

Proposed Details			
Name and address of authority or organisation promoting the proposal		Aberdeen City Council and Aberdeenshire Council	
Also provide name of any subsidiary organisations also involved in promoting the proposal		NESTRANS	
Proposal Name	Modern Transport System (MTS) for the North East of Scotland	Name of Planner	Mr Donald Murdoch Corporate Director City Development Services Aberdeen City Council Mr Iain Gabriel Director of Transportation & Infrastructure Aberdeenshire Council
Proposal Description	<p>To deliver a Modern Transport System for the North East of Scotland which enables a more economically competitive, sustainable and socially inclusive society.</p> <p>The proposal is an integrated package of transport measures comprising elements of roads, public transport, rail, both passenger and freight, and shorter distance journey measures by cycling and on foot. Improvements to air and sea transport are also included.</p> <p>The Scottish Executive had agreed that a part 1 Appraisal Summary Table (AST), in conjunction with the findings of previous studies, was adequate to justify the components of the MTS and a <u>full</u> part 2 AST is unnecessary. However two strategy options have been assessed using the Aberdeen Sub Area Model (ASAM) to confirm the optimum components of the MTS and this STAG assessment covers the development and analysis of those options. It is therefore a partial part 2 STAG assessment.</p>	Estimated costs <ul style="list-style-type: none"> • Capital (undiscounted) • Annual 	<p>£300m</p> <p>To be determined through appropriate scheme specific STAG assessments.</p>
Funding sought From (if applicable)	Scottish Executive	Amount of application (if applicable)	To be agreed through assessment of individual project categories.

Proposal background	
Planning objectives	The objectives for the MTS were developed through consideration of established European, UK, Scottish, Regional and Local transport related policy documents. They were grouped under the 5 Government criteria headings of Environment, Safety, Economy, Integration and Accessibility and an additional 2 overarching principles for the MTS of Acceptability/Participation and Deliverability. The derivation and final list of MTS objectives are given in chapter 2 and Appendix A of the MTS STAG appraisal.
Performance Against planning Objectives	The integrated package of measures performs best against the stated objectives.
Alternatives to proposal considered	12 options developed from combinations of 16 categories of proposals. Ranged from 'do minimum' through to 'all projects' options including public transport based and roads based combinations. The 16 main categories of schemes investigated for inclusion within the MTS were: Existing Infrastructure Maintenance; Western Peripheral Route; Strategic Roads; Urban Roads; Car Park Construction; Bus Priorities; Park & Ride; Cycling; Pedestrian Priorities; Crossrail; Mass Transit; Strategic Rail; Harbours; Airports; Freight and Public Transport Enhancements. The categories shown in bold have been identified as the optimum components for the MTS. Further details on the various options are contained within chapter 4 and Appendix D of the MTS Stag Appraisal. Alternative proposals were also considered in previous studies, namely CRU 'Sustainable Transport Study for Aberdeen' and Halcrow Fox 'Delivery of an Integrated Transport Strategy for North East Scotland' reports. Both studies concluded that the proposed integrated strategy was the preferred option. The final two options tested on ASAM provided a test with and without the Western Peripheral Route.
Comment on performance of alternatives	The integrated transport proposals and a public transport proposal were assessed as the best at solving problems and meeting objectives. These were assessed on ASAM with the integrated proposals providing greatest Benefit/Cost ratio and value for money as well as providing greatest relief from traffic congestion. A full description of the reasoning behind the decision to either progress or eliminate each option is given in Appendix G of the MTS Stag Appraisal.
Rationale for selection of proposal	The integrated package containing elements of roads, public transport, rail, both passenger and freight, and shorter distance journey measures, cycling and on foot proved to provide the greatest benefit across the full range of objectives. A full description of the rationale for the selection process is given in Appendix G of the MTS Stag Appraisal.

Spatial And social information

Area context:
General

Aberdeen and Aberdeenshire Local Council areas. The North East comprises the City of Aberdeen and Aberdeenshire. Aberdeenshire is predominantly rural with a population of around 228,000 and relies on primary sector and processing industries. Within the last 25 years, the emergence of the oil and gas industry and the economic development of tourism have broadened Aberdeenshire's economic base, leading to rapid population growth. Aberdeenshire is one of Europe's foremost fish landing areas with Peterhead being Europe's premier white fish landing port and Fraserburgh also a significant fishing centre. Other traditional industries include whisky distilling, paper products, forestry and timber related products. With major natural assets like the Cairngorms, Royal Deeside, extensive coastline and visitor attractions based on Aberdeenshire's heritage, tourism is of growing importance. The City of Aberdeen has a population of approximately 211,000 and is regarded as the Oil and Gas Capital of Europe. Aberdeen, known as the 'Granite City', is home to two universities and acts as the major retail and service centre for the whole of the North East region. Access to Aberdeen is however constrained by the 2 rivers, with the Don to the north and Dee to the south of the City. There are also significant constraints along the Trunk road network. In addition to the poor infrastructure, the public transport options from many of the travel to work areas are at best limited, with many areas having no access to rail.

Economic performance	<p>The North East is generally regarded as one of the most prosperous economies in the UK. The GDP of the North East was £7.7 billion in 1998, a rise of 6% since 1995, which is considerably less than that for Scotland and the UK over the same period, at 11.7% and 19.4% respectively. This is second only to London as the biggest contributor to the wealth of the nation (McKay, 2000). In terms of GDP per head, based on an index where the UK=100, North East Scotland had an indexed GDP per head of 123 in 1998 compared to 135 in 1996, whilst Scotland's as a whole was 97.</p> <p>Key industries with a national importance include oil and gas, fishing, manufacturing and tourism. Many are vulnerable to macro-economic pressures, such as the traditional manufacturing and processing industries, which face the challenge of securing higher added value by extending or upscaling the level of added value processing undertaken in the region.</p> <p>Aberdeen is regarded as the 'Oil Capital' of Europe and has become a centre of excellence in various elements of oil and gas exploration and production. The sector is becoming more globally focussed as operations in the North Sea slowly decline and the necessity to remain in Aberdeen for companies is decreasing. However, recent studies suggest that the decline is not as imminent as previously forecast, and that there is a 30-year supply of oil reserves still present in the North Sea. Extraction will depend on technological developments and investment.</p> <p>The expertise generated by the oil and gas sector is an important feature of recent moves towards diversification in the local economy, particularly technology and knowledge-based. The ability of the North East to continue to attract and invest in these new industries and also to encourage oil and gas related companies to remain in the area is essential to the growth of the economy.</p>
Deprivation/social exclusion	<p>Although there is relatively low unemployment in the North East, there are several communities which suffer from social exclusion. Several of these areas are covered by the Great Northern Partnership and Tillydrone Regeneration Partnership, which aim to address social exclusion issues such as employment, training, housing, environment and health.</p>
Planning and environment	<p>"North East Scotland <i>together</i>" finalised Aberdeen and Aberdeenshire Structure Plan was produced in April 2001 and is aimed at connecting communities to give people access to the services and facilities they need in a healthy and safe environment and thus enabling sustainable development throughout the area. The boundaries of the Aberdeen Green Belt and Strategic Reserve Land are currently under review by both Councils. There is currently a lack of available land for development in the North East. There is a demand for land, which suggests that implementation of a WPR would perhaps allow for the release of current Green Belt areas. An Air Quality Management Area has been declared in and around Aberdeen City Centre. The implementation of the MTS is of key importance in the delivery of the Structure Plan and AQMA aims.</p>
Spatial level of appraisal	<p>The project has been appraised at the level of the NESTRANS area, which is a combination of Aberdeen city and Aberdeenshire; it has also been appraised at the Scotland level. Where relevant, impacts at the level of those SIPS areas comprising the Great Northern Partnership have been indicated.</p>

Implementability appraisal	
Transport land-use integration	The integrated set of transport measures within the MTS are seen as the most appropriate means of achieving the common set of objectives for sustainable development of the North East as contained within the finalised Aberdeen and Aberdeenshire Structure Plan and the policies within both Authorities emerging Local Plans. The contents of these strategy documents undergo extensive consultation. The objectives for the MTS were also defined to ensure the proposals compliance with national transport related policies and advice.
Policy integration	The MTS is in accordance with Aberdeen and Aberdeenshire's Local Transport Strategies. The objectives satisfied by the MTS ensure the proposal also addresses issues relating to the 5 Government assessment criteria of Environment, Safety, Economy, Integration and Accessibility.
Distribution impacts	The appraisal work indicates reduced congestion within AC centre and on key radial routes plus less use of inappropriate routes, which also results in safety benefits and environmental benefits in AQMA and general area wide pollution reduction. Modal shift is limited but increase in bus through P&R. {cycling/walking} are not modelled. Economic impact to business trips, freight transfer due to improved journey times, reliability and access. Facilitating sustainable development
Technical feasibility	The construction of roads related proposals will be straightforward to implement once any necessary land acquisitions and planning permissions are obtained, as this will use standard civil engineering principles. The proposals relating to air, harbours and rail are under the control of private bodies and the timescales will ultimately be in their hands, but NESTANS will fully assist with implementation where possible and none of the proposals include measures that have not been implemented previously elsewhere. The proposed strategy will have had to satisfy the MTS 'Acceptability' and 'Delivery' objectives.
Operational feasibility	No restrictions have been identified at this stage that could affect the operation of any of the schemes within the MTS.
Technical risks	There may be additional cost and timetable implications due to the need to obtain land and planning permission that is associated with several of the schemes within the MTS
Other risks	There is a possibility that elements of MTS could generate substantial objection at the planning stage and any necessary land acquisition processes.
Affordability	Funding would have to, in the main, be from the Scottish Executive. A small amount of potential developer contributions and (partial?) private funding for rail, freight, air and sea proposals along with elements of European development funds may be available.
Financial sustainability	Operating costs such as on road maintenance would have to be included in the Local Authorities maintenance programme budgets. The operating costs of schemes operated by private bodies would have to be borne by them.
Public acceptability	Public consultation on opinion towards the MTS in 1999 (RGU) showed significant public support for the Strategy. The elements of the MTS are also contained within both Authorities various Policy documents, which have undergone extensive consultation.

Objective	Assessment Summary	Supporting Information
Transport: what are the transport impacts of the proposal	Key statistics for the road network from ASAM show the MTS as performing significantly better than a PT based option	Test results from ASAM
Environment: what will be the impacts of the environment		AQMA, Reduced traffic, Noise and Air from Mouchel
Safety: what will be the effects of the proposal on road and pedestrian safety	ASAM shows significant levels of traffic reduction in the urban area and in rural routes currently acting as a WPR. Reduced levels of traffic on unsuitable routes will improve accident rates.	
Economy: what are the impacts in terms of transport economic efficiency	BCR for MTS = 4.7 This is a very good benefit. BCR for PT = 0.03	TEE from ASAM
Economic activity: what will be the impacts in terms of employment	<p>The WPR project will:</p> <ul style="list-style-type: none"> • Contribute strongly towards safeguarding jobs in traditional sectors particularly paper and fish processing • Enable efficiency improvements in the oil production and exploration sector which will enhance Aberdeen's prospects in retaining and expanding employment in this sector • Assist prospects for service businesses including leisure tourism and especially for businesses located north of the city 	<p>Potentially the WPR element of the MTS could safeguard 1000 – 1500 direct jobs plus 500 – 750 indirect and induced jobs in the paper sector and 600 - 800 direct jobs plus 300 - 500 indirect and induced jobs in the fish processing sector; both generates large demand for goods transport which is met largely by locally based businesses. Fish processing prospects are, however, especially uncertain at this time.</p> <p>Oil sector impacts difficult to quantify: sector employs 22,000 on shore plus downstream employment: a 10% uplift could therefore amount to 3,000+ jobs</p> <p>All of these impacts as stated are at the regional level. As the growth / safeguarding of employment in these sectors within the NESTRANS region does not displace employment at the Scotland level and would have further positive impacts within the rest of Scotland, the Scotland level impacts exceed the region level impacts.</p>

	<p>In addition, the other components of the MTS will:</p> <ul style="list-style-type: none"> • Enhance efficiency within the labour market • Assist in addressing social inclusion objectives • Bring about distributional impacts for retail and similar activities, depending in part on planning issues and use of land at WPR junctions <p>Assessment:</p> <ul style="list-style-type: none"> • MTS (overall) +2 • WPR +2 <p>Other MTS elements +1</p>	
<p>Accessibility: what will be the impacts on accessibility</p>	<p>Accessibility will be increased by improved PT and reduced traffic levels.</p>	<p>ASAM output</p>
<p>Transport integration: what will be the impacts in integrating transport modes and services</p>		<p>P&R/WPR, Bus priority, Crossrail/Urban Realm/Towns</p>
<p>Policy integration: what will be the impacts of the proposal against wider government policy</p>		<p>Reduced traffic/Improved health Improved transport/Improved economic prospects</p>

Profile statements				
Opening year (2002)				
Subsequent year (2006)				
Environment				
Mitigation options considered (costs and benefits)				
Sub-objective	Qualitative information	Quantitative information	Magnitude of effect	Significance of impact
Noise and vibration	From Mouchel addendum report to follow	From Mouchel addendum report to follow		
Air quality – overall	From Mouchel addendum report to follow	From Mouchel addendum report to follow		
CO ₂ – global	Reduced traffic levels will generally produce reduced pollutants	See ASAM output		
PM ₁₀ – local	Reduced traffic levels will generally produce reduced pollutants	See ASAM output		
NO ₂ –local	Reduced traffic levels will generally produce reduced pollutants	See ASAM output		
Water quality, drainage and flood defence				
Geology				
Biodiversity				
Visual amenity				
Agricultural and soils				
Cultural Heritage				
Landscape				

Safety			
Sub-objective	Item	Qualitative Information	Quantitative information
Accidents	Change in annual personal injury accidents	ASAM shows significant levels of traffic reduction in the urban area and in rural routes currently acting as a WPR. Reduced levels of traffic on unsuitable routes will improve accident rates.	
	Change in balance of severity		
	Total discounted savings		
Security			
Economy			
Sub-objective	Item	Qualitative Information	Quantitative information
Transport economic efficiency	Travel time savings	See TEE Tables	See TEE Tables
<i>User Benefits</i>	Travel charges	See TEE Tables	See TEE Tables
	Vehicle operating costs	See TEE Tables	See TEE Tables
	Quality benefits	See TEE Tables	See TEE Tables
	Reliability benefits	See TEE Tables	See TEE Tables
<i>Operator benefits</i>	Capital costs	See TEE Tables	See TEE Tables
	Operating & Maintenance costs	See TEE Tables	See TEE Tables
	Revenues	See TEE Tables	See TEE Tables
<i>Government Impacts</i>	Taxation impacts	See TEE Tables	See TEE Tables
	Economic Net Present Value (NPV)	630,309	See TEE Tables

Economy (continued)			
Sub-objective	Item	Qualitative Information	Quantitative information
Economic activity and location impacts	Spatial level of the appraisal		
	GDP/output changes		
	Distributional/spatial Impact – by area		
	Distributional/spatial impacts by social group		
	Regeneration and social Inclusion impacts		
Integration			
Sub-objective	Item	Qualitative Information	Quantitative information
Transport Interchanges	Services & ticketing		
	Infrastructure & Information		
Land-use transport Integration	Transport assessment		
Policy integration	Fit with key policies		
	Social exclusion impacts		

Accessibility			
Sub-objective	Item	Qualitative Information	Quantitative information
Base accessibility	Within a community		
	Community as a whole		
Change in severance	Number of people affected		
	Importance of severance		
	Level of severance		