RECOMMENDATIONS:

2.1 That Cabinet notes the progress made in developing the new transport model for the city

# 3. RELEVANT BACKGROUND INFORMATION/CHRONOLOGY OF KEY EVENTS:

- 3.1 The development of a new transport model for the city has been undertaken to help achieve a number of benefits for the city. These include:
  - Using the survey information that has been collected with other data to create the model and help the council better understand travel patterns in the city.
  - Testing the potential effects of transport schemes and measures, such as junction improvements or road closures for special events, in advance of their implementation.
  - Providing a consistent basis for the council and developers to test the potential impacts of new developments or policies to ensure that the transport effects are understood and minimised, when required. For example, the council can make use of the model to assess proposed major projects, such as the new Brighton Centre. Developers would be required to pay for the costs of appropriate changes to the model to undertake any tests of their own proposals that the council may require. These changes would be agreed with the council. This will also provide a potential cost saving to the council as

- any analysis of a developer's model that may be required to assess its accuracy, would not be necessary.
- Providing a robust assessment tool will also help the council to bid for external funding and secure further investment opportunities for the city.
- 3.2 A transport model consists of a number of complex, computer programs and data input files that can enable forecasts of likely changes in human behaviour and therefore travel patterns. These outputs are primarily based on the cost and time of using different forms of transport and, for example, will indicate if drivers would take an alternative route if they encountered queues and delays to their journey, or if an alternative form of transport would provide a quicker and/or cheaper journey.
- 3.3 The input data for the model come from a number of standard sources, such as census-based statistics, as well as more local data and surveys from across the city in order to ensure the model is accurate and robust. These data have helped to create a number of the different elements, that when combined, enable the model to produce a number of different outputs for the 'base year' of 2010. These elements include:
  - The highway network with junction layouts;
  - The public transport network, including bus services;
  - Zones of existing development and for future development; and
  - Trip matrices with origins and destinations of journeys.
- 3.4 Following a review of the council's modelling requirements, the transport consultancy JMP were commissioned in June 2010 to develop the new model. The 'construction' of the model is now nearing completion. It will then need to be calibrated to check it will provide accurate outputs, and then validated to ensure it fulfils Department for Transport guidelines for such models. The work required to finalise the initial 2010 'base year' model should be fully completed in April 2011 and the model will be available to be used in May 2011.

#### 4. CONSULTATION

- 4.1 There has been no formal public consultation carried out regarding the transport model. However, a significant number of surveys were undertaken to ensure that adequate and robust data and statistics were available to use as input to the computer programs which form transport model. Some involved collecting data from residents. These surveys included:
  - Roadside Interviews
  - Household Surveys
  - Traffic and cycle counts
  - Public transport counts
  - Car Park surveys
  - Journey Time surveys.

#### 5. FINANCIAL & OTHER IMPLICATIONS:

### **Financial Implications:**

5.1 As part of the budget setting process for 2010/11, £500,000 was identified to provide a new computer-based transport model for the city, enabling a range of potential improvements to the city's transport infrastructure to be assessed.

Finance Officer Consulted: Karen Brookshaw Date: 16/03/11

#### Legal Implications:

5.2 There are no legal implications associated with the development of the transport model.

Lawyer Consulted: Elizabeth Culbert Date:21/03/11

## **Equalities Implications:**

5.3 There are no equalities implications associated with the development of the transport model.

## **Sustainability Implications:**

5.4 The model will provide the opportunity to assess the contribution of different transport measures or land-use changes to the council's sustainability priorities.

#### Crime & Disorder Implications:

5.5 There are no crime and disorder implications associated with the development of the transport model.

#### Risk & Opportunity Management Implications:

5.6 There are no risk and opportunity management implications associated with the development of the transport model. .

#### Corporate / Citywide Implications:

5.7 The model will be used to assess the citywide transport implications of proposed transport measures and schemes, changes in transport policy and new developments.

# 6. EVALUATION OF ANY ALTERNATIVE OPTION(S):

### 6.1 Do Nothing

The transport model is considered essential to allow assessment of potential transport schemes, proposed developments, and land use strategies. Without a model, the council would have a less robust and consistent basis for decision-making and less understanding of the likely implications of making changes to the transport network, or of increases in movement and activity.

# 6.2 <u>Develop an alternative type of model</u>

The specification of the model has been designed to comply with government guidance, thus allowing it to be used to support any future major transport scheme business case, especially if the scheme required government funding.

## 7. REASONS FOR REPORT RECOMMENDATIONS

7.1 To notify the Cabinet of the progress that has been made with the development of the model during 2010/11.

# **SUPPORTING DOCUMENTATION**

PRO 1 TO 1	
None	
Documents in Members' Rooms	
None	
Background Documents	

None

Appendices: