Active Travel Strategy for Ferrybank

Active Towns

December 2012



TABLE OF CONTENTS

1.	INTRODUCTION	2
2.	DEMOGRAPHICS	3
3.	TRANSPORT	5
4.	ACTIVE TRAVEL	6
5.	POLICIES AND PLANS	7
6.	EXISTING MODAL SHARE	8
7.	PEDESTRIAN AND CYCLE COLLISIONS	10
8.	TRIP GENERATION	11
9.	COMMITMENT TO SUSTAINABLE TRAVEL	14
10.	WALKING AND CYCLING TARGETS	15
11.	GENERAL ATTITUDES TO ACTIVE TRAVEL	19
12.	INFRASTRUCTURE MEASURES	20
13.	COST OF PROPOSALS	42
14.	EVALUATION FRAMEWORK	43

1. Introduction

Located on the North Bank of the River Suir, straddling the two counties of Kilkenny and Waterford, and ideally situated for access to Wexford, Limerick, Kilkenny, Tipperary and Dublin, Ferrybank is a vibrant community which retains a strong local identity whilst forming an integral part of Waterford City.

From the time of the first bridge crossings of the Suir, Ferrybank has been an attractive location for families to settle and business to develop. The arrival of the railway in the 1830's brought further major changes to Ferrybank. The rail links were initially extended to Rosslare to the east and as far as Limerick Junction in County Tipperary to the west. Industrial development in the early 20th century consisted of a number of factories largely in the food processing industry. Over the years, Ferrybank has had other significant industrial developments that provided much needed local employment, and these included R&H Hall which produced animal feeds and Odlums flour milling, which occupied a large mill now derelict on the North Wharf. The wharf was a busy part of Waterford Port and remains in occasional, but ever declining, use.



Ferrybank-Abbeylands Shopping Centre (part occupied)

The commercial core of the area is along Fountain Street where churches, schools, shops and community facilities are located, all within easy walking distance of each other.

Drawing on its industrial, maritime and cultural heritage, Ferrybank is in an exciting phase in its development. In recent years there has been substantial economic, social and community regeneration in the area.

2. Demographics

The area considered in this report is across the two counties of Kilkenny and Waterford City, which together are, for the purposes of this strategy, referred to as the Ferrybank Area. The boundary of this study area is shown of Figure 2.1.

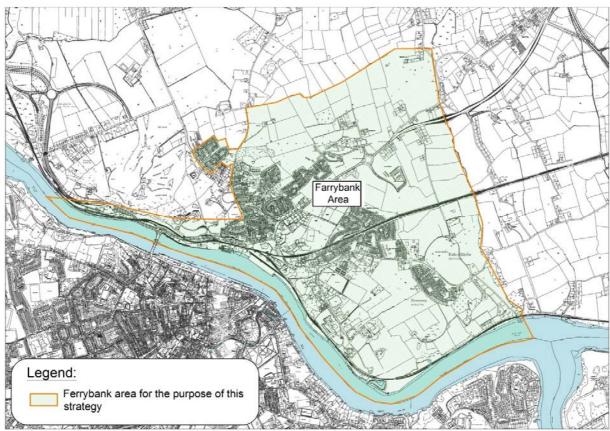


Figure 2.1 – Ferrybank study area for the purpose of this strategy

The Waterford City area of Ferrybank is included only for the purpose of considering the potential of the overall area for Active Travel. That area of Waterford City contains the train station and the largest schools and therefore needs to be considered in the strategy. However all of the measures recommended in this study are within the administrative area of County Kilkenny.

This area has a population of 5,217 persons (CSO Census 2011). Ferrybank has experienced greater growth than many other similar towns. It recorded a growth of 22.6% in the period between the 2006 and 2011 censuses. The growth of the settlement is well above the national average, which is 7.6%. This increase is in the areas within County Kilkenny and occurred as a result of significant residential developments.

The table below shows that the percentages of Principal Economic Status of the Ferrybank area's population.

	2011		
Principal Economic Status	Ferrybank	National figures	
At work	44%	43%	
Students and pupils	24%	24%	
Unemployed/Home duties	19%	18%	
Unable to work due to permanent sickness or disability	13%	15%	
Total	100%	100%	

Table 2.1 Population aged 5 years and over by Principal Economic Status; source: CSO 2011 Census

The economic status of the area's residents is the same as the national average and there is no factor relating to employee numbers or student numbers that would merit particular consideration in this strategy.



Rice Bridge Over River Suir

3. Transport

Ferrybank is well served by roads with connections to the M9 motorway and National Road N25 via the R448. The R711 (New Ross) and the R680 (Waterford) are important Regional Roads.

Ferrybank has good rail links to the country's main centres of population (Dublin, Cork, Limerick), with frequent stops on the intercity services. It has direct links to Dublin (Heuston) to the north and a direct link to Limerick Junction to the west; from Limerick Junction the rail line connect to Cork, Limerick and Galway.

There are frequent urban bus services from Ferrybank to Waterford city. Kenneally's Waterford City bus service runs every 15 min to Waterford City Centre. From the main Waterford City bus station there are connections with frequent stops on the intercity services to all country's main centres of population (Dublin, Cork, Limerick, Galway, etc.)

The area itself, however, has two features that sever the transport linkage and significantly impacts on travel within the greater area: the Suir River and the New Ross Railway line (disused).

In relation to the River Suir, there is only one river crossing in the vicinity – Rice Bridge. The second crossing, which is located on the N25 bypass, is not available to pedestrian and cycle traffic and in any event is too far removed from the city centre.

The impact of the severance, both river and railway is twofold:

- Travel distances are lengthened because the actual travel distances (via the crossings) are significantly longer than the straight line distance between trip ends. This is a particularly significant factor for Active Travel.
- The channelling of traffic onto the crossing points and nearby junctions creates congestion and consequently increases the time taken to complete a journey.

Therefore, trip length and trip duration are both increased.

These are significant factors for active travel in the Ferrybank area. Many trips arising in Ferrybank would have a destination across the river but due to the severity of the severance arising from the river and the uncertainty in relation to plans for additional bridging of the river, it is not considered feasible to take into consideration, or to make recommendations on, measures for cross-river trips in this strategy. The Ferrybank dual carriageway and Rice Bridge are heavily trafficked and were not constructed with the needs of cyclists in mind.

This strategy therefore focuses on accommodating Active Travel trips which have both an origin and a destination within the Ferrybank area. It is acknowledged that there are significant long term plans for strengthening the linkage to the city centre for pedestrians and cyclists from north of the river and the measures proposed in this strategy do not compromise those plans.

The second severance item, the New Ross railway line (disused) is also very significant. It severs the housing estates south of the railway from the estates, schools and shops to the north, leading to journeys being over a kilometre longer than they need be and an over-reliance on the Abbey Road. This is considered to be a major factor in the current low rate of active travel in the area.

4. Active Travel

Walking and cycling are healthy, cost effective and non-polluting modes of transport. There is an increasing awareness and appreciation of the benefits of walking and cycling and the introduction of facilities for Active Travel in the town would be timely.

Benefits of Walking and Cycling

Economic: Vehicular congestion is a deterrent to business in Ferrybank and it will continue to affect the economic competitiveness of the local economy. Reducing vehicular traffic volumes is therefore an important objective, and to do this, the alternatives must be more attractive. Walking and cycling are cost effective, requiring a small investment from the cyclist (bike and equipment) and the Local Authority (infrastructure).

Environment: The growth in greenhouse gas emissions is a major challenge nationally and internationally. Improving alternative travel modes can reduce reliance on the car, one of the main sources of greenhouse gas emissions.

Better quality of life: By improving opportunities for more active commuting and leisure trips the overall quality of life of Ferrybank residents and visitors could improve immensely.

An important factor relating to active travel in the Ferrybank area is topography. The river in the city is tidal and therefore practically at sea level; Rockshire climbs to a level of 80m OD, a rise of over 70m. Cycling and walking on gradients of 10% and greater is impractical and therefore cycle and walking routes need to follow the contours as much as possible, thereby avoiding steep gradients. The contours generally follow the river, as do the measure recommended later in this report. Topography is considered to be a major factor in the current low rate of active travel in the area.

5. Policies and Plans

The National Spatial Strategy 2002 – 2020 states that areas such as Ferrybank need appropriate policies and actions to support their roles as drivers of development at the county level.

The following national and local policy frameworks set out the National targets for sustainable travel and form a fundamental basis for development of the Walking and Cycling Strategy:

- Smarter Travel, National Policy for Transport (2009)
- National Cycle Policy Framework, 2009-2020

Ireland's *National Cycle Policy Framework, 2009-2020* sets out to create a strong cycling culture in Ireland with a target that 10% of all trips will be made by bike by 2020.

Smarter Travel, A New Transport Policy for Ireland 2009-2020 proposes a national increase in cycling trips to work of almost 80% and a 50% increase in walking trips by 2020.

6. Existing Modal Share

The table below shows the trip distances (to school or work) of the area's population compared to whole country and gives an indication of the percentages of trips that may be amenable to modal change. The information has been abstracted from the CSO 2006 Census database 'Persons aged 5 years and over by distance travelled to work, school or college'.

Trip Distance	Ferrybank Area %	Rep. of Ireland %
<1 km	1%	1%
1km - 4km	52%	38%
4km - 9km	31%	20%
9km - 14km	6%	13%
14 km - 24km	4%	13%
24km - 49km	3%	10%
≥50km	3%	5%

Table 6.1. Persons aged 5 years and over by distance travelled to work, school or college, source: CSO 2006 Census

Ferrybank has a high percentage of trips within the distance considered reasonable for walking and cycling. Compared to the national figures there is a relatively low percentage of long distance commuting unsuited to Active Travel. This presents a significant opportunity for modal shift to Active Travel, in that it is feasible for many of those who drive short distances at present to adopt walking or cycling.

According to 'An Employer's Guide to Mobility Management Plans' by Dublin Transportation Office, a distance of up to 4 km is considered reasonable for walking, and up to 10 km for cycling. In the case of Ferrybank, 84% of trips are within the 10km band and 53% within the 4 km band, offering significant scope for walking and cycling.

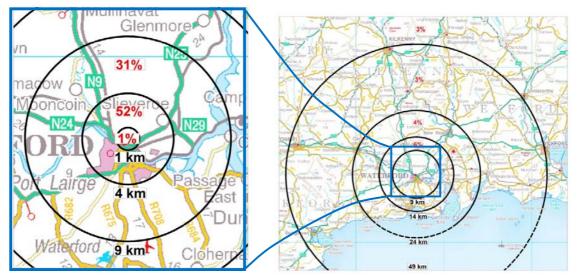


Figure 6.1: Trip Distances Bands of Area's Population (2006 CSO data)

The following table shows the modes of travel of students and workers in the area. The information has been abstracted from the CSO database 'Persons aged 5 years and over by means of travel to work, school or college' from 2006 and 2011 censuses.

		% of Persons travelling to Work, School or College					
			Ferryba	nk Area		Other towns*	
		2006 c	ensus	2011 c	ensus	2006 ce	ensus
Active Travel	On foot	15%	16%	16%	17%	21%	22%
Active Travel	Bicycle	1%	10%	1%		1%	
Public	Bus, minibus or coach	6%	6%	4%	4%	8%	12%
Transport	Train, DART or LUAS	0%	0%	0%		4%	12%
	Motor cycle or scooter	1%		0%	79%	1%	
Car Based	Motor car/van: Driver	50%	700/	55%		47%	66%
Transport	Motor car: Passenger	21%	76%	78% 23%		17%	00%
	Other	6%		1%		1%	

^{*} Other towns are "Towns with population 5,000 – 9,999" – data not available for 2011

Table 6.2 Persons aged 5 years and over by means of travel to work, school or college

In summary, of 2,076 persons at work and 1,102 pupils and students in Ferrybank area, 493 walk each day, 45 cycle each day and 129 travel by bus or train to work, school or college (Source: CSO 2011 Census). As previously shown in Table 6.1, 84% of persons at work, school or college travel between 0km and 9km to their destination. (Source: CSO 2006 Census).

Therefore Ferrybank has a higher than average number of car based trips and a lower than average number of sustainable transport trips compared to other similar towns. There is therefore a significant potential for modal shift to Active Travel and improvements to walking and cycling facilities would be required to foster that modal shift.

Table 6.2 suggests that although the railway station is on the intercity line and there are frequent services to Dublin, Cork and Limerick, it does not appear to be in use by locals for everyday trips.



Plunkett Railway Station

7. Pedestrian and Cycle Collisions

The Road Safety Authority provides on its website a database of road collisions and, from that source, the pedestrian and cyclist collisions within the years 2005 to 2009 inclusive were abstracted. The collision history is a follows:

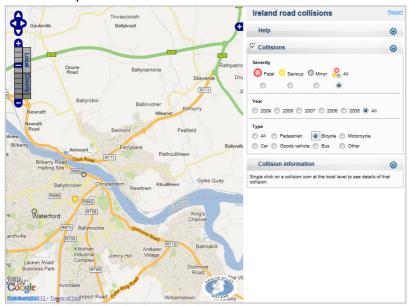


Figure 7.1: Ferrybank Bicycle Road Collision – source: RSA, Ireland Road Collisions

No bicycle collisions occurred in the Ferrybank area within the five years 2005 to 2009 inclusive.

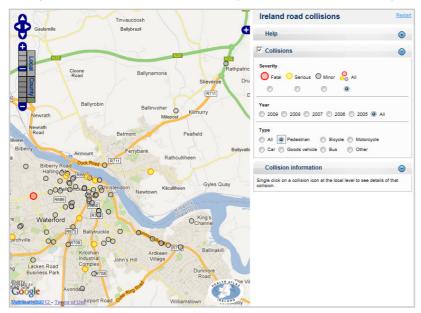


Figure 7.2: Ferrybank Pedestrian Road Collision – source: RSA, Ireland Road Collisions

One serious and two minor pedestrian collisions are shown on the road network in the Ferrybank area within the five years 2005 to 2009 inclusive.

The lack of cyclist collisions and low level of pedestrian collisions in the period of 4 years reflects the current low use of cycling and walking as a means of transport.

8. Trip Generation

Trip Generation

The reasons why people travels are listed in CSO National Travel Survey carried out in 2009 and are presented hereunder.

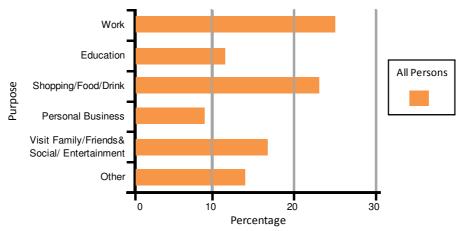


Figure 8.1 Reasons why people travel

In respect of Ferrybank, the principal trip generators for theses travel purposes are listed hereafter and their locations are shown on Figure 8.2.

Education

- Our Lady Of Good Counsel NS; Ferrybank Primary School (Enrolment in 2011/2012: 205)
- Muire An Port Mór; Primary (Enrolment in 2011/2012: 218)
- Abbey Community College; Ferrybank Secondary School (Enrolment in 2011/2012: 669)

Work

- Envirolab; Laboratory Testing and Consultancy Services serving the food, environmental and pharmaceutical sectors
- Trans- Stock; Warehousing & Cold Storage Ltd

Shopping

- Aldi Store
- Ferrybank-Abbylands shopping centre (retail area not operational at present)

Business Commercial

Core of smaller businesses along R711

Entertainment

- Ferrybank GAA Club
- AIBP Sports and Social Club
- Waterford Golf Course

Other

- Ferrybank Parish Hall
- Legion of Mary Catholic Church
- Saint Michael Church
- St. Joseph's Care Home

It is noteworthy from Figure 8.2 Trip Generators that:

- All three schools are located in the core of Ferrybank area very close to each other.
- The major non-residential developments in the area are: St. Joseph's Care Home, Ferrybank-Abbylands shopping centre (not fully operational) and Aldi Store, all located along the R711 within the distance of 1.5km
- The residential areas are grouped: one located north of the R711, one south of the disused New Ross railway line (in the Abbey Road area) and another to the east / southeast of the Ferrybank-Abbeylands shopping centre.

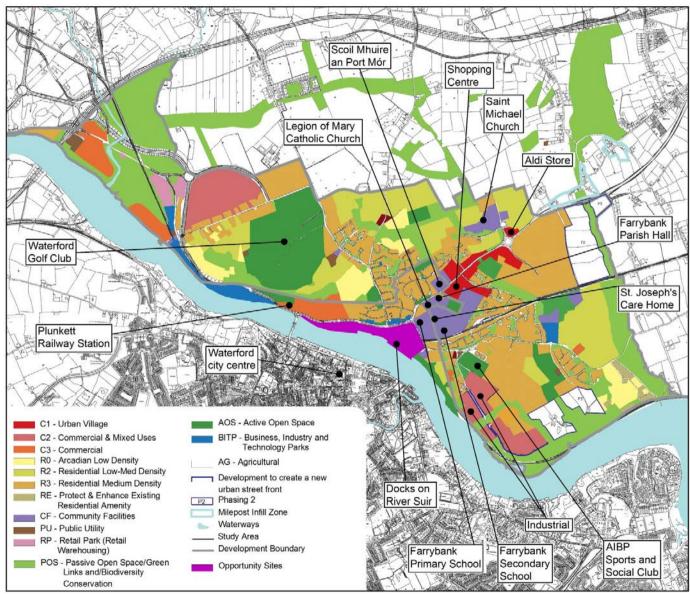


Figure 8.2. Trip Generators

Commitment to Sustainable Travel

Local Authority Commitment

The Council aims to maximise dedicated provision for pedestrians and cyclists, since walking and cycling are healthy, cost effective and non-polluting modes of transport. The 'Ferrybank-Belview Local Area Plan' from March 2009 contains the following policies and objectives in relation to increasing non-car based travel.

Policy TP3:

Reduce the need for people to travel (especially by car) by creating neighbourhood centres, where local and daily services are readily accessible, at frequent intervals throughout the plan area.

Policy TP4:

Promote the accessibility of Neighbourhood Centres which are located along key through routes in the plan area, and which in time, will be well served by public transport infrastructure, with good pedestrian and cycle links.

Policy TP6:

Support the creation of pedestrian linkages to the proposed urban centre in all new residential developments.

Policy T9:

Increase the provision of cycle paths in the plan area, particularly through the open space links.

Policy T10:

Provide cycle lanes for all zoned development areas on the following routes:

- (1) Abbey Road
- (2) Clover Road
- (3) N25/Urban Village
- (4) Rockshire Road
- (5) Mullinabro Road

Policy T11:

Provide bicycle stands in the urban village and at all neighbourhood centres.

Policy OSP5:

Investigate the feasibility of developing walkways in the plan area, particularly in riverside locations.

Policy OS3:

Develop a system of linear parks with walkways and cycle paths, with significant tree planting and public seating, in consultation with the National Parks and Wildlife Service (NPWS).

10. Walking and Cycling Targets

Active Travel encompasses both purposeful trips, such as those to work, education or personal business, as well as travel by walking or cycling with no purpose other that health and fitness benefit. Therefore, the possibility of creating a move to Active Travel can be based on a two-pronged approach: creating the potential for shorter safer journeys to work and school, and providing attractive facilities for increased leisure and health walking and cycling,

In developing targets for increased Active Travel it is necessary to assess each component separately, i.e. provide a target for commuter type travel and another for health and fitness travel.

In considering targets relating to commuter type travel the following factors are important:

- The 53% of trips within a 4km distance of work and school are the ones most amenable to mode change to walking and cycling.
- The real targeted increase is in cycling; the numbers cycling are low at present and this is seen as an area of potentially high growth.
- Targeting a significant increase in cycling may displace some existing walking trips; however
 the existing below-average percentage of walking trips in Ferrybank leaves some scope for
 also increasing walking trips, though to a lesser extent that cycling trips.
- The travel patterns of the young are less engrained; measures targeted at schools are more likely to be successful.
- Adults are more likely to use facilities provided for health and fitness walking and cycling.

Ferrybank offers the following particular benefits in relation to the return on investment in walking and cycling facilities:

- There is low use of walking and cycling at present so it is likely that the provision of a footpath and cycle network developed from a coherent strategy together with adequate marketing, education and policy measures would be rewarded by more increased Active Travel.
- The schools in the Ferrybank area are centrally located and close to the residential areas they
 serve. They have good car access but cycling and walking connections could be improved.
 Provision of pedestrian and cyclist access, directly from residential areas without the need to
 use the public road network would provide significant benefits in terms of time savings and
 increased road safety.
- Ferrybank has a unique riverside and therefore has the opportunity to create very attractive health and leisure paths.

The targets for walking and cycling in the National Smarter Travel Policy and the National Cycle Policy Framework and the targets for reduced car use in the National Smarter Travel Policy have informed the decision on target levels for Active Travel in Ferrybank.

The potential for modal shift of the various types of purposeful travel are set out in the following table and the reasons behind the estimations of degrees of potential impact are provided.

	Walk	Cycle
Work	Low/Medium potential. There is an existing well-connected footpath network. Some shortening of travel distances and additional crossings would foster walking.	Medium/High potential. Few existing facilities for cyclists and low level of cycling so provision of a connected network should see large percentage increase (albeit from a low base)
Education	Medium potential. Some children walk at present; however those who do not can be actively targeted within the school environment.	Medium potential. Cycling is likely to be a travel mode used by post-primary students only.
Shopping/Food/Drink	Low potential. The need to carry goods combined with some steep gradients makes walking impractical for some shopping trips	Low potential. The need to carry goods combined with some steep gradients makes cycling impractical for some shopping trips.
Personal Business	Medium potential. Dependent on nature of the business.	Medium potential. Dependent on nature of the business.
Visit Family/Friends& Social/ Entertainment	Medium potential.	Medium potential.

Table 10.1: Potential for Modal Shift to Walking and Cycling

The preceding paragraphs give a context for overall Active Travel targets for Ferrybank. However it is possible and beneficial to examine the sub-areas of the study area in detail to determine the relative use of active travel in the different areas, and from that information to set targets for each individual area which roll-up to an target for the overall area. In that regard CSO stats are available for all sections of the area, and figure 10.1 shows the current percentage of purposeful trips that are undertaken by walking and cycling by residents of each area.

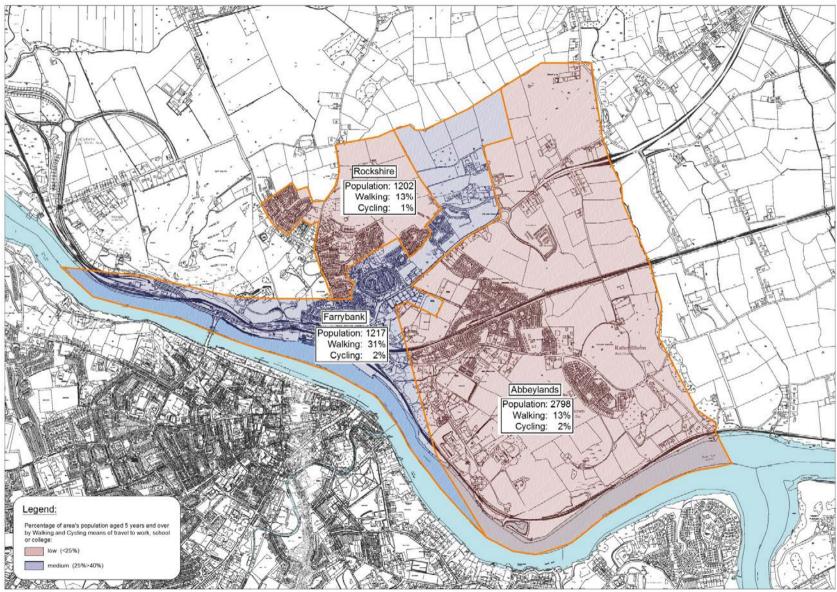


Figure 10.1 - Current percentage of purposeful trips that are undertaken by walking and cycling by residents of each area

Table 10.2 tabulates the existing walking and cycling percentages of each area and provides the targets for the percentages to be achieved by implementation of the measures contained in this strategy. The changed percentages for each area are rolled-up (weighted by area population) to give the prediction change in walking and cycling percentages for the complete area

		Existing 2011%		Target 2021%	
Area	Population	Walking	Cycling	Walking	Cycling
Rockshire	1202	13	1	23	5
Ferrybank	1217	31	2	35	5
Abbeylands	2798	13	2	23	5
Ferrybank Overall Area	5217	17	2	25	5

Table 10.2: Mode Split Targets 2011-2017 (percentage of trips by all modes as measured by CSO Database)

In that context therefore the targets are to change walking and cycling trips of 'Persons aged 5 years and over by means of travel to work, school or college' (the CSO database) from their existing percentages of 17% and 2% respectively to 25% and 5%.

The target dates are set to coincide with the census dates so their delivery can be independently verified by CSO data.

Health and fitness walking and cycling trips are new trips and are not linked to purposeful travel. Modal shift is therefore not a consideration that relates to such trips. This creates a difficulty in estimating the number of health and fitness trips that will occur once a new walkway / cycleway is provided: it cannot be estimated by predicting a diversion rate for existing car trips. It is believed that health/fitness walking and cycling is increasing and the predictions made hereafter are derived from a conservative estimation of increased health and fitness travel associated with new infrastructure in the context of the attractiveness of that infrastructure and the population catchment it serves.

Walking for health normally takes place within the urban area and cycling for health would normally take place outside the built up area. The riverside cycle/walk is the principal route for health and fitness trips within the area. The target is to increase health and fitness walking and cycling on that route. Monitoring will be provided by way of pedestrian and cyclist counts on the facility.

11. General Attitudes to Active Travel

Personal and community attitudes towards active travel are important influences. Subjective norms such as personality, attitude, information and experience of different modes of travel can influence travel mode choice as can factors such as time allocation and activity scheduling. Factors preventing people from making active travel choices include a lack of information (being unaware of public transport services or the existence of bike routes) as well as perceptions about different modes of travel (many people underestimate transport cost and travel time for their car).

Fast vehicle traffic is commonly cited as a barrier to walking and cycling while the availability of paths and cycleways increases the likelihood of people walking and cycling to reach their destination. Proximity of destination can also be an important factor in determining travel mode. For example, the further a young person lives from school the less likely they are to walk or cycle. Based on research conducted amongst adolescents in Ireland, a suggested acceptable distance for active travel to school is 2.4kms for walking and 4kms for cycling. Equally, commuting patterns show that the distance travelled between home and work often precludes active travel alone as a reasonable choice.

The general community issues in relation to the existing walking and cycling networks are safety, connectivity, maintenance, signage and bike parking.

National feedback from the Green Schools programme has identified the following specific issues relating to schools, many of which would apply to Ferrybank:

- Speed Limits;
- Lack of cycling infrastructure;
- Long waits at traffic lights/pedestrian crossings;
- Poor connectivity of pedestrian and cycling links to residential areas;
- Need for better traffic management around schools;
- Poor maintenance of pedestrian and cycle routes; and
- Dangers for both pedestrians and cyclists at junctions, especially roundabouts.

12. Infrastructure Measures

In relation to the needs of pedestrian and cyclist it must be remembered that the facilities must be appropriate to the trip purpose.

- Commuters (Work and School): Prefer a fast direct route between home and work/education, regardless of quality of environment.
- Leisure Pedestrians: Seek ease of access, circular routes and attractive environment.
- In addition people with mobility impairments require level, clearly defined footpaths with considerate placement of street furniture.
- Children may require greater segregation from motorised traffic.

In relation to the provision of infrastructure (the principal part of the strategy) the overall approach is stated in Table 12.1.

		Purposeful Trips		Health, fitness, leisure trips
Walking	Walking - Improve existing footpath linkage		-	Provide new walking route
	-	Insert new crossings		linking residential areas to
	-	Provide new footpaths where travel		amenity areas such as the
		distance would be significantly reduced		riverside
Cycling	-	Provide cycle lanes/tracks	-	Provide cycling tracks along
	-	Provide cycle parking		river bank for leisure cycling
	-	Provide cycle crossings		

Table 12.1 Overall Approach to Infrastructure Improvement

The actual measures proposed to implement the strategy are identified on the Figure 12.1. Greater detail of the proposed measures is provided in the description of the measures in the pages that follow.

The detailed strategy has emerged from consideration of the existing use of active travel, the locations of the principal trip generators, the opportunities and difficulties in relation to provision of facilities, the targets set and the community consultation undertaken.

The overall strategy is as follows:

- Develop **on-road cycle routes** at the following locations;
 - R711 (including possible contraflow)
 - o Abbey Road
- Provision of off-road cyclepath/footpath at the following locations:
 - Fairways
 - o Belmount
 - Clover Meadows
 - Disused New Ross Railway line
 - o Disused Rosslare Railway line

Quite Lane at

- o Gyles Quay
- Permeability Links at locations where journey time and distance could both be significantly
 reduced for pedestrians and cyclists by the provision of a short-cut. Such short-cuts are very
 beneficial since they make walking and cycling attractive due to the relatively longer driving
 route. The intention of this measure is to look at areas such as adjoining housing estates to
 determine if inter-connection would be beneficial. The feasibility of providing connections at
 each location will need to be assessed.

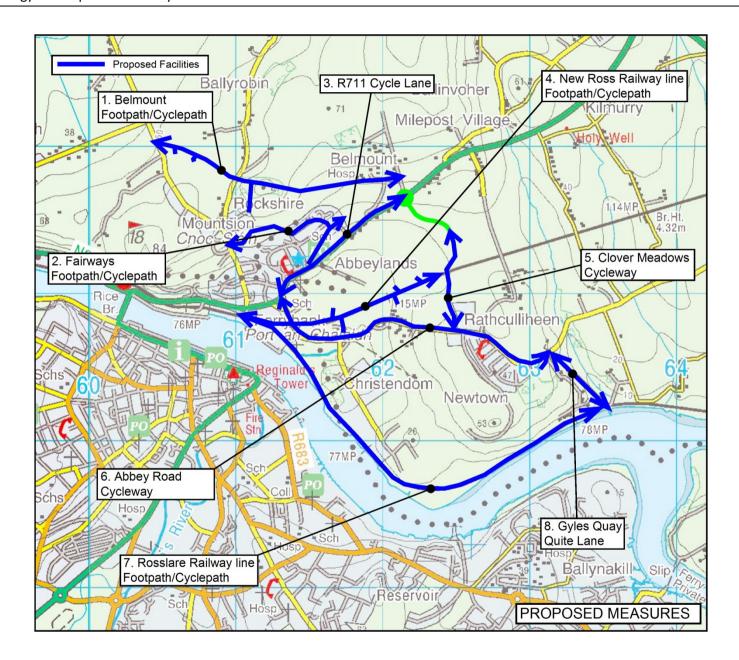
Cycle parking at

- o Railway Station.
- Schools
- Shopping Centre

• Traffic Management along

- o **R711**
- o Abbey Road
- **Improved way finding** by use of information panels wherever off-road cycle facilities are provided. This measure will be included in the design of each route.

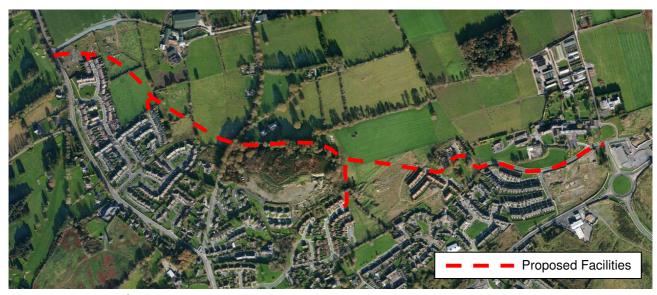
The locations of the actual measures proposed to be implemented are shown on the Figure that follows and the nature and extent of each measure is provided in detail in the pages that follow. The measures generally relate to cycling because there is a reasonable good footpath network in the town. However, improvements to footpaths would be made where the existing ones are in poor condition, and such works can be taken to from part of the measures outline hereafter.



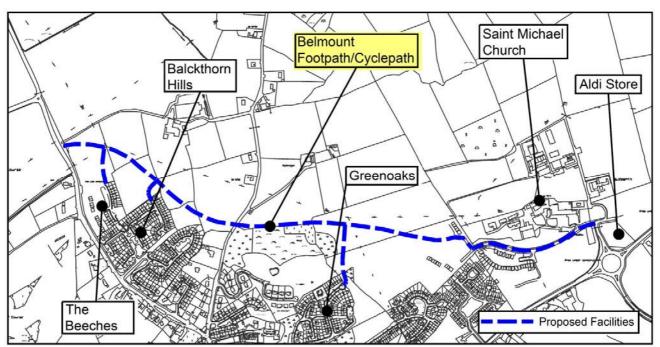
22

Measure 1: Belmount Footpath/Cyclepath

This is a proposed off-road path running from Newrath on the north, crossing Ballyrobin Road and ending at Aldi store on the Aylesbury Road. Most of the proposed path is new construction. There are also proposed connections from this path to Greenoaks, Balckthorn Hills and the Beeches residential estates, making this path attractive for residents of those estates to use for health and fitness purposes and for commuter trips. The path generally follows the contours, avoiding steep gradients.



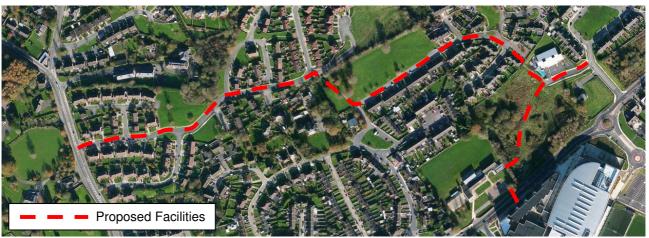
Belmount Footpath/Cyclepath - Arial View



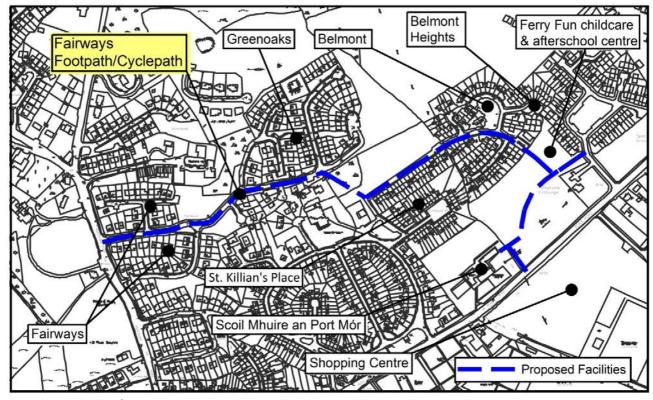
Belmount Footpath/Cyclepath - Map

Measure 2: Fairways Footpath/Cyclepath

This is also an east/west route running along the contours, but is closer to the centre than the Belmont route. The intention of this measure is to formalise and improve an existing footpath route, providing facilities for the cyclist. The route extends from the Rochshire Road, to the west, to the Árd Doire to the east. The section from Ferry Fun childcare to Scoil Mhuire an Port Mór is new. This path connects to the residential estates of Fairways, Greenoaks, St. Killian's Place, Belmont and Belmont Heights and leads ultimately to the Ferrybank shopping centre. This path would have potential to increase the walking and cycling trips to shopping, community facilities, childcare and schools as well as serving commuting trips.



Fairways Footpath/Cyclepath - Arial View



Fairways Footpath/Cyclepath - Map



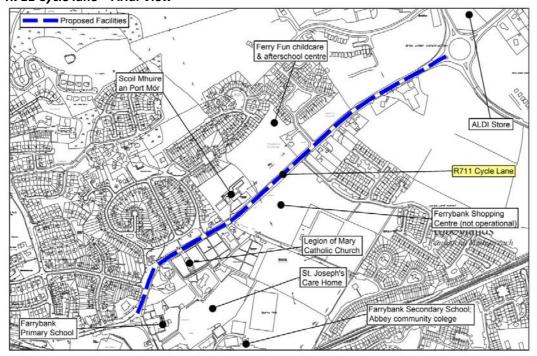
Fairways Footpath/Cyclepath - Greenoaks/St. Killian's Place - existing footpath

Measure 3: R711 Cycle Lane

The proposed R711 Cycle Lane would run from the roundabout on the R711 at the Aldi store on the northeast to the R711/Abbey Road junction to the southwest as far as Abbey Road. It is an on-road cycle facility providing a convenient and direct connection for cyclists in residential areas north of the R711 and linking to proposed cycling facilities south of the R711 (proposed measures No. 4, 6 and 7). It would also be of use to secondary school students travelling to school, although traffic volumes on the road are heavy, despite the presence of the bypass.



R711 Cycle lane - Arial View



R711 Cycle Iane - Map



R711 – Ross Road

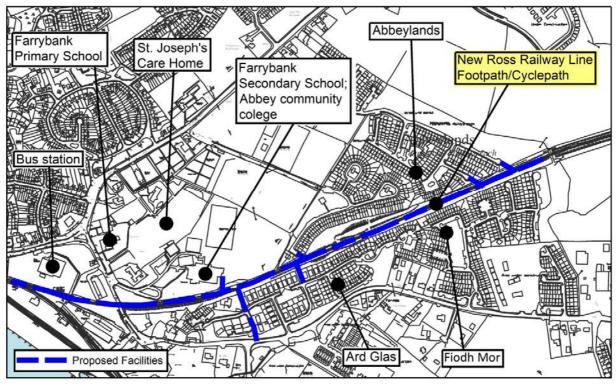
Measure 4: New Ross Railway Line Footpath/Cyclepath

The proposed footpath cyclepath on the New Ross Railway Line is a measure that is targeted at the population living in Abbeylands, north of the disused railway line, and in Ard Glas and Fiodh Mor, south of the railway. It has a number of advantages:

- safe and quick access to Ferrybank Secondary and Primary School and the Bus station.
- together with proposed measures 5, 6, 7 and 8, it creates a circular walking and cycling route very attractive for leisure walking and cycling trips
- existing severance of housing areas on opposite sides of the railway would be removed
- Active Travel would be given a significant advantage over car-based travel due to the reduced distances and times for walking /cycling relative to car travel.



New Ross Railway Line - Arial View



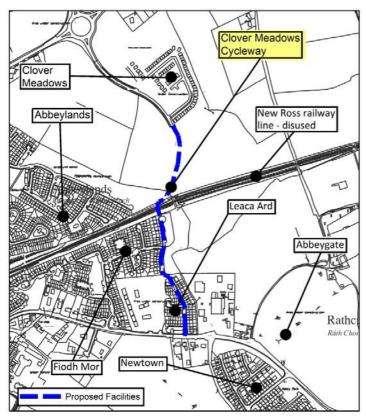
New Ross Railway Line - Map

Measure 5: Clover Meadows Footpath Cyclepath

The Clover Meadows Cycleway is an extension of Clover Avenue, running from the Aldi Roundabout on the R711 through the Clover Meadows residential estate across the disused New Ross railway line (proposed measure No. 4), along the edge of the Fiodh Mór residential area and through the Leaca Árd estate to the Abbey Road. The route provides a good connection between the residential areas it serves and provides a circular route attractive for leisure walking and cycling. It is also a convenient route to the Aldi Roundabout for population living in the Newtown and Abbeygate residential areas.



Clover Meadows Cycleway - Arial View



Clover Meadows Cycleway – Map



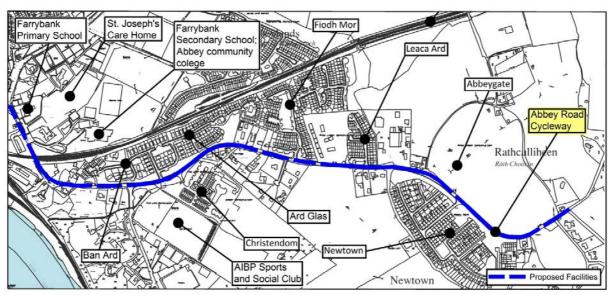
Clover Meadows Cycleway – Clover Avenue

Measure 6: Abbey Road Cycleway

This proposed cycleway is mostly an on-road facility, extending from the R711/Abbey Road junction to the urban speed limits at Gyles Quay Road (Measure 8). The section from Newtown residential estate to Gyles Quay Road is shared space as the width of the existing road is not sufficient for cyclelanes. The Abbey Road is the route to Ferrybank and Waterford residents of the Newtown, Abbeygate, Leaca Ard, Fiodh Mor, Christendom, Ard Glas and Ban Ard areas and should therefore be provided with facilities for pedestrians and cyclists to enable purposeful trips by active travel modes. In addition however the route would form part of a circular route linking to the Rosslare Railway line (disused) along the riverside which would form a very attractuive amenity route for the use of residents of those residential areas.



Abbey Road Cycleway - Arial View



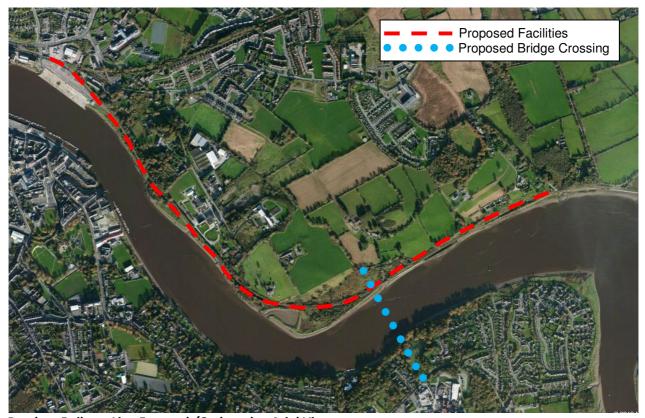
Abbey Road Cycleway - Map



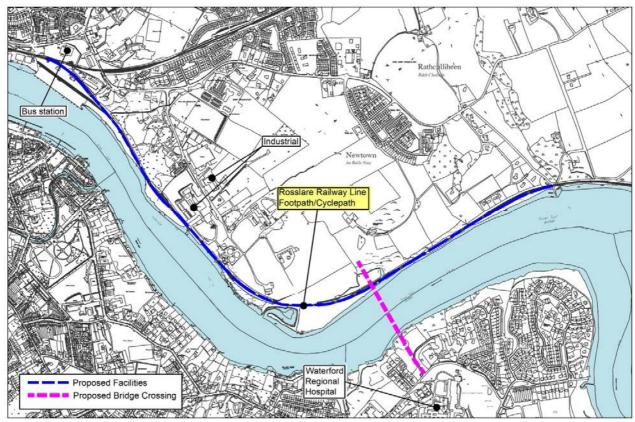
Abbey Road Cycleway – Newtown Glen

Measure 7: Rosslare Railway Line Footpath/Cyclepath

The proposed Rosslare Railway Line (disused) is a proposed footpath/cyclepath along the riverside running from the bus station in Ferrybank to the Gyles Quay Road to the east. The main purpose of this path would be health and leisure walking and cycling trips. In the future, this path could have a significant role in attracting Active Travel mode trips to work and school when the proposed new bridge over River Suir is built. The proposed location of the new Bridge over the Suir is shown in Map 8 'Development Objectives' of the 'Ferrybank-Belview Local Area Plan 2009' published by Kilkenny County Council and it is reproduced on the map hereunder.



Rosslare Railway Line Footpath/Cyclepath - Arial View



Rosslare Railway Line Footpath/Cyclepath - Map



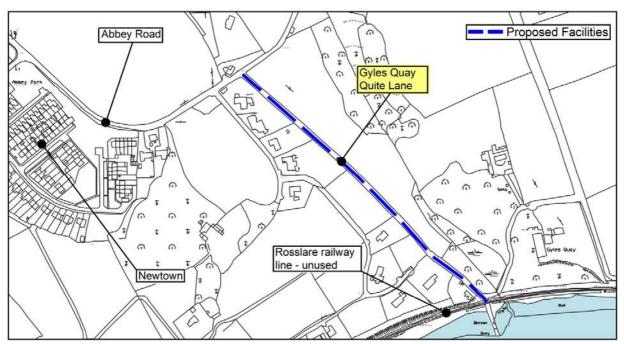
Rosslare Railway Line Footpath/Cyclepath – Unused railway line

Measure 8: Gyles Quay Quiet Lane

The proposed Gyles Quay Quiet Lane runs from Abbey Road to the Rosslare railway line (disused). At present this is a gravelled cul-de-sac lane. The target trips for this lane are health and leisure trips through a nice and quite area surrounded by trees. It would also be part of a circular route, as it connects to the Abbey Road proposed measure to the North and the Rosslare Railway Line proposed measure to the south.



Gyles Quay Quite Lane - Arial View



Gyles Quay Quiet Lane – Map



Gyles Quay Quiet Lane – Abbey Road

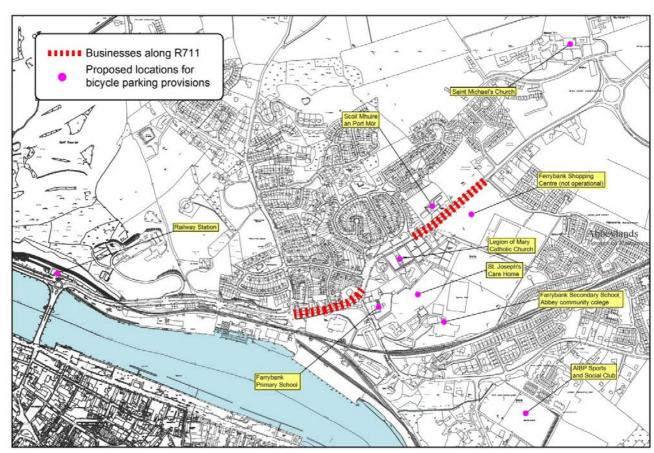
Measure 9: Cycle Parking

Due to the nature of cycling and the benefits it offers in terms of door to door transport, parking at the closest point to major destinations is a necessity. Although parking against railings and poles is possible, it is important to provide sufficient and attractive parking facilities in central and convenient locations.

Cycle parking facilities shall be conveniently located, secure, easy to use, adequately lit and well-signposted. Weather protected facilities should be considered where appropriate. In addition, parking should be placed within a populated, well-supervised area, and monitored by CCTV where possible.

The following locations would benefit by the provision of cycle parking:

- o Railway Station
- Scoil Mhire an Port Mór
- o Ferrybank Primary school
- Ferrybank Secondary School
- Shopping Centre
- o St. Joseph's care Home
- o AIBP Sports and Social Club
- o Legion of Mary Catholic Church
- o Saint Michael's Church
- On the R711 where businesses are located



Measure 9: Bicycle Parking - Map

Measure 10: Increased Permeability

Urban design, in which groups of buildings are fully permeated by an interconnected street network, allows for ease of access and a greater spread of travel movement. Where shorter routes are available to pedestrians and cyclists, but not to motorised vehicles, a strong incentive is provided for people to use active travel modes.

There are many locations within the area where the provision of short links for pedestrian and cyclist use between existing streets and roads would provide great benefit. In many cases individual housing estates were built without interlinkage. By examining a detailed map of the area, locations would be identified where the existing road network offers a poor route between trip ends.

The main issue leading to a lack of permeability between housing areas is the New Ross railway line (disused) and this would be dealt with by implementation of Measure 4. There are many examples of minor severance in other areas, and, for purposes of illustrating the issue, one example is now given: poor linkage between Oak Ridge and Árd Doire. The photographs show the problem: the route for pedestrians and cyclists from Oak Ridge to the shopping centre cannot be through Árd Doire (the shortest potential route) because of an omission of linkage. The route that must be followed is through The Willows, about 400m longer. This is a deterrent to active travel



Oak Ridge – Árd Doire linkage



Oak Ridge: Existing shortest walking route



Photo: Árd Doire - Wall between Oak Ridge and Árd Doire

Forming pedestrian and cycle connections at such locations would provide shorter and quicker routes for pedestrians and cyclists and would be a significant improvement on the use of the existing road network.

Proposed Marketing, Education and Policy Measures

Provision of infrastructure on its own will not lead to the targeted modal shift; behavioural change measures are also required in the form of marketing, education and policy measures.

Marketing and Education

The following typical measures are recommended:

- Designation of an Active Travel Co-ordinator.
- Sustainable Travel Ferrybank Website. The website would serve as an information portal, posting relevant information such as infrastructure plans, route maps, journey plans.
- Smarter Travel Map: a detailed map distributed to work places and educational institutions, etc.
- Personalised School and Workplace Travel Plans: The rollout of travel plans would be by the Coordinator in conjunction with the community.
- Travel Education for young users: a training park for young cyclists and initial training for Primary School students.
- Organised cycling days including distribution of accessories including high-visibility vests / T-shirts / rain coats / high-visibility rucksacks, water bottles and small promotional accessories, i.e. stickers, button badges, magnets etc.

Policy

Sustainable transport and land use should be well integrated. In particular, the following policies would have an important impact:

- Permeability in new residential areas.
- Review of parking policies with a view to facilitating active travel
- Improved connectivity through upgraded walking and cycling routes, greenways and upgraded junctions.

13. Cost of Proposals

Each proposal has been costed (2012 prices including VAT)

The proposals are divided into short term, medium term and long term, defined as follows:

- short term: within five years

- medium term: within the period 5 to 10 years

- long term: after 10 years

	Proposal	Cost	Implementation Timeframe
1.	Belmount (1.8km)	€600,000*	Long Term
2.	Fairways (1.0km)	€200,000	Short Term
3.	R711 Cycle Lane (1.1km)	€200,000	Short Term
4.	New Ross Railway Line (1.4km)	€320,000	Medium Term
5.	Clover Meadows (0.7km)	€200,000*	Medium Term
6.	Abbey Road (2.1km)	€150,000	Short Term
7.	Rosslare Railway line (3.1km)	€350,000	Long Term
8.	Qyles Quay (0.6km)	€30,000	Long Term
9.	Cycle Parking	€50,000	Short Term
10.	Increase Permeability	€100,000	Medium Term
To	otal	€2,200,000	

^{*} Land acquisition required for these measures and is included in the cost. It is assumed that other measures would not require land acquisition

Table 13.1 – Projected Costs of Measures

From the table the timeline for expenditure is as follows:

- €600,000 on works in the short term
- €620,000 on works in the medium term
- €980,000 on works in the long term

14. Evaluation Framework

The specific Terms and Conditions attached to Department of Transport, Tourism & Sport grant funding for National Cycle Network projects require that "all projects must include provision for automated counters on the route, with annual updates of the numbers of users on the route(s) provided to the Department, or a third party, as requested".

The roads and streets on which it is intended to construct cycling or pedestrian infrastructure should have automated counters fitted to determine usage by pedestrians and cyclists both prior to construction and following construction.

The counters would detect and count bicycles on both off-road bike tracks and on on-road bike lanes, and would detect pedestrians on footpaths

Additional monitoring that would be put in place is as follows:

- Counts (manual or automatic) of pedestrian and cycle trips at locations where counters may not be effective.
- School travel surveys, manually completed by the schools
- CSO statistics from the 5 year census returns; these provide independent verification of the changes in active travel over the period between the census dates, and the information is available for all areas of the town.