

Appendix I

Evaluation Plan

Post Implementation Scheme Evaluation

1.1 Introduction

It is proposed to produce a scheme monitoring report to show both the positive and negative impacts of the scheme. The aim of the monitoring will be to assess the performance of the scheme in achieving the original objectives. The monitoring methods have been determined based on these objectives and are a mix of existing proxy indicators and new indicators using bespoke surveys.

The aim of WP1 is:

“To enable the sustainable development of Weston–super–Mare”

The key to realising this goal is to readdress the aforementioned imbalance between jobs and residents, which results in high levels of out-commuting, mostly by car via the M5 motorway. As will be explained in the next section, one of the barriers to job creation in Weston is the poor perception of the town in the eyes of business, which includes its transport problems. Conversely, the attractiveness of Weston as a place to live remains; evidenced by the strong market for homes.

Hence, WP1’s objective is to support the employment-led development of the town by selective improvement of the town’s transport network to:

- Improve the highway access between the M5 motorway and Weston to reduce congestion;
- Relieve congestion on the A370 corridor in Weston;
- Provide improvements to local access, safety, public transport, walking and cycling; and
- Improve access between regeneration areas and other residential areas of the town.

1.2 Aims of evaluation plan

The Evaluation Plan presents the key stages and timescales covering a range of evaluation processes. The Evaluation Plan seeks to ensure that:

- Scheme objectives can be expressed as outputs and outcomes;
- Performance indicators reflect the scheme objectives and wider objectives;
- Baseline outcome and output data are available or a timescale for their collection is identified;
- Ongoing data collection and analysis is undertaken efficiently, in a timely way and in sufficient detail to inform the implementation programme;
- Assessment of risks to scheme implementation is continued and informs the implementation programme;

- Analysis includes consideration of how and why activities were carried out or if they could be done differently;
- Evaluation includes assessment of policy effectiveness, and considers the likely conditions had the scheme not been implemented; and
- Stakeholder and public opinion is understood, in terms of the process and the scheme itself, and informs ongoing implementation.

1.3 Core evaluation objectives

The core evaluation objectives will be to:

- Measure the improvement in highway access between the M5 motorway and Weston;
- Measure the change in congestion on the A370 corridor in Weston;
- Measure change in local access, safety, public transport, walking and cycling;
- Measure change in the level of access to the town centre from existing and new residential areas;
- Assess whether the wider benefits contributed toward the employment led regeneration of the town; and
- Measure negative impacts.

1.4 Measures and indicators

The measures and indicators will be finalised following reactivation of Programme Entry. In view of the need to ensure all necessary 'before' surveys can be completed in time however, it is useful to consider what might be needed from this stage. Where existing North Somerset indicators are used, it is useful to identify a link to this scheme to inform future reviews of the council's annual monitoring programme to ensure their continued value is clear. Where new monitoring is required, this information is needed to inform the costs.

The following table shows the type of measures and indicators that could be used to assess each of the scheme objectives.

Table 1 Summary of Impacts and Monitoring Proposals

Impacts	Indicator	Monitoring	
<i>Objective 1: Improving the highway access between the M5 motorway and Weston</i>		<i>Data Source</i>	<i>Baseline Data</i>
Increased capacity of Junction 21	Measure utilisation as a ratio with junction capacity.	Monitor traffic movements at peak times with traffic counts and video surveying	Daily traffic volumes feeding to and from the A370 western arm of the junction increased year on year during the period 1996–2007, with annualised growth of approximately 3%. A reduction of 5% has been observed in the period 2007–10, this most likely being attributed to a combination of economic recession and, to a lesser extent, recent steep rises in fuel costs.
<i>Review Period</i>		Annually	
<i>Reporting Process</i>		Annual Traffic Surveys Report	
<i>Risks to achieving objective</i>		<ul style="list-style-type: none"> • General increase in traffic • Unforeseen network circumstances (e.g. road works) skew surveys results 	
<i>Mitigation of risks</i>		<ul style="list-style-type: none"> • Network Management will assist in reducing impact of highway maintenance and utility works • Plan traffic surveys outside of planned engineering works 	

Impacts	Indicator	Monitoring	
Objective 2: Relieving congestion on the A370 corridor in Weston		Data Source	Baseline Data
Improved journey times on A370 corridor	Measure change in per vehicle journey times	Extract average journey times on A370 corridor from Strat-e-gis	To be extracted by Sept 2011
Reduced Q-lengths/durations	Measure change in observed Q - duration	Permanent ATC data used to identify peak queuing where queues are defined as the period when traffic is 20% or more below free flow speed	To be obtained for all relevant ATC locations at a 2010/11 Base of average daily time queuing. I.e. as at - A370 Flowerdown Bridge -where average daily queue duration for 2010/11 is 0.42hrs
Review Period		Annual	
Reporting Process		Annual Review	
Risks to achieving objective		<ul style="list-style-type: none"> • General increase in traffic levels • Settling down period 	
Mitigation of risks		<ul style="list-style-type: none"> • Review will take account of any increase in traffic 	
Objective 3: Providing improvements to local access, safety, public transport, walking and cycling		Data Source	Baseline Data
Greater cycle use	Measure change across monitoring sites in Weston	Permanent Cycle ATC data from sites in Weston	Using a 2010/11 baseline the AADT of cycle trips in WsM is 3315.

Impacts	Indicator	Monitoring	
Improved reliability of buses	Measure change in bus punctuality for services using the improved infrastructure	<p>LTP Bus Punctuality indicator surveys measuring two network-wide indicators. These are the percentage of buses starting journeys on time as well as the percentage of buses on time at intermediate timing points.</p> <p>Current data collection framework facilities the ability to present corridor-specific summaries at a later date</p> <p>Possibility of using RTI data in future?</p>	<p>In 2009/10 77% of buses in North Somerset started journeys on time and 61.8% of buses were on time at intermediate timing points.</p> <p>Punctuality for buses servicing Worle Station to be monitored post scheme implementation</p>
Increased Rail Patronage at Worle Station	Measure change in rail patronage	LTP indicator of Rail Patronage Growth using Annual one day November Rail Survey	Total passenger count for 2010 was 1269 boarders & alighters
Change in Mode Split of access to Worle station?	Measure change in mode split	Bi-annual November Rail Survey questionnaire distributed to all boarding passengers	Worle station mode split data to be extracted for baseline of 2010 by Sept 2011

Impacts	Indicator	Monitoring	
Reduction in accidents	Measure change in recorded all injury accidents	Obtain police accident data	Data to be provided specific to areas of WsM effected by schemes closer to implementation
Improved bus access to Worle Station	Measure change in number of households within easy access of Worle Station by bus	Use Accession	To be extracted – Date TBC in Autumn 2011
Improved walking infrastructure	<p>Measure number of pedestrians using new walking infrastructure.</p> <p>Qualitative appraisal of walking environment in areas where walking infrastructure improvements proposed</p>	Manual counts	<p>To be obtained post scheme implementation</p> <p>Appraisal of environment, safety, accessibility and integration to be conducted – Date TBC</p>
<i>Review Period</i>		Annual	
<i>Reporting Process</i>		Post construction Review	
<i>Risks to achieving objective</i>		<ul style="list-style-type: none"> • General increase in traffic levels effect pedestrian / vehicle conflict • Settling down period • Parking Infringements 	
<i>Mitigation of risks</i>		<ul style="list-style-type: none"> • Monitor use of pedestrian facilities • Monitoring of traffic signal timings • Prioritisation of signals to allow buses to keep to timetables • Parking enforcement 	

Impacts	Indicator	Monitoring	
<i>Objective 4: Improving access between regeneration areas at Weston Airfield and Locking Parklands area, and residential areas in the town, including areas of deprivation and high unemployment</i>		<i>Data Source</i>	<i>Baseline Data</i>
<p>Improved access between regeneration areas and town centre</p> <p>Improved access between other residential areas in the town and the town centre</p>	<p>Measured change in number of households within easy access of the town centre by public transport</p>	<p>Use Accession</p>	<p>To be extracted – Date TBC in Autumn 2011</p>
<i>Review Period</i>		Annual	
<i>Reporting Process</i>		Post Construction Review	
<i>Risks to achieving objective</i>		<ul style="list-style-type: none"> • Congestion may mean that in real traffic conditions (as opposed to accession modelling) predicted journey times are unachievable 	
<i>Mitigation of risks</i>		<ul style="list-style-type: none"> • Scheme design aims to protect buses from increase in congestion 	
<i>Wider Objective 5: Contribute to employment led regeneration of Weston</i>		<i>Data Source</i>	<i>Baseline Data</i>
<p>Increased number of jobs in Weston</p>	<p>Record number of people employed by businesses in W-s-M</p>	<p>Data obtained from MINT UK (mined by Economic Dev team), before and after Weston Package</p>	<p>Asked Economy and Development for stats</p>

Impacts		Indicator	Monitoring	
Increased number or size of businesses in Weston		Record number of new businesses that setup in W-s-M each year Record the annual change in the area of floorspace allocated for employment purposes	Data obtained for Research & Monitoring team	Asked Economy and Development for stats In 2009/10 the amount of Ha completed for employment development in WsM was 0.3Ha and the total gross floorspace completed was 2581 sqm.
		Local Economic Assessment (LEA) is a statutory review that will be completed annually in North Somerset from 2010/11	Report conducted by Economic Development team	Draft report to be made available in August 2011
Review Period			Annual	
Reporting Process			Business survey/ LEA	
Risks to achieving objective			<ul style="list-style-type: none"> • Failure to attract new businesses • Decrease in floor space allocated for employment purposes 	
Mitigation of risks			<ul style="list-style-type: none"> • Improved transport infrastructure will encourage new businesses to the area 	
Negative Impacts: Post scheme implementation			Data Source	Baseline Data
Increased accidents if traffic speeds increased	Measure change in number of all injury accidents		Obtain police accident data	Detailed above in reduction in accidents objective

Impacts	Indicator	Monitoring	
	Measure change in traffic speeds	Use permanent ATC data from sites along the A370 corridor	AADT vehicle speeds for all ATC sites on A370 corridor available
Displacement of congestion downstream	Reflected in journey time changes elsewhere on the network	Journey time surveys on other key routes	To be extracted from Strat-e-gis by Sept 2011
Release of latent demand for travel	Annual traffic growth	Monitor selected ATCs across the town to produce traffic growth of the WsM cordon	% growth of vehicle movements in WsM cordon using a 2005/6 baseline was -3% in 2010/11

1.5 Management and reporting

The management and reporting for the evaluation process will be coordinated by the Project Director. The timescales for this will be set out following reactivation of Programme Entry.

1.6 Costs

The costs to collect the data for this Scheme Monitoring Report are as follows:

- Pre-scheme report 2011/12 - **£9,500**
- Post-scheme report 2013/14 - **£9,800**

1.7 Summary

The evaluation plan has identified indicators and data sources so that the Council can successfully evaluate the success of the project with regard to the project objectives.

Annexe 1

Weston Package Evaluation Plan - Monitoring Costs

	Impacts	Indicator	Monitoring	Monitoring Costs		
				Before Monitoring based on 2011/12 Costs		Post monitoring with inflation to 2013/14
				Working	Cost	Cost
Objective 1: Improving the highway access between the M5 motorway and the A370 corridor in Weston	Increased capacity of J21	Measure change in jct capacity	Video surveying of traffic movements at peak times	Based on £150 per video survey + £25 per extra unit	£225.00	£234.00
	Improved journey times on A370 corridor	Measure change in per vehicle journey times	Extract average journey times on A370 corridor from Strat-e-gis	Extraction of a new route is £105 + £35 p/h for additional nodes. Based on average of 4hrs time	£245.00	£254.80
Objective 2: Relieving congestion on the A370 corridor in Weston	Reduce Q lengths / duration	Measure change in observed queue duration	Permanent ATC data i.d peak queuing	4 weeks ATC speed & class data is £144 + £87 per additional sites. Based on 6 sites	£579.00	£602.16
	Greater cycle use	Measure change across monitoring sites in WsM	Permanent Cycle ATC data from sites in Weston	4 weeks Cycle ATC data is £96 + £57 per additional site. Based on 4 sites	£267.00	£277.68
Objective 3: Providing improvements to local access, safety, public transport, walking and cycling	Improved reliability of buses	Measure change of bus punctuality for services uses improved infrastructure	LTP / BQP Bus Punctuality surveys	Based on punctuality at 13 timing points using video surveys	£3,900.00	£4,056.00
	Increased rail patronage at Worle station	Measure change in rail patronage	LTP Rail patronage indicator	Based on average annual cost for provision of enumerators, mileage and administration	£1,000.00	£1,040.00
	Change in mode split of access to Worle station	Measure change in mode split	Bi-annual November rail questionnaire	Based on average annual cost for provision of extra enumerators, mileage, printing costs and administration on top of usual Nov rail survey costs	£500.00	£520.00
	Reduction in accidents	Measure change in recorded all injury accidents	Obtain police accident data	Based on officer time taken to extract data	FOC	FOC
	Improved bus access to Worle station	Measure change in number of households with easy access	Accession modelling	Based on officer time at £23.91 p/h assuming 24hrs of work	£573.84	£573.84
		Measure change in number of pedestrians	Video surveying of pedestrian movements	Based on £150 per video survey + £25 per extra unit.	£150.00	£150.00
	Improved walking infrastructure	Qualitative appraisal of walking environment	Conduct appraisal	Appraisal of walking environment will be included in appraisal of the whole scheme	FOC	FOC
Objective 4: Improving access between regeneration areas and residential areas in the town	Improved access between regeneration areas and town centre	Measure change in number of households with easy access to the town centre by public transport	Accession modelling	Based on officer time at xx p/h assuming 24hrs of work	£573.84	£596.79
	Improved access between other residential areas in the town and the town centre			Based on officer time at xx p/h assuming 24hrs of work	£573.84	£596.79
Wider Objective 5: Contribute to employment led regeneration of Weston	Increased number of jobs in Weston	Record the number of people employed by businesses in Weston	Data obtained from MINT UK	Based on officer time taken to extract data	FOC	FOC
		Record the number of new business start-ups	Data obtained from Econ Dev team	Based on officer time taken to extract data	FOC	FOC
	Increased number or size of business in Weston	Record change of floorspace allocated for employment	Data obtained from Econ Dev team	Based on officer time taken to extract data	FOC	FOC
Negative Impacts: Post scheme implementation	Increased accidents if traffic speeds increase	Measure change in number of all injury accidents	Data obtained from police	Based on officer time taken to extract data	FOC	FOC
	Displacement of congestion downstream	Changes in journey times elsewhere on network	To be extracted from Strat-e-Gis	Extraction of a new route is £105 + £35 p/h for additional nodes. Based on average of 4hrs time	£245.00	£254.80
	Release of latent demand for travel	Measure annual traffic growth	Monitor selected ATCs	4 weeks volumetric ATC data is £96 + £57 per additional site. Based on 10 sites or 3 cordons	£609.00	£633.36
					£9,441.52	£9,790.22