

Appendix 6

Options Assessment: Multi Criteria Analysis

6 Options Assessment

MCA

The assessment is based on a two-stage approach:

- Initially a sifting (“Screening of Options Long List”) assessment was carried out on all possible route options. This process was a high-level assessment whereby routes were appraised on their ability to provide a bus corridor, and whether they could practically be delivered. A simple pass/fail result was given for each route at this stage.
- The routes that passed Stage 1 were then taken forward and combined into a number of feasible longer routes between points. These were then assessed by a “Multi-Criteria Analysis” process, in which routes were ranked in a comparative manner under a number of criteria.

Packaging of Land Use and Transport Options (Scenarios)

Individual measures involving land use, transport demand, transport network, traffic management and demand management that are compatible with the ABTA process have been incorporated into the Options Assessment. This association will support a collective scenario that contribute to achieving the ABTA objectives.

There are no planned land use changes of a substantial scales within the study area that would be deemed influence the existing transport demand patterns. Future development will fundamentally build on the strength of established development areas and hence demand patterns.

Transport Network

Primarily, the N5 Westport to Turlough Road project, due to be completed in 2023, will create a bypass of Castlebar for through traffic travelling along the N5. The LAM was modelled to account for the opening of this bypass and associated traffic redistribution for through traffic, long distance traffic and internal traffic. Due to the near-completion of this scheme, it is included in any scenario testing. This traffic redistribution and projected flows have been accounted for in the MCA process to allow for the delivery of future proofed design proposals and the introduction of fit for purpose infrastructure.

Systra were engaged to carry out detailed traffic modelling to inform the scheme. The baseline assessment included the collection of extensive traffic and POWSCAR data to develop a Local Area Model (LAM) for the Castlebar town area. This LAM is integrated with the Western Regional Model (WRM).

The LAM developed has been calibrated and validated in-line with TII Project Appraisal Guidelines and meets all specified criteria for both the AM and PM showing that the model is fit for purpose. The model represents AM and PM peak period base year traffic conditions well, as demonstrated statistically through calibration and validation. The model realistically represents journey times and the modelled traffic flows match observed count data. It therefore provides a robust basis for assessing transport scheme options.

The N5 Westport to Turlough Road project is the only major road project that has either under construction, undergoing the planning process, options process or been allocated funding/timelines within the study area. However, it is noted that MCC are assessing the feasibility of a northern ring road to the west of the study

area. Due to the known timelines associated with projects of this scale, the direct impact of the proposed link is not assessed but the proposals do account for future proofing and tie-ins with this additional scheme.

MCC are currently reviewing the active travel network within the study area. Most notably, the Castlebar Urban Greenway is currently undergoing upgrade works which is improving the at standard of the existing infrastructure and increasing the length of the greenway. This has been taken as the baseline for the cycling network.

Additionally, MCC are progressing the County Cycle Network Plan with proposals to connect towns via greenways. This plan is at development stage. Tie-ins for this plan are accounted for.

Transport Demand

The Castlebar Local Area Model (LAM) was developed in line with the National Demand Forecasting Model (NDFM) which takes input attributes such as land-use data, population etc., and estimates the total quantity of daily travel demand produced by, and attracted to, the Study Area. Therefore, transport demand characteristics have been fully accounted for in the Options Assessment process.

Multi Criteria Analysis

The full MCA analysis for the study areas is shown in Appendix 4.

This section outlines the methodology used in the assessment of five scheme options. The proposed options were assessed using 'Multi Criteria Analysis' (MCA) as outlined in the 'Common Appraisal Framework for Transport Projects and Programmes' published by the Department of Transport, July 2019.

The required criteria are as follows:

- Economy
- Safety
- Physical Activity
- Environment
- Accessibility and Social Inclusion
- Integration

Each option will be appraised under the criteria outlined above and compared based on a five-point scale, ranging from having significant advantages to having significant disadvantages over other route options. Table 0-1 shows the colour coding of the five-point scale, with advantageous routes graded "dark green" and disadvantageous routes graded "red".

Table 0-1 Options Colour Coded Ranking Scale

Colour	Description
	Significant advantages over other options.
	Some advantages over other options.
	Neutral compared to other options.
	Some disadvantages to other options.
	Significant disadvantages to other options.

Assessment Criterion

Economy

Capital Cost and Value for Money

Capital cost estimates are determined from both the indicative high-level infrastructure cost estimate and land acquisition cost. Indicative cost estimate is established to assess options for their likely capital infrastructure cost.

Each option has been assessed relative to the nature and extent of infrastructure works requirements to deliver the scheme objectives. The indicative cross-section for each option was used to determine the extent of the works required to provide the pedestrian and cycle facilities.

Access for All, Transport Reliability and Efficiency, and Quality of Service

This sub-criterion assesses the extent to which new users will be attracted to the cycle facilities, creating a mode shift that results in journey time savings for all users including and especially those choosing cycling and public transport.

The safer, more consistent and higher quality the cycling facilities are, the more new users will be attracted to these route.

Safety

Pedestrian Safety

This criterion considers the safety of pedestrians along the route. The safety of access, location, availability and crossing facilities and the junctions and between them are the items considered when assessing safety of those walking on the routes.

Cyclist Safety

This criterion assesses the safety of cyclists within the study area. This assessment is predominately concerned with the level of segregation provided between cyclists and motorised traffic.

Road Safety

In general, road collisions may be reduced along a dedicated cycle route due to modal shift. The speed of motorised vehicles is influenced by carriageway width. For the purposes of comparing the proposed options, the proposed cross-section is used to assess road safety.

Physical Activity

This criterion identifies the potential impact of each proposed option in facilitating a healthier lifestyle. This assessment considers how each option provides measures which support walking and cycling.

Environment

The scope and methodology for the environmental assessment was established by considering what environmental aspects are likely to be impacted and are, therefore, of importance in evaluating the route options. The potential impacts of route options are assessed at desktop study level. The environmental constraints considered are outlined in the following sections.

Landscape and Visual Quality

This criterion assesses the possible effects of each route on the surrounding streetscapes and considers whether the proposed option provides opportunities for better integration between transport and urban form. It also considered whether the proposed option may result in reduced traffic volumes.

Air Quality

The potential of each option to affect air quality as a result of mode shift, required diversions, etc. is assessed in this section. An option's potential to minimise harmful transport related emissions is considered.

Noise and Vibration

This criterion assesses the noise and vibration impact of each option.

Land Use

The potential impact on lands use through land-take, severance or reduction of viability, or which prevents or reduces its value for intended use is considered under this heading.

Accessibility and Social Inclusion

Key trip attractors are also considered in this criterion. The following land-uses have been considered as key trip attractors for the purposes of this assessment:

- Education (schools, universities, community centre, etc.)
- Retail and leisure (shopping centres, town centre, etc.)
- Health (hospitals, clinics, etc.)
- Employment (business parks, office developments, etc.)
- Residential (housing estates and predominantly residential roads and streets, etc.)

Multi-modal

This criterion assesses how the proposed options will improve multi-modal accessibility within residential, employment, educational and retail centres by improving accessibility by walking and cycling, public transport, car and HGV.

Socially Inclusive

Consideration is given to whether an option helps provide a socially inclusive transport network and whether it will benefit vulnerable groups in society such as people on low income, non-car owners, people with disabilities and the young and the old.

Integration

Land Use Integration

This criterion identifies the extent to which an option supports or encourages planned future development or provides economic opportunities. It considers whether an option supports integration between sustainable transport and land-use planning and policies. As part of this assessment, cognisance was taken of the ability of each option to offer opportunities to regenerate particular streets or areas or enhance the urban environment in general.

Transport Network Integration

This criterion identifies the possible links between each option and existing and proposed sustainable transport modes. Additionally, major effects on general traffic are also considered.

Cycling Integration

This criterion identifies the integration of the proposed options with the existing and proposed adjacent routes, and the quality of infrastructure along the route.

6.1

Options Assessment:

MCA

Proposal 1

Area:	1	Sub-Area:	D	Description:	National Road	Location:	N5 -OLD DUBLIN ROAD
		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
		Do Nothing	Do Minimum	Do Something	Do Something	Do Something	Do Something
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide two-way cycle track on the eastern extent to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide two-way cycle track on the eastern extent to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provide a cycle lane on the western extent * Provide footpath in each direction * Provide dedicated crossing points
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	1	Sub-Area:	C	Description:	National Road	Location:	N5 - LAWN ROAD
		Option 1	Option 2		Option 4	Option 5	Option 6
		Do Nothing	Do Minimum		Do Something	Do Something	Do Something
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety		* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide two-way cycle track on the eastern extent to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide two-way cycle track on the eastern extent to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provide a cycle lane on the western extent * Provide footpath in each direction * Provide dedicated crossing points
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	1	Sub-Area:	B	Description:	National Road	Location:	N5 - HUMBERT WAY
		Option 1 Do Nothing	Option 2 Do Minimum		Option 4 Do Something	Option 5 Do Something	
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety		* Improve surfacing, reduce vehicular speed limit, signage and road markings *Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide two-way cycle track on the eastern extent to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
	Landscape						
Environment	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	1	Sub-Area:	A	Description:	National Road	Location:	N5 - WESTPORT ROAD
		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
		Do Nothing	Do Minimum	Do Something	Do Something	Do Something	Do Something
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide two-way cycle track on the eastern extent to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide two-way cycle track on the eastern extent to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provide a cycle lane on the western extent * Provide footpath in each direction * Provide dedicated crossing points
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
	Landscape						
Environment	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	1	Sub-Area:	F	Description:	National Road	Location:	N84 - STATION ROAD
		Option 1	Option 2		Option 4		
		Do Nothing	Do Minimum		Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety		* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	F	Description:	Town Centre Two Way	Location:	JOHN MOORE RD
		Option 1 Do Nothing	Option 2 Do Minimum		Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety		* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	F	Description:	Town Centre Two Way	Location:	PAVILION RD
		Option 1 Do Nothing	Option 2 Do Minimum		Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety		* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	F	Description:	Town Centre Two Way	Location:	L1704
		Option 1 Do Nothing	Option 2 Do Minimum		Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety		* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

6.2

Options Assessment:

MCA

Proposal 2

Area:	1	Sub-Area:	E	Description:	National Road	Location:	N60 - BREAFFY ROAD
		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
		Do Nothing	Do Minimum	Do Something	Do Something	Do Something	Do Something
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide two-way cycle track on the eastern extent to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide two-way cycle track on the eastern extent to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provide a cycle lane on the western extent * Provide footpath in each direction * Provide dedicated crossing points
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	5	Sub-Area:	A	Description:	Employment/Industrial	Location:	MONEEN ROAD (E)
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	4	Sub-Area:	F	Description:	Residential	Location:
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something	
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points	
Economy	Capital Cost					
	Transport Reliability					
Safety	Pedestrian Safety					
	Cyclist Safety					
	Road Safety					
Physical Activity	Physical Activity					
Environment	Landscape					
	Air Quality					
	Noise & Vibration					
	Land Use Character					
Accessibility & Social Inclusion	Multi-modal					
	Socially Inclusive					
Integration	Land Use Integration					
	Transport Network					
	Cycling Integration					

6.3

Options Assessment:

MCA

Proposal 3

Area:	4	Sub-Area:	B	Description:	Residential	Location:	NEWPORT ROAD
		Option 1 Do Nothing	Option 2 Do Minimum		Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety		* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
	Landscape						
Environment	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	E	Description:	Town Centre Two Way	Location:	LANNAGH ROAD
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
	Landscape						
Environment	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
	Land Use Integration						
Integration	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	D	Description:	Town Centre Two Way	Location:	HOPKINS ROAD
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
	Landscape						
Environment	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	B	Description:	Town Centre Two Way	Location:	STEPHEN GARVEY WAY
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
	Landscape						
Environment	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	A	Description:	Town Centre Two Way	Location:	OLD WESTPORT ROAD
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
	Landscape						
Environment	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
	Land Use Integration						
Integration	Transport Network						
	Cycling Integration						

6.4

Options Assessment:

MCA

Proposal 4

Area:	4	Sub-Area:	F	Description:	Residential	Location:	TURLOUGH ROAD
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	4	Sub-Area:	D	Description:	Residential	Location:	UPPER THOMAS STREET
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something			
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points			
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	G	Description:	Town Centre Two Way	Location:	Thomas Street/Richard Street/Rush Street/Lucan Street
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

6.5

Options Assessment:

MCA

Proposal 5

Permeability Network

There is no detailed MCA for the permeability network as all proposed and existing links will be upgraded to meet minimum DMURS and NCM standards to include as necessary:

- Surfacing;
- Lighting
- Security;
- Crossings; and
- Directness.

6.6

**Options Assessment:
MCA**

Proposal 6

Area:	4	Sub-Area:	A	Description:	Residential	Location:	RATHBAWN ROAD
		Option 1	Option 2				
		Do Nothing	Do Minimum				
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety				
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
	Landscape						
Environment	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
	Land Use Integration						
Integration	Transport Network						
	Cycling Integration						

Area:	5	Sub-Area:	C	Description:	Employment/Industrial	Location:	MONEEN ROAD (E)
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	2	Sub-Area:	D	Description:	Town Centre One Way	Location:	UPPER CHAPEL STREET	
		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
		Do Nothing	Do Minimum	Do Something	Do Something	Do Something	Do Something	Do Something
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing carriageway layout * Improve surfacing, reduced speeds, signage and road markings to improve cyclist safety * Provide dedicated crossing points	* Remove parking * Improve surfacing, reduced speeds, signage and road markings to improve cyclist safety * Provide cycle lane in the direction of vehicular traffic * No contra-flow cycle facilities	* Remove parking * Improve surfacing, reduced speeds, signage and road markings to improve cyclist safety * Provide cycle lane in the direction of vehicular traffic * Provide contra-flow cycle lane	* Remove parking * Improve surfacing, reduced speeds, signage and road markings to improve cyclist safety * Provide cycle track in the direction of vehicular traffic * Provide contra-flow cycle track	* Remove parking * Improve surfacing, reduced speeds, signage and road markings to improve cyclist safety * Provide cycle lane in the direction of vehicular traffic * Provide contra-flow cycle track	* Remove parking * Improve surfacing, reduced speeds, signage and road markings to improve cyclist safety * Provide two way cycle track on one extent
Economy	Capital Cost							
	Transport Reliability							
Safety	Pedestrian Safety							
	Cyclist Safety							
	Road Safety							
Physical Activity	Physical Activity							
Environment	Landscape							
	Air Quality							
	Noise & Vibration							
	Land Use Character							
Accessibility & Social Inclusion	Multi-modal							
	Socially Inclusive							
Integration	Land Use Integration							
	Transport Network							
	Cycling Integration							

Area:	2	Sub-Area:	A	Description:	Town Centre One Way	Location:	MAIN STREET
		Option 1 Do Nothing	Option 2 Do Minimum				
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing carriageway layout * Improve surfacing, reduced speeds, signage and road markings to improve cyclist safety * Provide dedicated crossing points				
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	2	Sub-Area:	C	Description:	Town Centre One Way	Location:	TUCKER STREET
		Option 1	Option 2				
		Do Nothing	Do Minimum				
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	* Retain the existing carriageway layout * Improve surfacing, reduced speeds, signage and road markings to improve cyclist safety * Provide dedicated crossing points				
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	C	Description:	Town Centre Two Way	Location:	SPENCER STREET
		Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Do Something	Option 4 Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
	Landscape						
Environment	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						

Area:	3	Sub-Area:	C	Description:	Town Centre Two Way	Location:	MONEEN ROAD INDUSTRIAL ESTATE (INTERNAL ROADS)
		Option 1	Option 2	Option 3	Option 4		
		Do Nothing	Do Minimum	Do Something	Do Something		
Assessment Criteria	Assessment Sub-Criteria	Retain the existing	*Retain the existing cross section layout * Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide dedicated crossing points to improve pedestrian safety	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle lanes in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Improve surfacing, reduced speeds, signage and road markings * Provided continuous footpath along each extent * Provide dedicated crossing points	* Improve surfacing, reduce vehicular speed limit, signage and road markings * Provide cycle tracks in each direction to be provided for through narrowing of the vehicular lanes/kerb adjustments * Provided continuous footpath along each extent * Provide dedicated crossing points		
Economy	Capital Cost						
	Transport Reliability						
Safety	Pedestrian Safety						
	Cyclist Safety						
	Road Safety						
Physical Activity	Physical Activity						
Environment	Landscape						
	Air Quality						
	Noise & Vibration						
	Land Use Character						
Accessibility & Social Inclusion	Multi-modal						
	Socially Inclusive						
Integration	Land Use Integration						
	Transport Network						
	Cycling Integration						