

Halcrow Group Limited

Forres, Kinloss and Findhorn Active Travel
Audit

Final Summary Report

December 2011



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HITRANS

Forres, Kinloss and Findhorn Active Travel Audit Final Summary Report December 2011

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1 Introduction

1.1 Background

1.1.1 Halcrow Group Ltd was commissioned by HITRANS, the Highlands and Islands Regional Transportation Partnership to:

- Develop a methodology to audit existing active travel infrastructure;
- Provide baseline information on existing infrastructure provision for active travel; and
- Recommend priority areas for future investment.

1.1.2 The overall aim is to assess where best to apply available funding in order to increase the potential for active travel and ideally to see an increase in the number of people choosing to walk or cycle.

1.1.3 In particular, the key purpose of the audits is to identify:

“A practical network of high quality routes suitable for cycling within each settlement that provides convenient and safe access to all major destinations”

and

“A network of routes for pedestrians focused upon railway stations, bus stations, ferry terminals, major employment areas, local shopping areas, leisure/recreation centres, hospitals and main trip generators.”

1.1.4 This document summarises the main findings of the methodology as applied to Forres, Kinloss and Findhorn.

2 Active Travel Methodology

2.1 What is the methodology?

2.1.1 Halcrow has developed a methodology to assess existing and proposed active travel infrastructure. This methodology is based on the following key parameters:

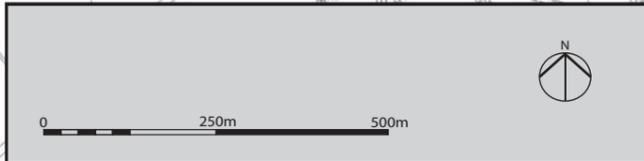
- A desktop study including demographics, travel to work patterns, public transport information and traffic accident data;
- Analysis of main trip generators/attractors;
- Consultation with the Local Authority and other interested parties;
- On site audits; and
- Application of a 'prioritisation filter'.

2.1.2 The prioritisation filter is an analysis tool to identify those corridors where there is the greatest potential for modal shift. The filter encompasses information from the desktop study such as demographic data, trip generators and attractors, planning proposals and the results of stakeholder consultation. The filter also assesses the 'implementability' of a route compared to its potential usage.

2.1.3 On site audits for walking are carried out utilising the Transport Research Laboratory (TRL) Pedestrian Environment Review System (PERS). For cycling, an Institution of Highways and Transportation (IHT) cycle audit is undertaken. Both systems audit the condition of existing facilities for pedestrians and cyclists to identify where proposed measures can be effectively targeted.

2.1.4 The outputs from the application of the methodology are:

- An Active Travel Prioritised Action Plan
- An Active Travel Master Plan



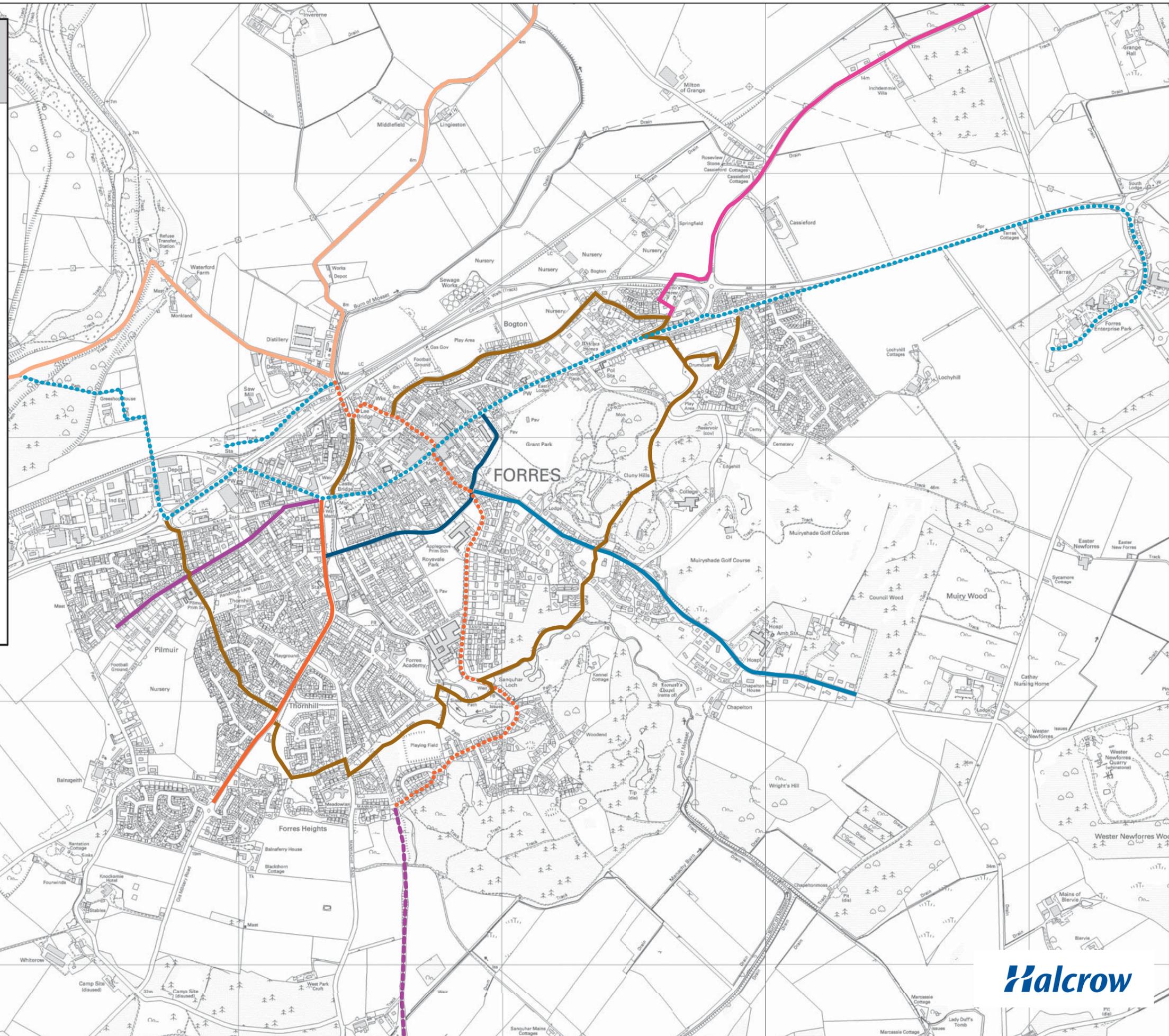
Forres Potential Active Travel Plan Network (Indicative)

Figure 2.1: Proposed Active Travel Network

Key:

- ⋯ FSN 1
- ⋯ FSN 2
- FSN 3
- FSN 4
- FSN 5
- FSN 6
- FSN Circular
- NCN 1
- Forres - Findhorn
- ⋯ Dava Way

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



2.1.5 The prioritised action plan identifies areas and potential interventions where there is the greatest potential to achieve modal shift or where there is the greatest need for infrastructure for pedestrians and cyclists. The master plan is a core network for pedestrians and cyclists that provide direct, convenient, safe, attractive and coherent links between journey origins and journey attractors. It should be noted that all the proposals and recommendations contained within the prioritised action plan and master plan will require further investigation and feasibility work.

2.1.6 Consultation also plays an integral role in the identification of routes for walking and cycling and also helps to pinpoint, at a very local level, the barriers to active travel. In Forres, Kinloss and Findhorn the following individuals and organisations were consulted:

- Moray Council: Access Officer, School Travel Officer, Planning Department
- Sustrans
- RAF Kinloss
- Forres Cycling Club
- Forres Area Forum
- Forres Community Council
- Forres Footpaths Trust
- Stuarts Bike Shop

3 Walking and Cycling in Forres, Kinloss and Findhorn

3.1 Overview of current conditions for active travel

3.1.1 Data from the 2011 census is not yet available but the three settlements of Forres, Kinloss and Findhorn have a combined population of 11,783 according to 2001 census data. Forres is the second largest settlement in Moray with a population of 8,967. Kinloss had a population of 1,931 - a large percentage of which would have been associated with the RAF base whose flying squadron has now been disbanded. It has been recently announced that the Ministry of Defence will relocate 930 personnel and family to Kinloss by summer 2012. Findhorn has the smallest population of the three settlements at 885 during the 2001 census.

3.1.2 The age structures of the settlements differ dramatically which may influence travel mode choices, likely journey motivators and the appropriate interventions which may prove effective in increasing active travel. The working age populations in all three settlements are similar to the regional statistics, while statistics for Forres under 16s and those of pensionable age are also broadly similar. Findhorn and Kinloss display different characteristics; Moray's under-16 population is around 20% whereas Findhorn's population comprises a smaller percentage of under-16's, at around 13%. However, Kinloss demonstrates a larger under-16 population at around 32%. The implications of this are that the percentage population of 65 and over is slightly higher in Findhorn although dramatically lower in Kinloss. Moray's 65 and over population is around 16%, 18% in Findhorn but only 2% in Kinloss.

3.1.3 Table 3-1 below show comparisons of how people travel to work in Forres, Kinloss and Findhorn compared to the region and the whole of Scotland.

Table 3-1: Comparison of mode of transport for journeys to work and study – regional and national comparison

Mode of transport	Forres	Kinloss	Findhorn	Moray	Scotland
% taking bus	4	8	19	10	16.5
% car and passenger	56	40 47 54	53		
% cycle	7	26	13	5	1.3
% walk	29	23 15 26	23		

(Data supplied by SCROL)

3.1.4 The data from the 2001 Census shows that:

- There are high levels of cycling in each of the three settlements, particularly Kinloss – at one quarter of journeys;
- Active travel accounts for almost half of all journeys in Kinloss and over one third of journeys in Forres;
- Slightly lower levels of active travel in Findhorn are not a result of more car journeys but a greater number of journeys carried out by bus;
- Bus use in Forres and Kinloss is well below the national level;

- Car use in Forres is slightly higher than the national level; and
- Kinloss and Findhorn demonstrate levels of car use lower than the rest of Moray or Scotland

3.1.5 Census data has also been used to provide a snapshot of the distances travelled to work and study in Forres, Kinloss and Findhorn and are shown below in Figure 3-1.

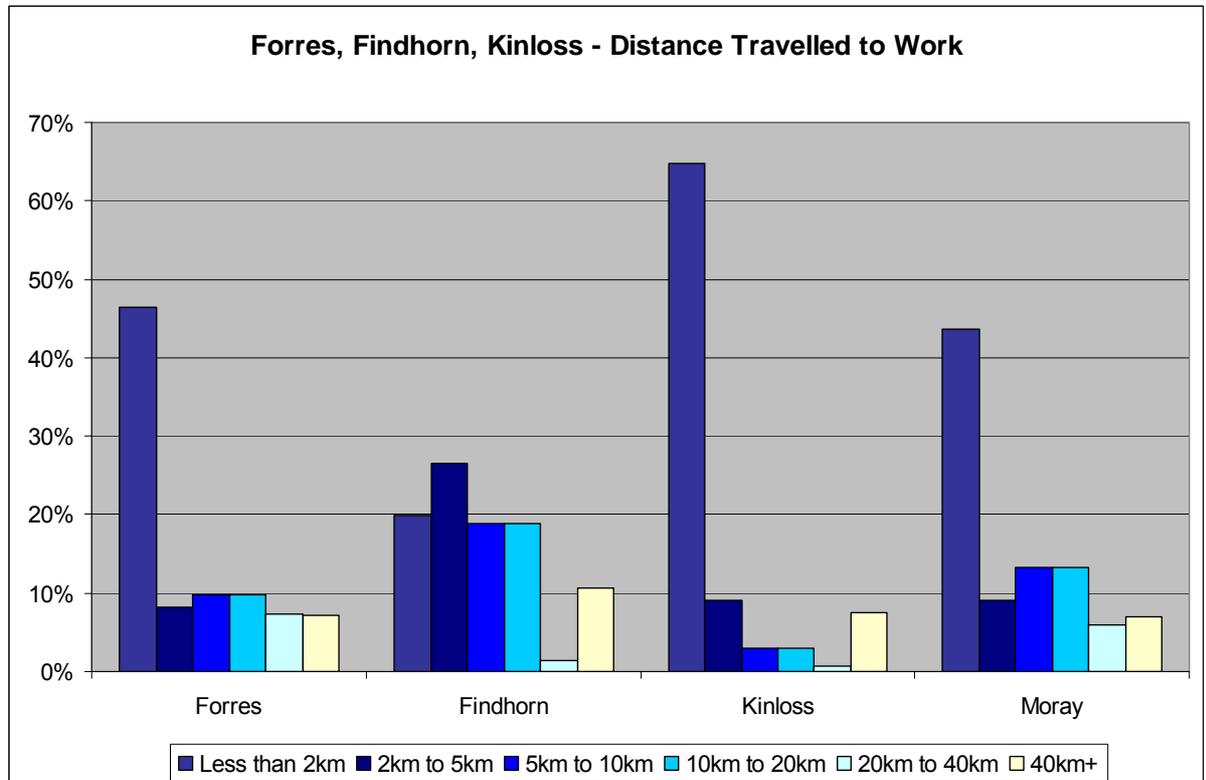


Figure 3-1: Distance travelled to work or study

(Data supplied by SCROL)

3.1.6 As expected, the settlement with the largest percentage of shorter journeys to work is Kinloss. This can be explained by the RAF base and associated barracks in the town. There is still scope to increase the active travel modal share however, as journeys of less than 5km are deemed acceptable walking and cycling distances. Whilst Kinloss already demonstrates high levels of active travel, at 49%, the percentage of journeys less than 5km was 74% in the 2001 census. Forres travel patterns are very similar to the regional picture with 54% of journeys less than 5km and marginally fewer longer trips. Findhorn on the other hand demonstrates a lower percentage of shorter trips while nearly 40% of journeys are between 5km and 20km. This is reflective of the relatively few opportunities for employment or study in Findhorn and the remote nature of the settlement.

3.1.7 Whilst Census data is now ten years old, it does serve to provide comparable data with other areas and it remains the best data available, prior to the publication of results from the census undertaken in 2011.

3.2 Study Area

3.2.1 The towns of Forres, Kinloss and Findhorn are located on the eastern periphery of the Moray administrative area in the north east of Scotland. The towns are virtually equidistant between Nairn and Elgin, two hubs of retail and employment, the latter of which being the administrative centre for the region. Forres, Findhorn and Kinloss lie close to the A96 trunk road which joins Inverness (which is about 26 miles west of Forres)

and Aberdeen which is about 75 miles east of Forres. The Aberdeen to Inverness railway line also serves Forres, providing frequent accessible links within the area and beyond.

- 3.2.2 Forres, Kinloss and Findhorn are connected by the B9011, Kinloss being 6km north of Forres and Findhorn a further 4.5km north from there. The road is a busy national speed limit route with provision for walking and cycling on a shared footway/cycleway adjacent to the carriageway. Alternative routes from Forres to Kinloss are possible, the National Cycle Network National Route 1 (Figure 3-2) links the towns via quiet back roads taking in Benromach Distillery via Whiteinch and joining the B9011 to the west of Kinloss.

i) Forres

- 3.2.3 Built on the sections of flat ground between the River Findhorn and woods of Cluny and Sanquhar Hills (Figure 3-3), Forres' position as a strategic settlement in the area has been long established, recorded as a Royal Burgh in the 12th Century under the rule of King David I. The area is rich in history and geographical interests with a diverse history including influences from Picts, Scots and Norse¹. Modern points of interest include the award winning floral sculptures of Forres in Bloom (Figure 3-4), Sueno's Stone (Figure 3-5), a 6m Pictish carved stone agreed to date from between the 9th and 10th centuries. The stone is displayed in an armoured glass structure near to the pedestrian/cycle bridge over the A96 on what was the old road between Forres and Findhorn.
- 3.2.4 In an attempt to mitigate growing traffic levels through the High Street of Forres, the late 1980s saw the development of the Forres Bypass (Figure 3-6), part of the A96. Although the bypass has removed through trips from the town centre, High Street remains a busy road with buses and cars accessing the retail areas (Figure 3-7). The large Tesco superstore relocated from the Bogton area of the town centre (Figure 3-8) to the western end of Nairn Road near the A96 roundabout. There is still a large Co-op on High Street although it is dwarfed in comparison to the new Tesco store. Other than removing through trips from the town centre, the Forres Bypass has also severed direct pedestrian links with Forres Railway Station (Figure 3-9) and the expanding Greshop Industrial Estate to the north.
- 3.2.5 There is abundant car parking in the town centre with eight off road car parks located within a couple of minutes walk of High Street. This provision allows drivers to visit the town centre without the need for much consideration of other modes as the convenience offered is very appealing. There is significant provision of on road parking on High Street itself which provides the opportunity for drivers to park directly outside shops or cafes they may be visiting, a notion which brings unnecessary traffic in to the retail area. The nature of the settlement results in very few shops outwith the central retail area, meaning that the High Street plays a pivotal role in the community.
- 3.2.6 Forres has seen a notable expansion in housing provision over the past decades with large residential areas being developed on the south western edge of the town. These residential areas have, on the whole, provided excellent facilities for walking and cycling with many shared footway/cycleways on the main routes and off road links between cul-de-sacs, through recreational spaces and linking neighbouring housing estates. As stated, there are few other retail areas within Forres outwith the High Street and it is therefore essential that close attention is paid to providing direct pedestrian and cyclist links between residences and the commercial hub.

ii) Kinloss

- 3.2.7 The area has had an association with the Royal Air Force since 1938, when, with World War II looming, the need for a pilot training school was addressed. On April 1st, 1939, following the requisition of land from various local farms and estates, RAF Kinloss opened, home to 14 Flying Training School and one year later, 19 Operational Training Unit, which trained bomber crews for the inevitable offensive. Since then, the base has

¹ <http://www.thisismoray.com/>

changed operational duties several times, recently a long association with the Nimrod aircraft, although integration with the local communities has remained as important as when the first pilots began using local hotels during World War II as the food on offer was much better than the rations provided.

- 3.2.8 The RAF base has played a pivotal role in the success of the local economy for decades and many service personnel and families have settled in and around Kinloss even after active service has been completed. Along with nearby RAF Lossiemouth, the economy and population of Moray have been closely linked with the successes of the bases. A report commissioned by Highlands and Islands Enterprise from August 2010 concluded that RAF Kinloss contributed £68m to the local economy and supported 2,341 full time jobs².
- 3.2.9 As part of the UK government's defence review in 2010, the decision to disband the flying squadron of RAF Kinloss was taken. The full impact of the decision is not immediately measurable and may yet be offset by plans to relocate 930 army personnel and relatives to barracks in Kinloss in the summer of 2012³. This will provide a new challenge for promoting active travel in the area with a population that may not be as familiar with travel choice options as those that have lived in the area for years.
- 3.2.10 The short nature of trips from residences to RAF Kinloss and the close knit military community should assist in developing a strategy to promote active travel to new residents. There are a couple of shops and pubs in Kinloss which must be accessible to pedestrians and cyclists to ensure short trips do not suffer from obstruction or cause residents to choose longer car based trips to alternative areas.

iii) Findhorn

- 3.2.11 The small coastal community of Findhorn is very compact which results in short local trips. These trips and those to Kinloss and Forres are comfortably within the reach of active travel modes. Short cuts through housing areas are well used by pedestrians although the narrow and often un-maintained nature of these makes them less accessible to cyclists or disabled users. There are cafes, a shop and a post office in the village which act as a hub for locals and visitors. There are several hotels and pubs which attract visitors at all times of year. The nearby beach is a very important attraction bringing in people from around the region either for short walks or as part of the Moray Coast Trail. The distance between Findhorn and major services inevitably results in longer journeys which may not be accessible using active travel modes to all age and ability ranges. The one way system and the high levels of on-street parking in Findhorn create barriers to walking and cycling, something which could be addressed to enhance the vibrancy of the village centre.
- 3.2.12 There are four primary schools in the study area, three in Forres and one in Kinloss. Of the schools in Forres, the largest is Applegrove with 296 pupils, followed by Anderson's and Pilmuir with 201 and 157 respectively. Kinloss Primary serves both Kinloss and Findhorn, with a pupil roll of 141, making it the smallest of the four primaries. Forres Academy on Sanquhar Road is the secondary school for the area and takes in pupils from the four primary schools mentioned as well as those from Dunphail, Dyke and Dallas. Through analysis of school travel plans, it was evident that there were a high proportion of children driven to school (e.g. Applegrove 43%). School travel plan aims included reducing congestion at school gates and increasing the number of pupils who walked or cycled to school. The rural characteristics of the Forres Academy catchment area mean that not all pupils are within comfortable walking or cycling distance and will rely on school transport. In an attempt to maximise active travel, it is essential that

² <http://www.hie.co.uk/common/handlers/download-document.ashx?id=b54c1a27-0085-43a5-8651-87fe6b41d0f5>

³

<http://www.mod.uk/DefenceInternet/DefenceNews/PressCentre/PressReleases/1672011ColdWarEraNewsAnEndAsArmyBeginsReturnFromGermany.htm>

children are targeted early in their school life to make walking, cycling and scooting a natural choice.



Figure 3-2: NCN signs near Benromach Distillery



Figure 3-3: Cluny Hill



Figure 3-4: Famous floral displays of Forres



Figure 3-5: Sueno's Stone in Forres



Figure 3-6: Cyclist on the Forres Bypass



Figure 3-7: Typical traffic on High Street



Figure 3-8: Derelict former Tesco site in Bogton area of town centre



Figure 3-9: Cyclist crossing A96 from Forres Railway Station toward town

3.3 Existing provision for cycling

- 3.3.1 The Sustrans National Cycle Network National Route 1 runs in close proximity to Forres and passes through Kinloss. The route links the communities of Kintessack and Dyke to the west with the hub town of Forres. The route passes through Broom of Moy and across the River Findhorn before skirting the northern edge of Forres, passing the Benromach Distillery and along quiet roads where it then joins the B9011 west of Kinloss. From here, the route passes through Kinloss partly off road then returns to the B9089 and beyond the Abbey ruins south and west towards Elgin. The route is well signed at key intersects and uses quiet roads on all sections other than at the River Findhorn and a short stretch at the main Kinloss junction where off road and toucan facilities are provided (Figure 3-18).
- 3.3.2 The key issue in this area is that the National Cycle Route doesn't particularly serve the communities of Forres, Kinloss and Findhorn, only passing close by. It would be beneficial to the towns if those using the NCN were encouraged to visit local communities, increasing the likelihood of touring cyclists stopping to visit local businesses or attractions. The villages surrounding Forres and Kinloss would also benefit from the NCN providing links to the town centres where they may visit shops, cafes and other businesses. If direct links were provided, there may be more incentive to use active travel for their journeys rather than using the car.
- 3.3.3 Findhorn and Kinloss are linked to Forres via the Forres – Findhorn Cycleway (Figure 3-10), a shared footway/cycleway alongside the B9011 and bridge over the A96 (Figure 3-16). The cycleway was opened in 2005 and provides the opportunity to take a direct route between the settlements without having to interact with traffic. There are a couple of areas on the route where the road must be crossed and there are obstructions on the shared cycleway which could be removed.
- 3.3.4 As previously discussed, High Street acts as a commercial hub for the region and it is important that provision for cycling is considered. Currently, there is a short section of cycle lane leading to and from the roundabout at the west of Bridge Street (Figure 3-11) and on road cycle graphics along High Street to the east of the centre. However, when cyclists reach High Street, there is no specific provision and traffic levels present a physical and perceived barrier to cyclists (Figure 3-14, Figure 3-15).
- 3.3.5 The area surrounding Forres is generally flat and has many quiet country roads, providing the perfect conditions for road cycling. An active cycling club operates in Forres (Figure 3-12) with a large and varied membership including locals and those employed at RAF

Kinloss. Such an active club is evidence of the acceptance of cycling and the excellent routes in the region.

- 3.3.6 Within new housing in Forres, there has been consideration of walking and cycling and on many of the key routes, shared footways have been built providing an option for cyclists to access and egress without interacting with traffic (Figure 3-13). A toucan crossing has been installed (Figure 3-17) on the A940 Granttown-on-Spey Road linking two new housing areas together across one of the busier roads in Forres. The one way system in Findhorn provides cycle access (Figure 3-19) although there is currently no two-way cycling permitted.



Figure 3-10: Forres Findhorn Cycleway



Figure 3-11: Short section of cycle lane on Bridge Street leading to High Street which ends before reaching any trip generators



Figure 3-12: Forres Cycling Club



Figure 3-13: New housing with shared footway on main route



Figure 3-14: Cyclist passing through commercial centre of High Street



Figure 3-15: Cyclists on eastern section of High Street, car giving adequate space while passing



Figure 3-16: Pedestrian/cycle bridge over A96



Figure 3-17: Toucan crossing linking two separate housing areas



Figure 3-18: Toucan crossing in Kinloss



Figure 3-19: Cycle access to the 20mph one way system in Findhorn

3.4 Existing cycle parking

3.4.1 Despite the high levels of cycle use in the towns, there is limited cycle parking provided at key destinations. Forres Railway Station provides both cycle lockers (Figure 3-20) at the front of the station and Sheffield Racks at the rear on the platform (Figure 3-21). During one site audits, the lockers were not in use although the Sheffield Racks were used but had remaining capacity.

3.4.2 Forres town centre attracts high numbers of cyclists although there is limited cycle parking provision. There are five new racks (Figure 3-22) in place which were observed in use throughout the audits. The parking was never at capacity although there were high levels of casual cycle parking along High Street with bikes leant against shop or café frontages (Figure 3-23). Although this may be convenient for cyclists, the bikes can obstruct the pavement and where there are high levels of on road car parking, pedestrians can feel hemmed in, reducing the appeal of walking in town.

3.4.3 Notable locations which may benefit from cycle parking are the trip generators in Findhorn and Kinloss as well as more formal cycle parking opportunities on High Street, reducing the obstruction caused by existing casual cycle parking.



Figure 3-20: Cycle Lockers at Forres Railway Station



Figure 3-21: Sheffield Racks on the platform at Forres Railway Station



Figure 3-22: Newly installed cycle parking on Forres High Street, replacing the outdated wheel hoops previously in place



Figure 3-23: Lack of formal cycle parking results in high levels of casual parking which can cause obstruction

3.5 Traffic flow and accident data

- 3.5.1 The available pedestrian/cyclist accident data for the settlements illustrate a few hot spots which would benefit from mitigation measures. As can be seen from the Forres cycle accident data, most incidents occurred at junctions with a high percentage on the A940 Grantown-on-Spey road. Two accidents took place at the Bridge Street/A940 roundabout, typically a junction design that demonstrates higher cyclist accident rates than other junction types.
- 3.5.2 The emerging pattern from pedestrian accident data is the frequency of accidents on the main east/west route through High Street. This is not unexpected as pedestrian/vehicle interaction is at it's highest in this area, specifically the commercial hub between the Post Office and Anderson's Primary. This suggests that the conflict between pedestrians and vehicles in this area is at a critical level and remedial work should be considered as a priority.

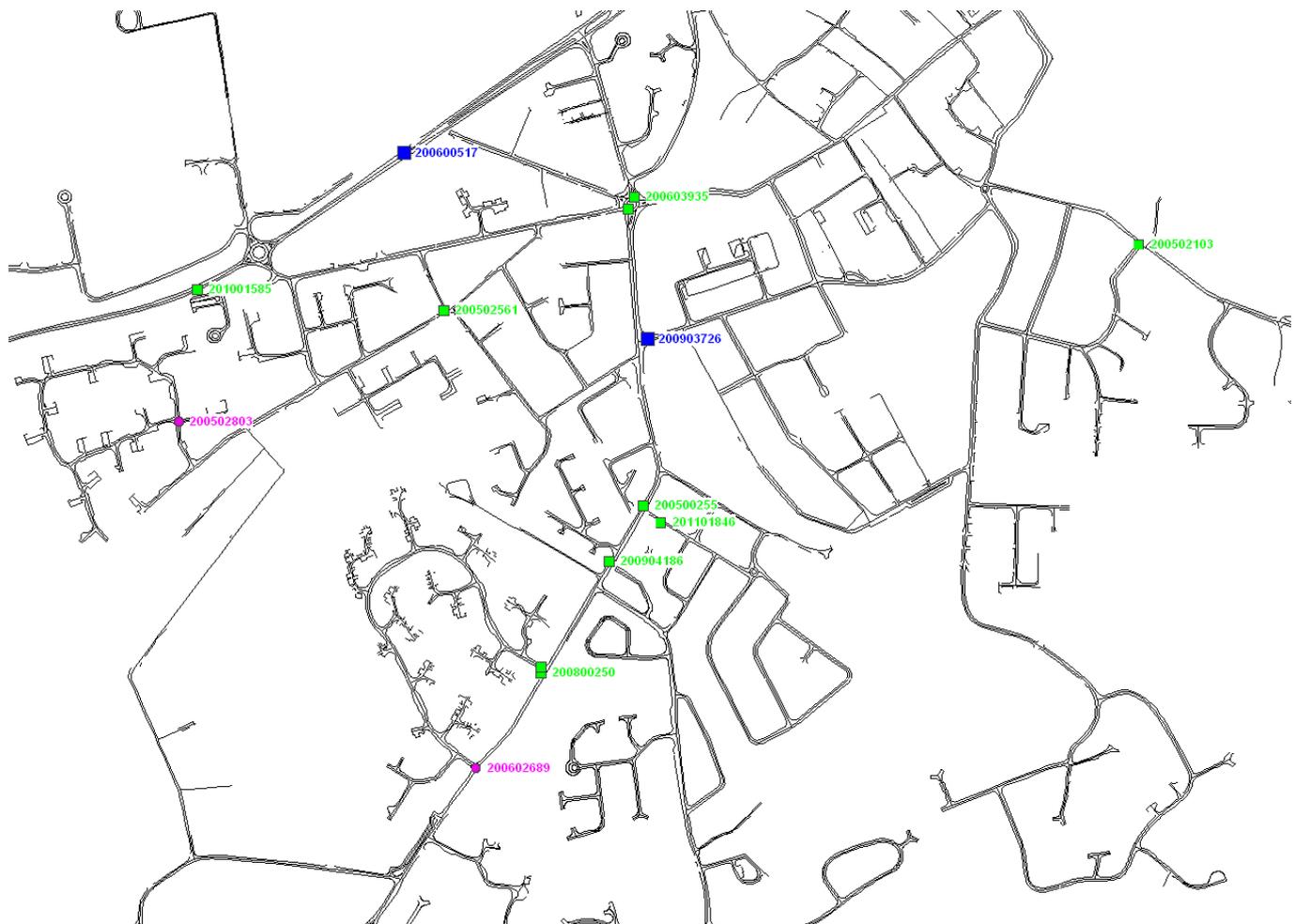


Figure 3-24: Forres Cycle Accident Data 2005-2010

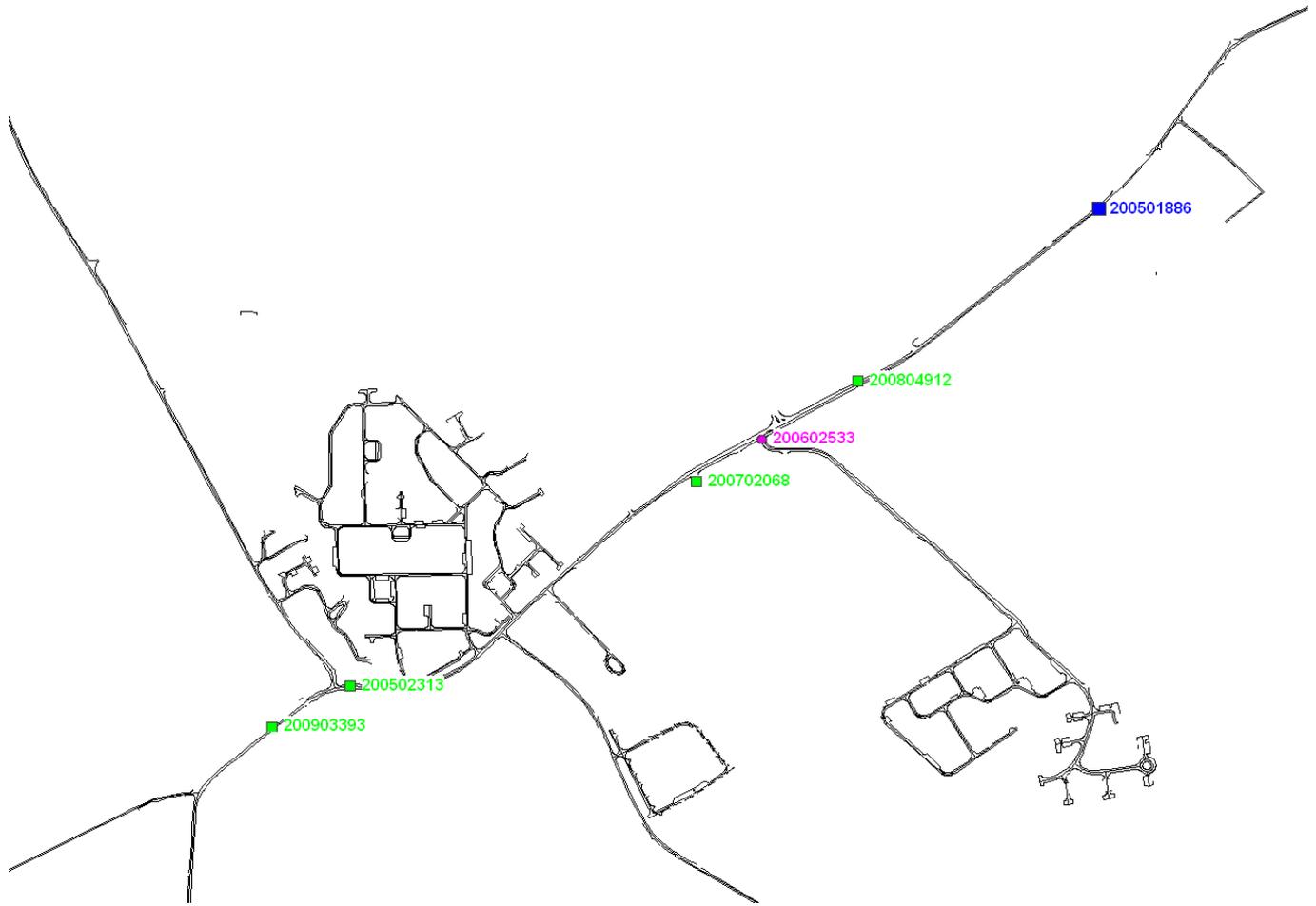


Figure 3-25: Kinloss/Findhorn Cycle Accident Data 2005-2010



Figure 3-26: Forres Pedestrian Accident Data 2005-2010

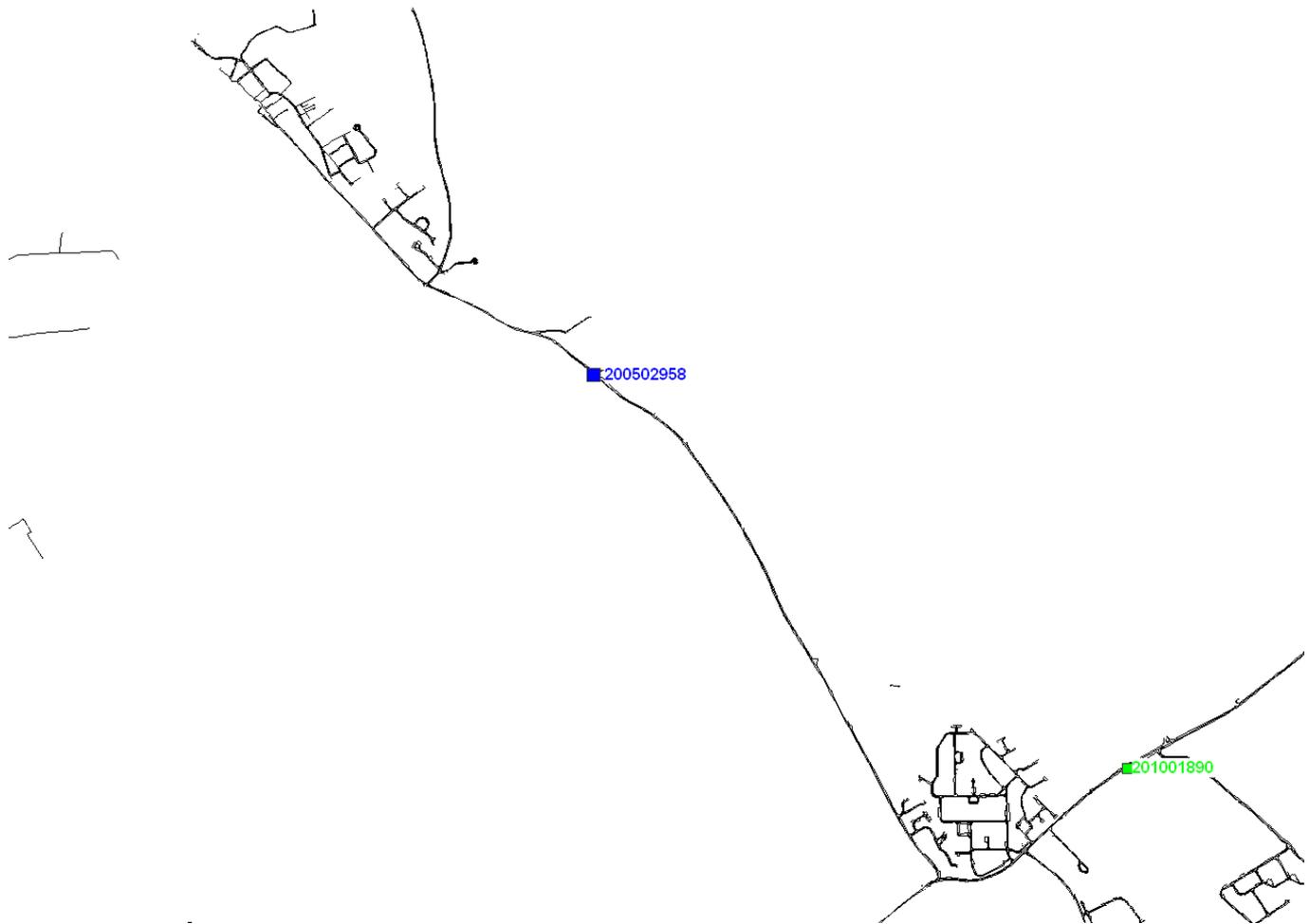


Figure 3-27: Kinloss/Findhorn Pedestrian Accident Data 2005-2010

3.6 Local Transport Strategy

3.6.1 Moray Council published a Draft Local Transport Strategy (LTS) in April 2010, representing an update from the 2001 LTS, the objectives for Active Travel included:

- K1: Support and enable economic development through a sustainable transport infrastructure;
- K2: Promote safer, inclusive and affordable travel for all;
- K5: Increase sustainable travel choices to promote travel behaviour change and reduce the need for car use and the environmental impact associated with transport and health;
- S8: Encourage less car dependent forms of transport and where appropriate encourage road traffic reduction, walking, cycling and other active travel initiatives;
- S9: Work with others to improve transport infrastructure related to recreation and tourism; and
- S10: Support access to the countryside and well being initiatives.

- 3.6.2 Although there were no specific schemes detailed for the study area, the development of active travel routes in Elgin under the Urban Freedom project are encouraging. This strategy of a core network is applicable to all large settlements in the region and should be implemented where feasible.
- 3.6.3 Budgets for some transport activities within Moray Council have been static for a number of years, resulting in an effective budget cut year-on-year. The current financial climate that is affecting all local authorities in Scotland will likely result in a further reduction for transport budgets within Moray⁴. The HITRANS Regional Transport Strategy (RTS) identified active travel as a key theme across the region. Following publication of the RTS, HITRANS partly funded Active Travel Audits in various settlements including Elgin. The completed Elgin Active Travel Audit was utilised to develop a revised bid for funding from the European Regional Development Fund (ERDF) under the banner of “Urban Freedom”, which was successful in April 2009. Urban Freedom is a two year, £1M sustainable travel town project within Elgin that is co-funded by the ERDF and The Moray Council, supported by Cycling Scotland, HITRANS and Sustrans.

3.7 Moray Local Plan

- 3.7.1 Moray Council published a Local Plan in 2008, the objectives for **Forres** (Figure 3-28) included:
- Need to identify sites for 550 new houses;
 - To safeguard the high quality green spaces in the town;
 - To identify 10 hectares of land for general industrial/commercial uses and support the Towns Strategic Business Park;
 - To protect the outstanding Conservation status of the town centre;
 - To enhance the appearance of the town from the A96 and in particular the approach from the west;
 - To exercise the precautionary principle on land liable to flood;
 - To identify a search area for long term housing supply; and
 - To support the town centres’ vitality.
- 3.7.2 The objectives for **Findhorn** included:
- Need to balance the high quality environment of Findhorn with the pressure for further development;
 - To maintain the distinctive characteristics of the village, namely the original Seatown, holiday attractions of the beach area, dunes, caravan site, Local Nature Reserve, residences at the south end and the Park Ecovillage; and
 - To ensure that any new development does not compromise the specific features of the village, namely, its open spaces (including public spaces between houses), woodlands, footpaths, Bay foreshore and its enclosure by gorse and sand dune areas.
- 3.7.3 The objectives for **Kinloss** included:
- To promote the separate small scale development of the village outwith the Ministry of Defence operational land at the RAF base; and
 - To facilitate Ministry of Defence development requirements within its defined operational land.
- 3.7.4 The objectives illustrate the desire for major development to be considered in Forres with two sites for development identified, providing space for 275 houses at the eastern edge

⁴ <http://www.moray.gov.uk/downloads/file64607.pdf>

of the settlement in Ferrylea, a further 210 designated houses over 12 hectares to the south at Lochy Hill and a long term desire for housing on a further 18 hectares at Lochy Hill. It is therefore crucial that these developments include active travel routes to ensure convenient, direct options for walking and cycling to the town centre.

- 3.7.5 Current plans exist for a new retail development on the north of Forres, over the disused gas works and existing football stadium. These plans include a large supermarket and other retail units with a roundabout access point from the A96, adjacent to the level crossing. This may draw some business from High Street and with a large car park as part of the design, it is essential that proposed pedestrian access points to the south of the site are prioritised, linking with the core routes in the proposed Active Travel Network.

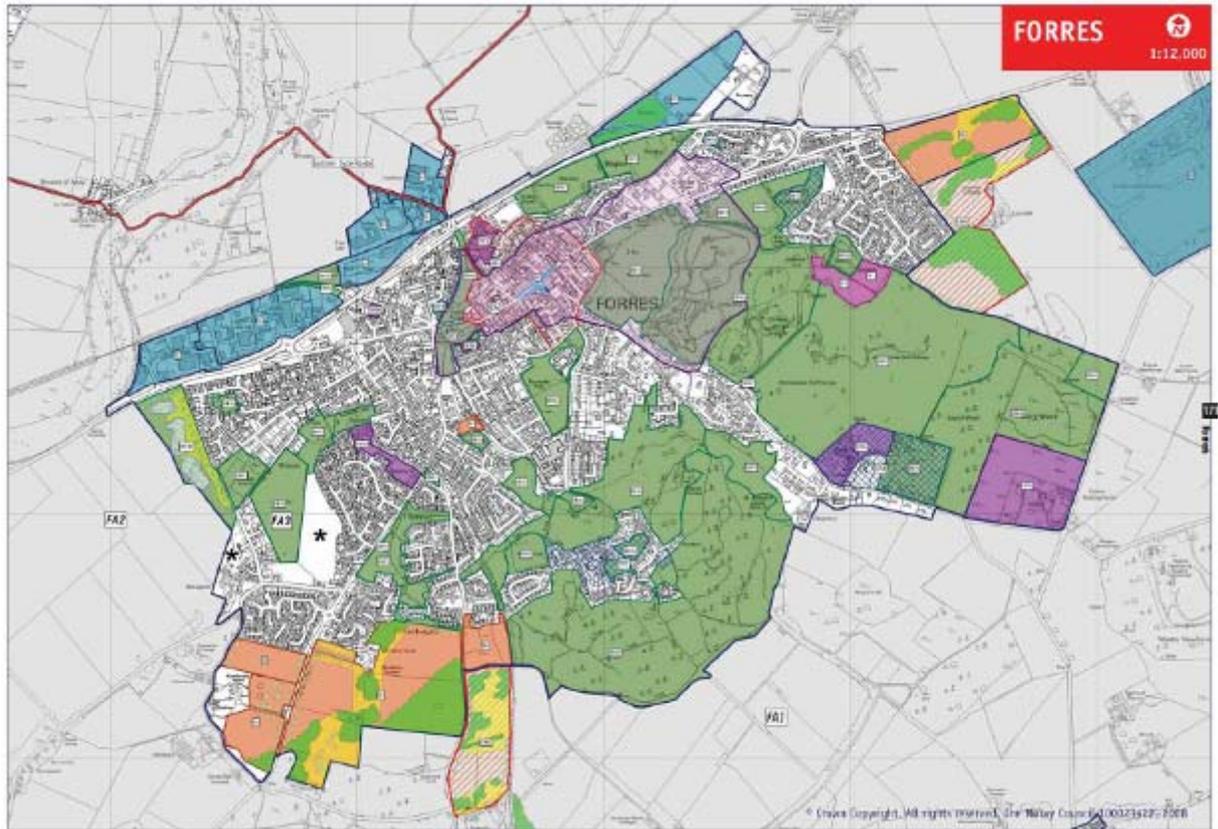


Figure 3-28: Forres Local Plan Map ⁵

⁵ www.moray.gov.uk/moray_standard/page_57742.html

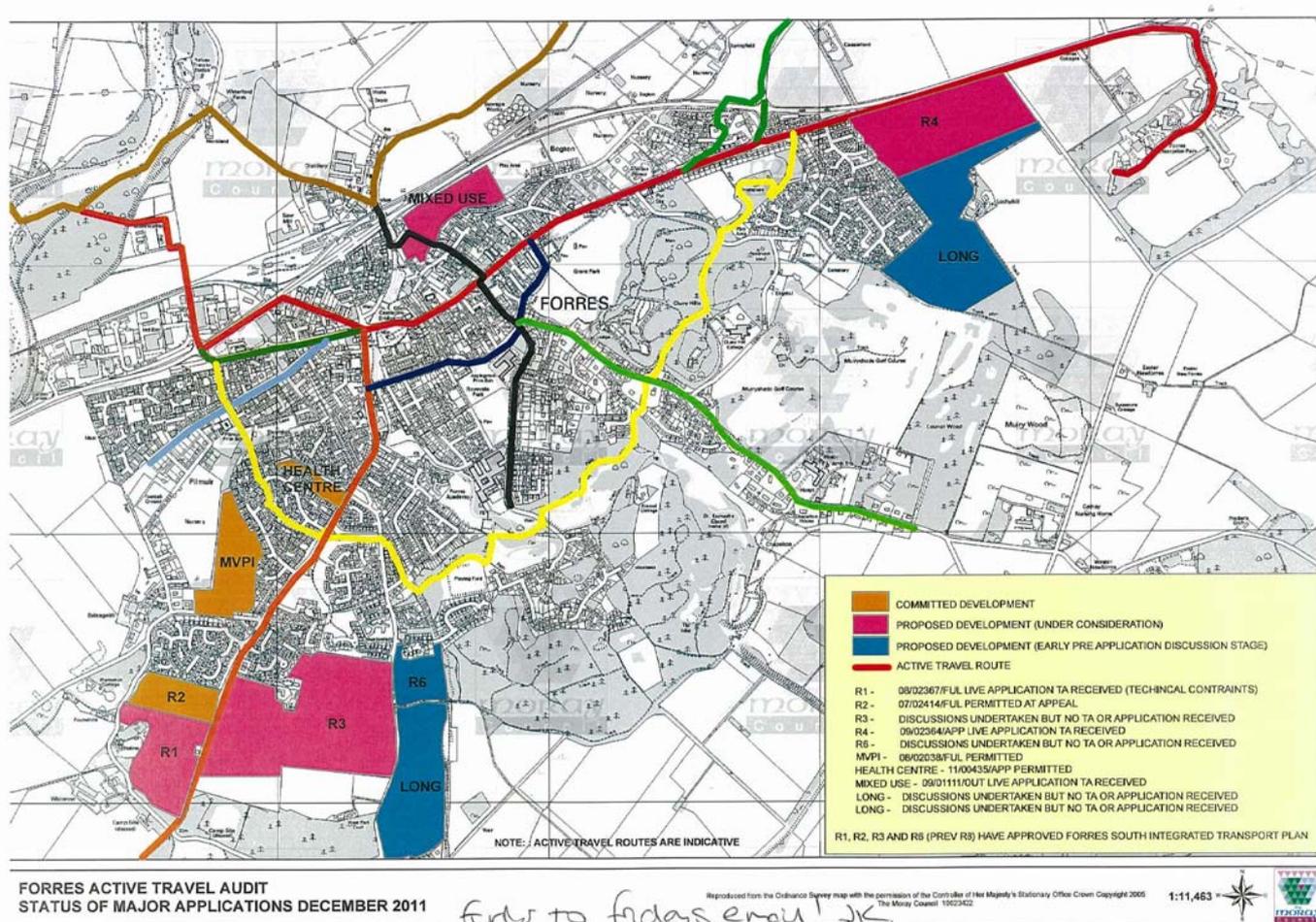


Figure 3-29: Status of major applications in Forres ⁶

3.8 Moray Structure Plan

- 3.8.1 The Moray Structure Plan states that, “It is vital that Forres is not isolated within the region and funds continue to support developments and growth of the town”. From the Moray Structure Plan, it is made clear that Elgin is the main commercial and administrative centre within Moray. It is suggested that in order to attract new development and potential inward investment it will be necessary to harness the advantages that Elgin can give to the area.
- 3.8.2 Further within the Moray Structure Plan, it states that as the settlements outwith Elgin do not offer as much potential, any alternative to this approach is likely to be ineffective since development will not be diverted to areas of weaker demand. Forres will play an important, but secondary role in providing services and development opportunities for the area. Whilst seen as secondary, Forres, Buckie, Keith and Lossiemouth support Elgin and have their own catchment and provide an important role in retail, commercial and leisure provision. These centres will also act as focal points for development and will accommodate significant levels of new development.
- 3.8.3 Moray 2020, the Local Economic Forum Development Strategy, sets out a 56 point Action Plan to strengthen the economy of Moray, from business assistance to employment training, research and e-business. It identifies particular priorities to address the supply of industrial land and to develop the next phase of the Enterprise Park at

⁶ Working Moray council draft

Forres. Key supporting measures are identified and include the need to upgrade the area's transport infrastructure.

- 3.8.4 The other important economic area in Forres is the Greshop Industrial Estate. All land at the main site at Greshop is now developed or under offer. Other sites are difficult to let or not particularly attractive as development sites (e.g. railway marshalling yards). In addition, there may be some impact on existing land and property by the Flood Alleviation Scheme for the River Findhorn.
- 3.8.5 This effectively means that provision falls below the current target in the Local Plan, and there is a shortage of general industrial land. Therefore, to provide flexibility and cater for more than just the average annual take up, the Moray Structure Plan proposes that a further 5-10 hectares be identified to 2012 and beyond. The Forres Enterprise Park will continue to be promoted as a prestigious location for high amenity uses in the area within a regional and national market.

3.9 Core Paths Planning

- 3.9.1 Production of Core Paths plans are a mandatory requirement for every Local Authority. Moray Council have recently adopted their Core Paths documentation⁷ which includes an extensive network of paths and tracks. Alongside the adopted Core Paths, Moray Council has, through public consultation exercises, highlighted the routes which are considered to be Aspirational Core Paths.
- 3.9.2 The Core Paths taken forward in the Adopted Plan are a mixture of public roads/roadside paths and off road paths. The general picture in Forres is that of routes around the periphery of the town centre, links to other settlements and leisure paths in Grant Park, Sanquhar Woods and the River Findhorn. Other than where the adopted Core Paths link through the west side of Findhorn, links through the heart of the communities in Kinloss and Forres remain an aspiration (Figure 3-30, Figure 3-31, Figure 3-32 refer).

⁷ http://www.moray.gov.uk/moray_news/news_75776.html

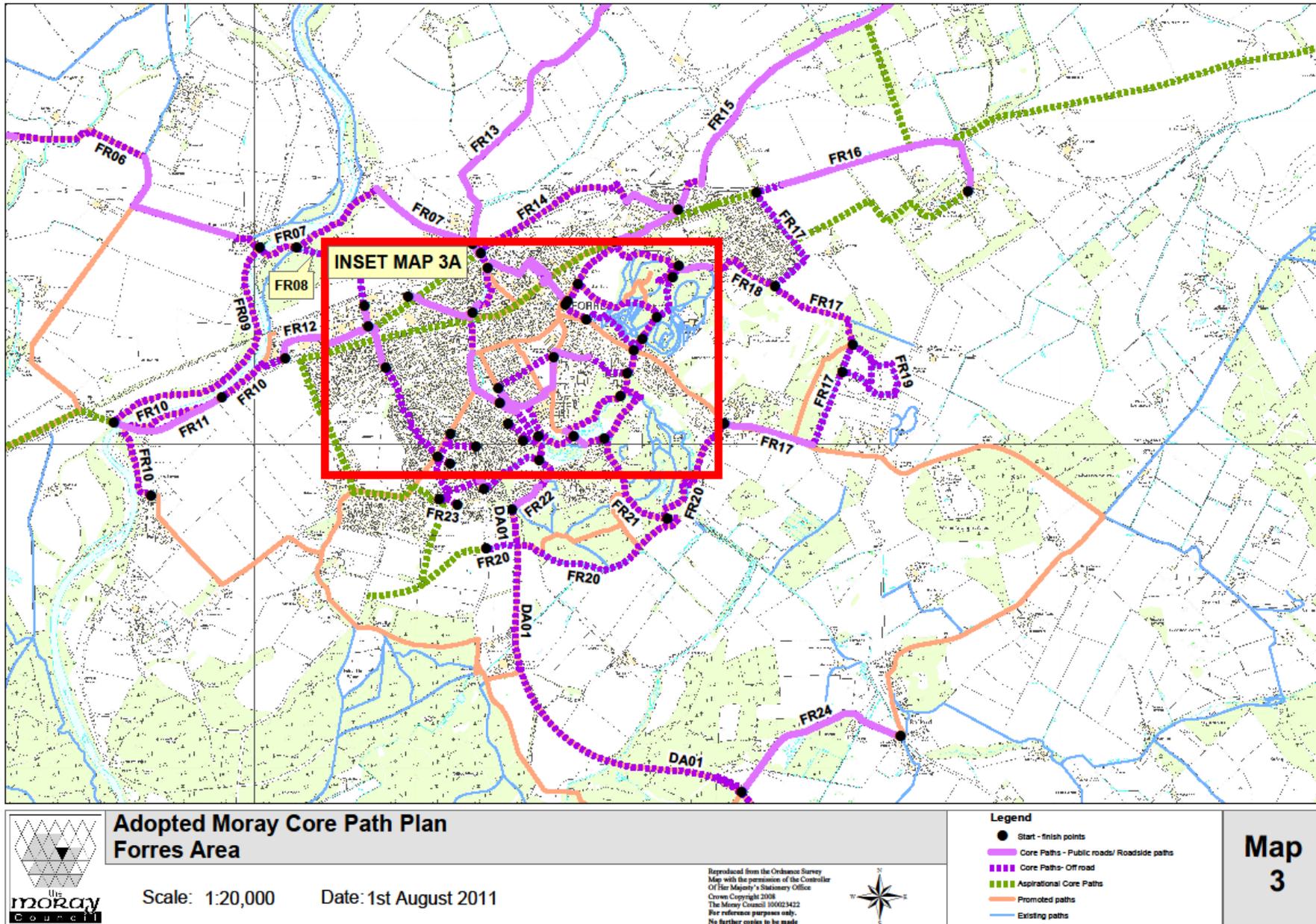
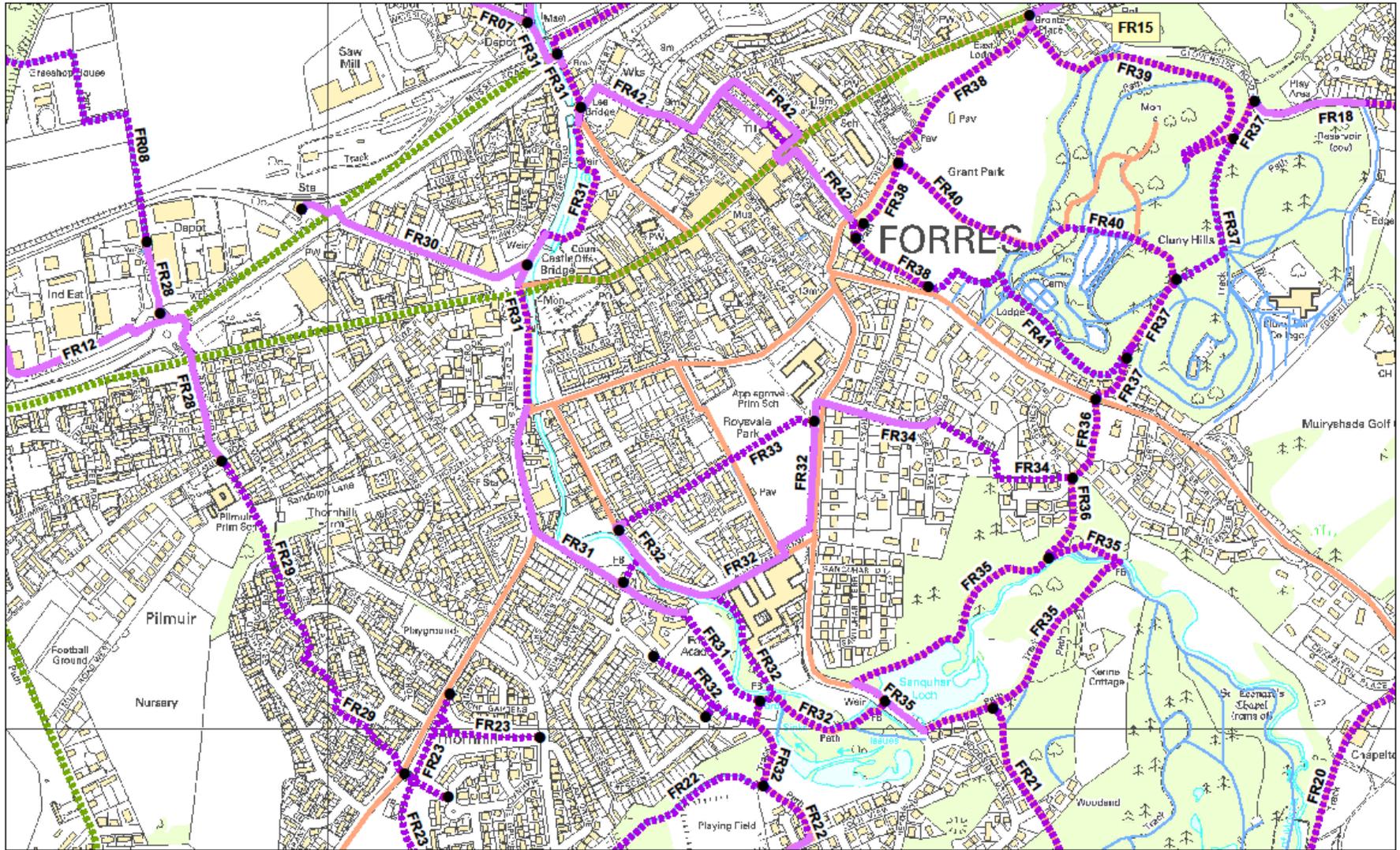


Figure 3-30: Forres Area Adopted Core Paths Plan

Doc No 001 Rev: Date: December 2011



	<p>Adopted Moray Core Path Plan Forres Inset Map</p>	<p>Legend</p> <ul style="list-style-type: none"> ● Start-finish points — Core Paths - Public roads/ Roadside paths — Core Paths- Off road — Aspirational Core Paths — Promoted paths — Existing paths 	<p>Map 3A</p>
<p>Scale: 1:6,000 Date: 1st August 2011</p> <p><small>Reproduced from the Ordnance Survey Map with the permission of the Controller Of Her Majesty's Stationary Office Crown Copyright 2008 The Moray Council 100023422 For reference purposes only. No further copies to be made.</small></p>			

Figure 3-31: Forres Inset Adopted Core Paths Plan

Doc No 001 Rev: Date: December 2011

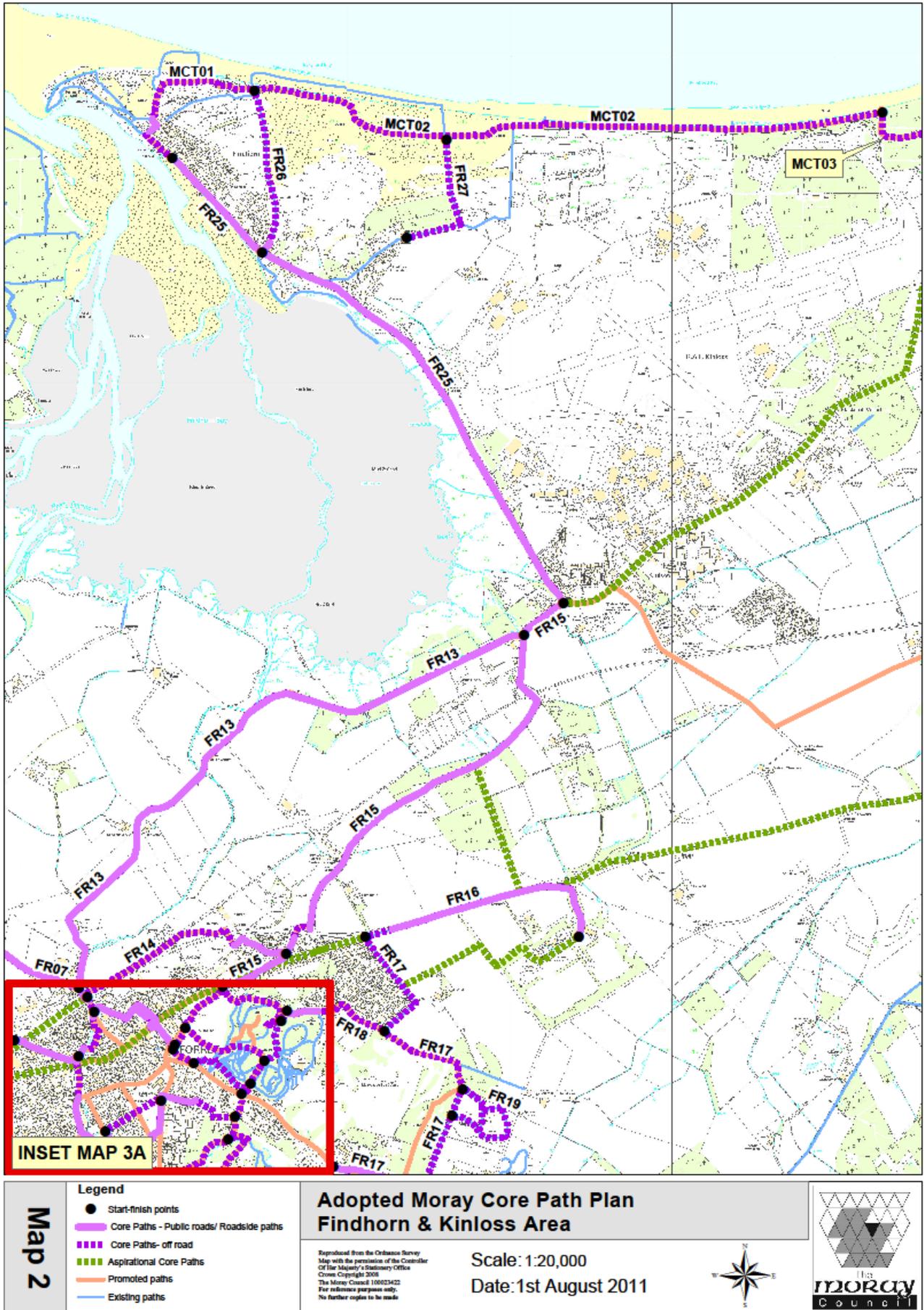


Figure 3-32: Kinloss and Findhorn Adopted Core Paths Plan

3.10 Current Issues

3.10.1 To summarise, the audit process identified a number of key issues that act as a disincentive for active travel as noted below.

1) Forres High Street

- Despite the introduction of the A96 bypass, High Street in Forres remains relatively busy with traffic and associated car parking; and
- A significant cluster of accidents occurred in this area between vehicles and pedestrians.

2) Dispersed population within Moray and reliance on the car

- It is difficult to promote walking and cycling in hilly areas.

3) The A96 Bypass acts as a physical barrier to active travel

- With traffic flows in the region of 11,000 vehicles per day, a 40mph speed limit and limited formal crossing locations, the A96 may deter people from walking and cycling to services on either side.

4) Limited cycle parking

- There is limited cycle parking in the town centres with casual cycle parking noted frequently during the audit.

5) Large retail developments on outskirts of town

- Dispersed nature of new retail premises may result in more car journeys to shops.

6) Long distances between Findhorn and major services

- Longer distances between Findhorn, Kinloss and Forres may reduce likelihood of active travel being a first choice.

7) Limited commercial hubs in Forres

- With few commercial hubs in Forres, there is a need to visit High Street resulting in high levels of vehicle traffic.

8) Declining Transport Budget

- Prioritisation of schemes may rule out starting new projects.

3.11 SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis of Active Travel in Forres, Kinloss and Findhorn

Strengths	Weaknesses
<p>Extensively signed walking and cycling network in the area</p> <p>An off-road link between the three settlements provides less confident cyclists with appealing option</p> <p>Extremely high levels of cycling demonstrated in 2001 census data</p> <p>The settlements benefit from a pro-active community</p> <p>New housing developments contain a high number of off road paths and shorter traffic free links</p> <p>Previous Active Travel Audits in Moray have successfully been used to secure European funding</p>	<p>Although High Street remains an attractive retail area, traffic and abundant car parking detract from the aesthetic quality</p> <p>Poor maintenance of off road cycleways which may be off putting</p> <p>Lack of cycle parking in town centre results in bikes cluttering the footway when left casually parked outside shops</p> <p>Strategic access points to Forres town centre involve negotiation of busy junctions with little active travel provision</p>
Opportunities	Threats
<p>A large proportion of journeys to work are less than 2km</p> <p>The Ministry of Defence plan to use RAF Kinloss base as barracks for 930 Army personnel and relatives⁸</p> <p>Moray Council's development of a Sustainable Network in Elgin could be replicated in Forres</p> <p>Continued development in Forres which should match previously demonstrated high standards of connectivity</p>	<p>Disbandment of RAF Flying Squadron at Kinloss and potential loss of cycling culture</p> <p>Out of town shopping detracting from High Street hub</p> <p>Funding for large scale infrastructure may be more difficult to secure</p> <p>Potential political resistance to measures to reduce traffic in the town centre</p>

⁸ <http://www.bbc.co.uk/news/uk-scotland-north-east-orkney-shetland-15668827>

4 Potential Forres, Kinloss and Findhorn Active Travel Network

4.1 Introduction

4.1.1 The active travel audit identified potential walking and cycling routes that could link residential areas to the main trip generators and attractors to form a strategic network for the area. The main trip generators are:

- Forres Academy;
- Applegrove Primary, Anderson's Primary, Pilmuir Primary, Kinloss Primary;
- Cluny Hill College;
- Forres Railway Station;
- Forres High Street Retail Area;
- Forres Enterprise Park;
- Greshop Industrial Estate;
- Forres Tesco;
- RAF Kinloss;
- Findhorn Village;
- Findhorn Foundation;
- Leancoil Hospital;
- Forres Mechanics Football Club;
- Grant Park;
- Sanquhar Loch;
- Culbin;
- Findhorn Beach;
- River Findhorn;
- Sueno's Stone;
- Benromach Distillery;
- Forres Footpaths Trust Walks;
- NCN National Route 1/North Sea Cycle Route;
- Dava Way; and
- Moray Coast Trail.

4.1.2 The study has developed a set of long term objectives for encouraging walking and cycling as follows:

Objective 1: Establish and promote a “Forres Sustainable Network” that builds upon the Moray Council pilot “Sustainable Network” in Elgin

Objective 2: Improve the connections between settlements in the area by further developing and extending existing links

Objective 3: Remove or minimise the physical barriers to walking and cycling

Objective 4: Ensure that town and village centres are pedestrian and cycle friendly places

Objective 5: Support physical infrastructure with appropriate soft measures whilst giving proactive community groups a voice and continue dialogue with the local authority

- 4.1.3 The priority for Forres is to ensure that Active Travel is supported and promoted through the development of a network of core routes which will serve the main trip generators in the town, providing a genuine alternative to private car journeys. The town centre remains a focus of economic activity in the region and it is essential that this is maintained. It would be advantageous to improve provision for walking and cycling in the town centre without having a overly negative impact on the access of other vehicles.
- 4.1.4 Reliance on the car in Moray is higher than other local authorities in Scotland, linked to a low population density, widely dispersed throughout the region. Existing links go some way to providing alternatives to car use between settlements although improvements to these would enhance the attractiveness of walking or cycling.
- 4.1.5 Key junctions in the settlements present barriers to active travel with limited crossing opportunities or no provision for cycling. By minimising the conflict at these junctions, walking and cycling will be safer and more attractive. The one way system in Findhorn and the physical street characteristics also act as barriers to active travel, small alterations to the existing situation could make walking and cycling more attractive.
- 4.1.6 The physical infrastructure may go some way to providing its own incentive to walk and cycle although the benefits must be locked in by additional soft measures which would capitalise on the new network and route improvements.

4.2 Active Travel Network

- 4.2.1 The following corridors have been identified as having the potential to provide the most direct and coherent network of routes to the destinations listed in 4.1.1. The routes are:
- Forres Sustainable Network Route 1 (FSN1): NCN Route 1 at River Findhorn – Greshop Industrial Estate – Forres Railway Station – High Street – Grant Park – Forres Enterprise Park;
 - Forres Sustainable Network Route 2 (FSN2): Dava Way – Sanquhar – Forres Academy – Applegrove Primary – High Street – NCN Route 1 at Benromach;
 - Forres Sustainable Network Route 3 (FSN3): Burn of Mosset – Applegrove Primary – Anderson’s Primary – Forres Library & Community Centre;
 - Forres Sustainable Network Route 4 (FSN4): Knockomie – Thornhill – War Memorial;
 - Forres Sustainable Network Route 5 (FSN5): Pilmuir – Bridge Street;
 - Forres Sustainable Network Route 6 (FSN6): Leancoil Hospital – Saint Leonard’s Road;;

- Forres Sustainable Network Circle (FSN Circle Route): Bridge Street – Mosset Burn – Bogton Road – Sueno’s Stone – Drumduan Path – Cluny Hill – Sanquhar Loch – Mosset Burn – Forres Heights – Pilmuir – Greshop;

4.2.2

A full description of the routes with potential improvements subject to consultation, feasibility and design are included in Appendix 1 of this report. The action plan in the following sections suggests the key priorities in the development of the aforementioned routes along with the ‘softer’ initiatives to encourage active travel in the area. Figure 4-1 at the end of this chapter shows the extent of the potential Active Travel Network in relation to the Local Plan for Forres, Kinloss and Findhorn.

5 Prioritised Action Plan

5.1 The Priorities

5.1.1 This prioritised Active Travel Plan sets out the key potential measures needed to encourage walking and cycling in Forres, Kinloss and Findhorn. As well as incorporating parts of the strategic walking and cycling network, it also includes promotion and 'soft' measures which form part of a package of works which have been used successfully in those towns and cities where there has been an increase in sustainable modes.

5.1.2 The following measures are the key priorities for encouraging active travel in Forres, Kinloss and Findhorn:

Priority 1: Deliver the Forres Sustainable Network (FSN):

- FSN Route 1 – Central;
- FSN Route 2 – Northern ;
- FSN Route 3;
- FSN Route 4;
- FSN Route 5;
- FSN Route 6; and
- FSN Circle Route.

Priority 2: Town Centres and Junction Improvements

Priority 3: Walking and Cycling Promotion

Priority 4: Delivery of a Quiet Streets Network to support the FSN

Priority 5: Forres to Findhorn Cycleway

5.1.3 Each of these individual priorities are summarised below and form part of the wider Forres, Kinloss and Findhorn Active Travel Network outlined in chapter 4.

5.2 **Priority 1 Recommendation: Deliver the Forres Sustainable Network (FSN)**

5.2.1 It is recommended that the development of a core network of active travel routes suitable for utility and leisure trips is taken forward as the first priority for active travel in Forres. The routes which form the Forres Sustainable Network (FSN) provide a coherent network and increase connectivity between residential areas and hubs of economic activity. It is vital that these routes are regarded as a coherent network for them to operate effectively. The aspirational routes taken forward in the Adopted Core Paths Plan have been considered in the drafting of the FSN. The key link highlighted in consultation runs concurrently with FSN Route 1, a high quality spinal route from east to west linking some of the most important trip generators in the town including the Greshop Industrial Estate, Forres Railway Station, High Street retail hub and Forres Enterprise Park.



Forres Potential Active Travel Plan Network (Indicative)

Figure 5.1: Proposed Forres Sustainable Network

Key:

- ⋯ FSN 1
- ⋯ FSN 2
- FSN 3
- FSN 4
- FSN 5
- FSN 6
- FSN Circular
- NCN 1
- Forres - Findhorn
- ⋯ Dava Way

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.

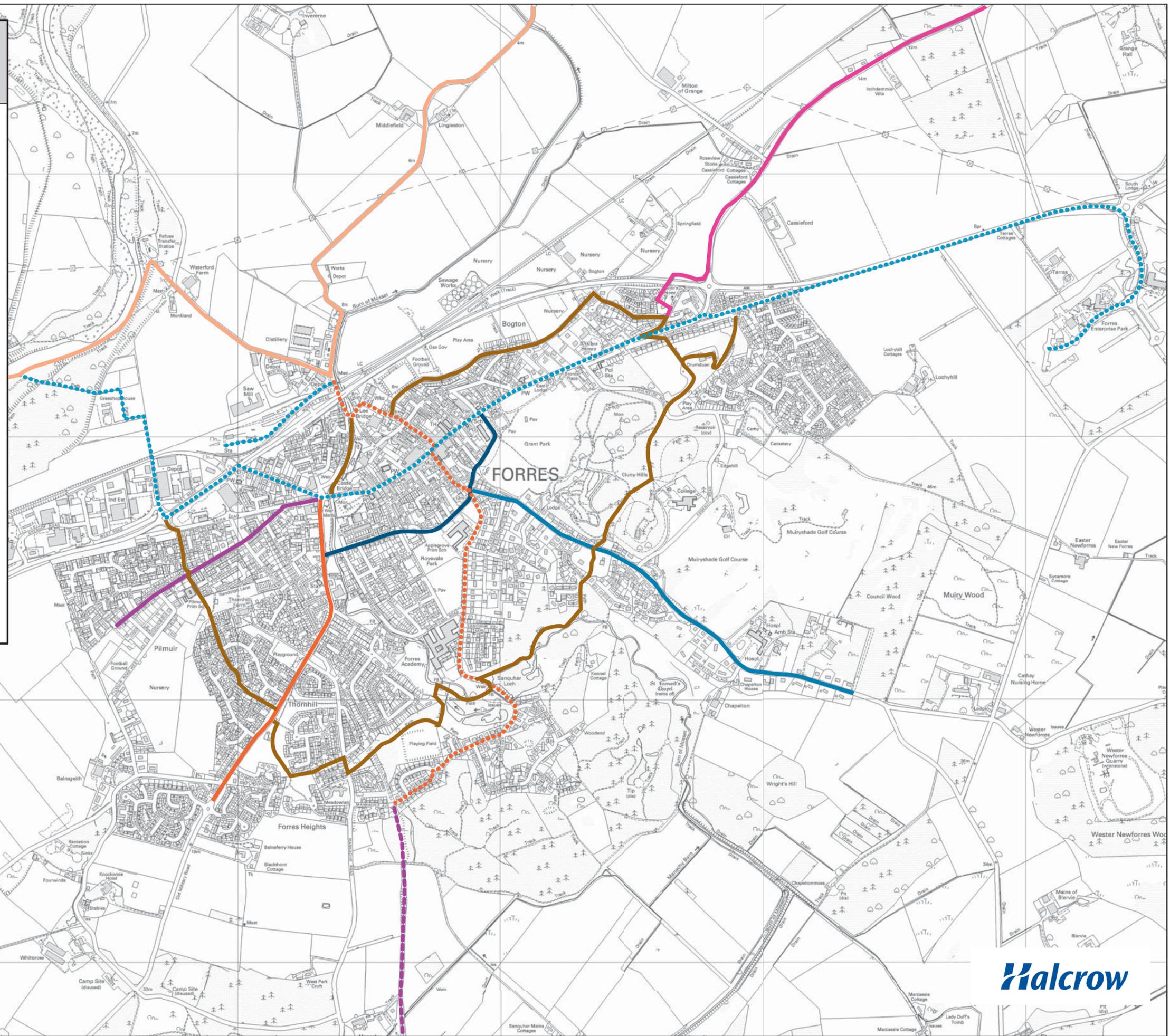




Figure 5-2: FSN1 Links from River Findhorn to the A96 through Greshop Industrial Estate



Figure 5-3: FSN1 Links from River Findhorn to the A96 through Greshop Industrial Estate



Figure 5-4: FSN1 Roadside footway linking Greshop to Forres Railway Station



Figure 5-5: FSN1 Cyclist having difficulty negotiating barriers at exit from Forres Railway Station



Figure 5-6: FSN1 Access to crossing of A96 from Tytler Street



Figure 5-7: FSN1 Bridge Street Roundabout which present barrier to active travel as crossing is very difficult



Figure 5-8: FSN1 Cycle lanes on Bridge Street come to abrupt end when entering the retail centre



Figure 5-9: FSN1 High Street demonstrated high levels of pedestrian activity but constant vehicle flow and no cycle provision



Figure 5-10: FSN 2 No provision for cyclists at level crossing



Figure 5-11: FSN 2 Narrow chicane restricts cycle access to NCN



Figure 5-12: FSN 2 current crossing provision from NCN over A96 to Forres



Figure 5-13: FSN 2 Alternative route to east of bridge more suitable



Figure 5-14: FSN 2 Path to be upgraded along east of Mosset Burn



Figure 5-15: FSN 2 Remove barrier on short cut through Caroline Street



Figure 5-16: FSN 2 Permit two way cycling on Caroline Street



Figure 5-17: FSN 2 Consider relocating toucan and redetermining short section of footway to allow cycling



Figure 5-18: FSN 2 Block south end of Tolbooth Street to all vehicles except bikes



Figure 5-19: FSN 2 Permit two way traffic on Tolbooth Street after stopping up the south end



Figure 5-20: FSN 2 Consider alternative junction arrangements after stopping up south end of Tolbooth Street which would give more provision for walking and cycling



Figure 5-21: FSN 2 Widen footways on Sanquhar Road around Forres Academy



Figure 5-22: FSN 2 Current view along footway next to Sanquhar Loch



Figure 5-23: FSN 2 Attractive off road link from Loch View to Mannachie Rise



Figure 5-24: FSN 3 Access point to Orchard Road restricted by guardrail



Figure 5-25: FSN 3 Footway narrows as Orchard Road heads east



Figure 5-26: Wide junction radius typical of side streets on Orchard Road



Figure 5-27: FSN 3 View east along South Street



Figure 5-28: FSN 4 Off road footpaths on west side of A940



Figure 5-29: FSN 4 Space to create a segregated two way cycle facility on A940



Figure 5-30: FSN 4 Road tightens near junction with Fleurs Place



Figure 5-31: FSN 4 Wide area from Orchard Road to Bridge Street Roundabout



Figure 5-32: FSN 4 Access to off road path through park beside Mosset Burn



Figure 5-33: FSN 4 Large park which could accommodate wider, lit shared footway, thus avoiding Bridge Street Roundabout



Figure 5-34: FSN 5 Pilmuir Road would benefit from permanent 20mph status



Figure 5-35: FSN 5 Route passes by Pilmuir Primary therefore



Figure 5-36: FSN 5 Tricky one way junction configuration at east end of Pilmuir Road



Figure 5-37: FSN 5 Two way cycling should be permitted on Iona Place providing the most direct route from Pilmuir Road to the town centre



Figure 5-38: FSN 6 Leancoil Hospital on the south east side of Forres



Figure 5-39: FSN 6 Saint Leonard's Road provides direct links from town centre to Leancoil Hospital

5.2.2 The recommendations are summarised below in Table 5-1:

Table 5-1: Priority 1 Recommendations Summary Table – Deliver the Forres Sustainable Network (FSN)

Description

- Moray Council are in the process of delivering an Elgin Sustainable Network which draws ideas from an earlier Active Travel Audit of the town, funded under the Urban Freedom scheme. This is a model which could be replicated in Forres to provide a coherent, connected and relevant active travel network for the town.

Issues for consideration

- Funding for a project of this scale may be hard to secure given the declining Moray Council Transport Budget
- The FSN works because all routes are connected, increasing the permeability and coherence of active travel trips and as such should not be seen as a series of piecemeal interventions

Table 5-1: Priority 1 Recommendations Summary Table – Deliver the Forres Sustainable Network (FSN)

Recommended Intervention (subject to feasibility and design)

- Deliver six core routes through Forres and a circular route linking them via a network of core paths.
- The priority route is FSN 1, a spinal route from east to west linking Greshop Industrial Estate, Forres Railway Station, High Street and Forres Enterprise Park. This route matches the route raised through Core Paths Plan consultation as the key corridor in the area. It is therefore essential to deliver this as a high quality route as the reputation of the FSN will ride on the delivery of this.
- The second priority is FSN 2, the Northern route linking the Dava Way from Rafford, through an off-road link at Mannachie Avenue, along Loch View, Sanquhar Road, Tolbooth Street, High Street, Caroline Street, across the A96 to the level crossing and NCN Route 1. Issues to consider in the implementation of this route will be any proposed development at the old gas works and Forres Mechanics Football ground. Developer contributions must be sought in this area to ensure links from here to town are not severed and a Toucan crossing links NCN Route 1 and Forres town centre. This route serves the National Cycle Network, the retail hub, Forres Academy and Leisure Centre as well as concentrations of housing in the south.
- The third priority is FSN 3, a shorter route which runs from the A940 in the west to High Street at Anderson's Primary in the east. The link is important as it provides an alternative to traversing High Street whilst intersecting with FSN 1, FSN 2, FSN 4 and FSN 6. The road is largely residential other than Applegrove Primary in the central region and Anderson's Primary to the east. Reducing speed and calming traffic is the key to the success of this route as school children may use this unsupervised.
- Priority four is FSN 4 from the new housing to the southern tip of Forres on the A940 northwards to the Bridge Street Roundabout. This road is notable as the number of pedestrian casualties from 2005-10 accident data highlights this as a source of a high proportion of all occurring pedestrian accidents. There are quieter routes to the town centre from here although by removing or minimising conflict points, this direct route should become useable for all. The interventions taken forward on this route should include reducing car/pedestrian conflicts and making side junctions safer to cross.
- The fifth priority is FSN 5, linking the western end of Pilmuir to the Bridge Street Roundabout. A long straight section of wide carriageway which again is mainly residential although serves Pilmuir Primary. Reducing speeds on this road from a part time 20mph zone to a permanent 20mph zone would benefit those wishing to take a direct route to and from town or unaccompanied school children.
- FSN 6 links Leancoil Hospital in the south east of Forres to the FSN 2/3 intersection. This link does not serve a large number of properties although hospital staff, patients and visitors may benefit from enhanced active travel links.
- While all the previous routes have been corridor based, the FSN Circle serves to connect them all via a series of quieter roads and core paths. Not all trips will be from the outskirts to the town centre, FSN Circle provides a link between residential areas and other trip generators, it provides a link across FSN routes, ensuring the network is permeable and fully connected.

5.3 Priority 2 Recommendation: Town Centres and Junction Improvements

5.3.1 To ensure the vitality of village and town centres, it is important to realise their worth to the local community and the consequences of a declining economic hub. Without the centres of Forres, Findhorn and Kinloss, journey distances would need to be significantly increased to reach services, well outwith the reach of many people who may have previously considered active travel.

5.3.2 Forres town centre is a hub for the region, providing vital services along High Street although the area is dominated by on street car parking and constant levels of through traffic. As housing provision increases, it will be increasingly important and will attract even greater

numbers of visitors. As a result, demand for car parking may rise and traffic levels along High Street may create a perceived barrier to active travel. It is important that as part of development proposals, provision for walking and cycling is considered as a priority. This will ensure that the notion of walking and cycling for utility trips is in place before greater physical or perceived barriers are in place.

5.3.3 The same can be said for Findhorn and Kinloss, although a lot smaller than Forres, if the already limited services diminish and barriers to active travel increase, residents may resort to longer trips in to Forres. This will have a knock on consequence of reducing local active travel trips and increasing longer car journeys.



Figure 5-40: Findhorn village centre, currently operating one way system obstructive to cyclists



Figure 5-41: Kinloss shops with wide footway although limited safe access from main housing areas on south side of road



Figure 5-42: One way on Tollbooth Street



Figure 5-43: One way link in Findhorn



Figure 5-44: Bus stop in Findhorn



Figure 5-45: Continuous car parking on Forres High Street



Figure 5-46: One way restriction to south of Forres High Street



Figure 5-47: Good pedestrian link blocked by parked cars and step



Figure 5-48: Useful pedestrian link could be visually enhanced to increase perceived safety



Figure 5-49: Findhorn village centre, currently operating one way system obstructive to cyclists



Figure 5-50: High levels of car parking in Findhorn village centre blocks shops and cafes



Figure 5-51: Historical passageway in Findhorn which is heavily used could be upgraded to become more appealing



Figure 5-52: Cycle hoop cycle parking, unobtrusive when not in use and tidies up nuisance parking (Cyclehoop)⁹



Figure 5-53: Less conventional cycle parking, shaped as a car, removing one parking space and installing one car shaped bike rack can provide parking for up to 10 bikes (Cyclehoop)¹⁰



Figure 5-54: Bridge Street Roundabout where a cluster of cycle accidents have occurred



Figure 5-55: Orchard Road Roundabout with 5 vehicle entry points and poor visibility

⁹ <http://www.cyclehoop.com/gallery/>

¹⁰ <http://www.cyclehoop.com/gallery/>

5.3.4 The recommendations are summarised below in Table 5-2:

Table 5-2: Priority 2 Recommendations Summary Table – Town Centres and Junction Improvements

Description
<ul style="list-style-type: none"> The town centres are vital in the continued life of Forres, Kinloss and Findhorn. Removing barriers to active travel and some general streetscape improvements would enhance them further.
Issues for consideration
<ul style="list-style-type: none"> Whilst improving walking and cycling access, it is vital that the impact on vehicles is not out of proportion as residents, businesses and commuters will not buy in to major disruption Reducing on street parking will not be politically acceptable so offsetting this intervention may soften the blow
Recommended Intervention (subject to feasibility and design)
<ul style="list-style-type: none"> A key issue is the traffic and parking characteristics of Forres High Street. By reducing traffic and limiting on street parking, the area could have wider footways and provide pleasant walking/cycling environment. Other than a wider traffic management review of the entire town centre, smaller interventions could still have a positive effect. The removal of on-street parking on High Street appears to be a feasible option subject to further study and consultation. There are eight off street car parks nearby which are entirely free of charge. By removing the on street parking, the road space could be redistributed to provide cycle facilities and wider footways. Narrower carriageways tend to naturally slow traffic and the opportunity for more formal crossing points could be considered. If removing all on street parking on High Street meets excessive resistance, an alternative option would be to charge for on street parking whilst retaining free parking in the off street car parks around the centre. This may have the desired effect of moving cars from High Street. Again this option would require consultation and it may also not be politically acceptable. The lack of cycle parking on High Street was notable; the only location being five brand new racks recently installed next to the Mercat Cross, providing parking for up to ten bikes. Whilst the racks were never at capacity, it was noted that casual cycle parking often caused obstruction as bikes were piled against shop or café frontages. To reduce this nuisance bike parking, the opportunities for formal cycle parking need to be more frequent, on a smaller scale and widely dispersed throughout High Street. Alternative cycle parking such as cycle hoops would add extra locking points, give additional stability whilst not taking over the pavement when not in use. More unconventional parking could include car shaped bike racks. For those who may wish to spend longer in town, covered cycle parking may appeal to them. Provision of covered cycle parking could be provided by removing a couple of car spaces in the Leys Road Car Park next to Stuarts Bike Shop and installing covered Sheffield Stands similar to the arrangement at Applegrove Primary. Zebra crossings would provide pedestrians with safer crossing areas although trials of an experimental Tiger crossing in London¹¹ have shown interesting early results. This is essentially a shared Zebra crossing which permits use by both pedestrians and cyclists. This is a non conventional crossing and further study/approvals would be required before this could be considered. Provide improved crossing point from Kinloss shops to main residential area on south of B9089 which will also serve Kinloss Primary School. Consider parking rationalisation in Findhorn village centre around shop and cafes. Current arrangements create barriers for walking, cycling and wheelchair access. Retain parking to

¹¹ <http://www.tfl.gov.uk/assets/downloads/businessandpartners/shared-zebra-crossing-study.pdf>

Table 5-2: Priority 2 Recommendations Summary Table – Town Centres and Junction Improvements

north and south of shopping area, widen footway to fill space where parking bays were accommodated which will provide additional space for pedestrians and the potential to extend existing outdoor seating areas.

- Formalise quiet links in Findhorn with improved surfacing to make them accessible for cyclists and wheelchair users.
- Carry out speed and volume surveys on all one way links around the town centres to confirm the most appropriate measures to introduce two way cycling. One way links create barriers to cycling and in order to maximise the permeability of the town centre, these restrictions should be removed.
- Ensure all crossings in town centres have flush dropped kerbs with appropriate tactile paving.
- Two major physical barriers on the core routes in to Forres town centre are the Bridge Street Roundabout and the Orchard Road Roundabout.
 - Restricting turning movements on Bridge Street Roundabout would probably be unfeasible although consideration could be given to restricting movements in and out of Market Street. There are alternative routes in and out of Market Street and by closing all vehicle movements, the junction could be completely redesigned with additional facilities for pedestrians and cyclists. In particular, the existing traffic flows through the roundabout present limited crossing opportunities for pedestrians. Turning counts and speed surveys would assist any new design and a viable alternative that does not heavily impact on vehicle behaviour would be very possible.
 - The second roundabout which is an issue on the core routes is the Orchard Road Roundabout. With limited visibility and various conflicting vehicle movements, the aim should be to provide safe, coherent facilities for cyclists and pedestrians. Tollbooth Street which links with High Street is currently one way although it could be possible to close the south end of it and ban vehicles from accessing the roundabout. The street could then be converted to allow two way vehicle movements although traffic flows would dramatically reduce, creating a much safer link for cyclists. As the south end of Tollbooth Street is closed, a continuous footway could be installed from Orchard Road to South Street, negating the need for pedestrians to interact with vehicles. The reduced vehicle flows on the roundabout would then permit alternative designs to be investigated which would show greater consideration for active travel.

5.4 Priority 3 Recommendation: Walking and Cycling Promotion

- 5.4.1 The improvement of physical walking and cycling infrastructure requires support through a range of soft measures. These measures must include promoting the new network and improved facilities and generally raising awareness of walking and cycling options in the area. The already proactive community should be approached to assist with promotional events, giving them a sense of ownership and pride in the new network.
- 5.4.2 The Department for Transport “Smarter Choices: Changing the way that we travel” paper from 2004 indicated that for every £1 spent on well designed soft measures there will be a benefit of £10 in reduced congestion plus wider gains in air quality, CO2 and health. Projects throughout Europe which have combined both hard and soft measures include the German Cycle Friendly Towns (1980s), English Sustainable Transport Towns (2004- 09) English Cycle Friendly Towns/City (2005-11) and the Welsh Demonstration Project in Cardiff. Following these, the Scottish Government assisted with funding for the Smarter Choices Smarter Places project. This initiative set out to address not only transport but health and climate change with seven projects awarded funding across Scotland.
- 5.4.3 Some of the schemes which could be considered include:
- Creating, publishing and making active travel information available;
 - Active prescriptions from NHS professionals;
 - Active kids – Active Parents; and
 - Workplace Travel Planning.
- 5.4.4 The recommendations are summarised below in Table 5-3:

Table 5-3: Priority 3 Recommendations Summary Table – Walking and Cycling Promotion

Description
<ul style="list-style-type: none"> • A targeted promotional campaign to maximise modal shift to walking and cycling.
Issues for consideration
<ul style="list-style-type: none"> • Opportunity to build on existing high levels of active travel in settlements. • Those on long distance trips may be less likely to change modes.
Recommended Intervention (subject to feasibility and design)
<ul style="list-style-type: none"> • There are several large employers in the region, the military presence in Kinloss being the most significant. It is therefore recommended that work place travel plans are formally rolled out, especially at the RAF Kinloss base where 900+ personnel and families will relocate in summer 2012. A travel plan is a package of measures produced for employers to encourage staff to use alternatives to single-occupancy car-use. Such a plan, for example, could include: car sharing schemes; a commitment to improve cycling facilities; a dedicated bus service or restricted car parking allocations. It might also promote flexible-working practices such as remote access and video conferencing. Travel plans can offer real benefits not only to the organisation and its employees, but also the community that surrounds it. It may help to relieve local parking or congestion problems or improve public transport connections across the area. It may also relieve stress on employees through reducing delays or providing the opportunity to cut their travel commitments by working from home on occasion. • The distances between Findhorn and Forres may prove a barrier to those less capable of walking or cycling over a sustained period of time. To assist those who wish to travel by bike, encouragement should be given to bus companies to carry bikes¹². This would give the user

¹² <http://www.ctc.org.uk/DesktopDefault.aspx?TabID=4578>

Table 5-3: Priority 3 Recommendations Summary Table – Walking and Cycling Promotion

the opportunity to take their bike to town and perhaps visit several locations which may be a stretch too far for walking and also assist with those who wish to visit shops and would tend to do so by car. The route from Forres to Findhorn is mainly downhill and return journeys would be a lot easier than from Findhorn to Forres. An example of a successful scheme is that of a small scale rural service which consistently carries 30 bikes per month, which in relative terms, is a significant number. A scheme established in the Autumn of 2011 saw First Group permit one bike on some evening services in Glasgow and Aberdeen for free with the bike being stored in the space occupied by buggies or wheelchairs¹³.

- An annual initiative to consider would be holding a car free day or a traffic free bike ride through the town centre. Such events may serve to encourage a more permanent modal shift. Support from local groups such as the Community Council, Forres Cycling Club and others would give a sense of ownership to the day. Events could be held in Grant Park with demonstrations, bike workshops and travel information stalls. The Sky Rides which have provided traffic free bike rides through usually busy towns and cities have proved remarkably popular and this sort of event would transfer well to a town such as Forres as alternative routes for traffic are available.
- There is already a mixed signage strategy through the region with NCN, Forres Findhorn Cycleway, Forres Footpaths Trust and tourist signs visible. It would be beneficial to consolidate this, retaining a leisure network through the Forres Footpaths Trust while promoting utility trips through similar ideas as piloted in Elgin. By colour coding street furniture and signage, each route will have a distinct identity and be easily recognisable if picked up at a key intersection point.
- Active Travel literature and promotional information should be produced to support those who participate in personalised travel planning. For example, in London where cycling has increased by 83%, the free London Cycle Map has proved a significant benefit. Consolidating the current available mapping to provide one combined piece of literature which could be available as a map leaflet and as large information boards around the town would draw together both leisure and utility networks into one neat package.
- Getting community “buy-in” to the proposed network will involve the inclusion of groups such as the Community Councils, Forres Cycling Club, Forres Footpaths Trust and Transition Town Forres. These groups will be the point of contact for Local Authority officers, and provide a combined voice when issues are raised.

A.1

¹³ <http://www.cyclingscotland.org/news/on-your-bike-and-if-the-weather-bad-put-it-on-the-bus/>

5.5 Priority 4 Recommendation: Quiet Streets Network

- 5.5.1 An approach which has proven successful in Oxford is to support the core routes of an active travel network with a quieter streets network. The core routes are designed to link concentrations of housing with areas of economic activity via the most direct and appealing links possible. A core network may not be successful without the support of a network linking smaller residential areas to the important routes. Oxford has demonstrated that the most successful intervention in these circumstances is to reduce vehicle speed. This lower speed, coupled with low traffic levels, provide the ideal environment for those who may be less confident going by bike.
- 5.5.2 Although the main interventions will benefit cyclists, pedestrians will also gain from reduced speeds and reduced accident rates. The routes must be pedestrian friendly with good quality footways, crossing points and signage where appropriate.
- 5.5.3 The notion that 20mph is fast enough in towns is spreading through the United Kingdom with schemes in Portsmouth, Oxford and very shortly, the south side of Edinburgh.



Figure 5-56: Example of existing traffic calming in new residential area at Knockomie



Figure 5-57: New housing in Pilmuir shows traffic calmed streets with wide shared footways



Figure 5-58: Off road links through Thornhill Park are a vital link not only for leisure



Figure 5-59: Housing around Grant Drive has footways throughout the area which in place would benefit from widening and additional lighting

5.5.4 The recommendations are summarised below in Table 5-4:

Table 5-4: Priority 4 Recommendations Summary Table – Quiet Streets Network	
Description	
<ul style="list-style-type: none"> Consider a town wide strategy for reducing speeds on all non-arterial routes which will provide a more appealing network of streets for pedestrians and cyclists. 	
Issues for consideration	
<ul style="list-style-type: none"> This network will not necessarily link key trip generators via the most direct route although it will be essential to provide alternative routes for those less confident cycling, parents with young children or wheelchair users. 	
Recommended Intervention (subject to feasibility and design)	
<ul style="list-style-type: none"> Break up residential streets with alternative parking regulations and buildouts which would provide additional crossing facilities for pedestrians. Consider widening and improving the surfacing of off road paths in new housing estates on the south side of Forres to permit cycling without causing conflict with pedestrians. Consider the introduction of speed cushions on roads such as Burdshaugh, Bogton Road and North Road which present longer stretches of street without significant junctions. Continue work on installing DDA compliant flush dropped kerbs, not restricting these to town centres but throughout the three towns. Promote these routes within School Travel Plans and as part of a consolidated active travel map of the area. 	



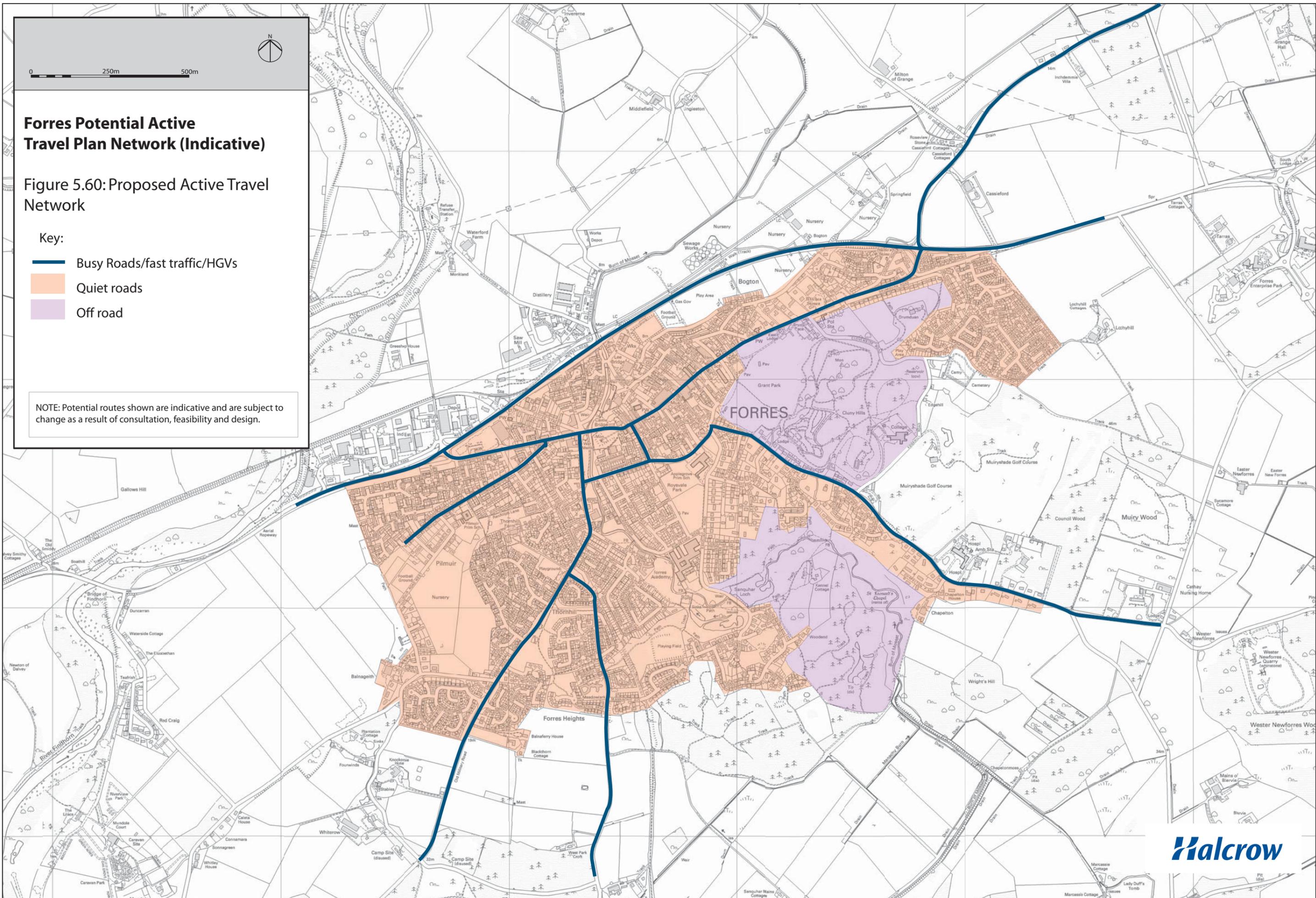
Forres Potential Active Travel Plan Network (Indicative)

Figure 5.60: Proposed Active Travel Network

Key:

-  Busy Roads/fast traffic/HGVs
-  Quiet roads
-  Off road

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



5.6 Priority 5 Recommendation: Forres Findhorn Cycleway and Dava Way Improvements

5.6.1 Currently, the three settlements in the study area are linked via the NCN and Forres Findhorn Cycleway. There are very minor improvements which would enhance the routes and potentially encourage more trips between the towns by active travel modes. Along with the Forres Findhorn Cycleway, the Dava Way provides a direct link to Rafford in the south, also a very active community. Part of the route is off road and would benefit from being upgraded to provide a link with FSN Route 2 bringing people in to Forres via Forres Academy.



Figure 5-61: Debris and gravel accumulates and causes puncture hazards



Figure 5-62: Poor design of transition with faded surface markings



Figure 5-63: Cyclists instructed to dismount as Forres Findhorn Cycleway approaches Findhorn



Figure 5-64: Section of Forres Findhorn Cycleway which is on road is in 40mph limit before reaching 30mph at entrance to Findhorn



Figure 5-65: Redundant lighting after disbandment of RAF Kinloss causes obstruction to cyclists

5.6.2 The recommendations are summarised below in Table 5-5:

Table 5-5: Priority 5 Recommendations Summary Table – Forres Findhorn Cycleway and Dava Way Improvements

Description

- Both the Forres Findhorn Cycleway and The Dava Way provide important links in the area for active travel although both would benefit from improvements.

Issues for consideration

- Dava Way link would require agreement with Dava Way Association and funding required may serve larger communities through other interventions.
- Forres Findhorn Cycleway requires a rigorous schedule of maintenance to ensure the route stays useable throughout the year.

Recommended Intervention (subject to feasibility and design)

- Surface the short off road section of The Dava Way between the end of FSN 2 Northern and the minor road link to the B9010. The route is promoted as a multi use path with off road cycling and horse riding permitted, these needs must be taken into account.
- Develop a thorough schedule of maintenance for the Forres Findhorn Cycleway, clearing gravel and other debris, maintaining shrubbery, repainting surface markings when and where appropriate.
- Improve the crossing point to the north of bridge over railway line. Consider relocating crossing point further north of bridge to improve visibility issues and move crossing from fast bend in the road. Consider using a jug handle turn so cyclists are not forced to look over their shoulder when approaching the crossing but are given a clearer opportunity to look for potential hazards.
- Remove redundant furniture from RAF Kinloss which causes obstruction to walking and cycling.

6 Conclusions

- 6.1.1 Existing travel data for Forres, Kinloss and Findhorn demonstrate a willingness to accept active travel, a notion supported by numerous pro-active community groups through various forms of promotion. The community groups have provided well signed and mapped routes as well as providing a voice for active travel and a point of contact for the local authority. Forres would benefit from a network of core active travel routes adopted by Moray Council under their “Sustainable Network” scheme currently being developed in Elgin. This scheme would provide direct links between concentrations of housing and key trip generators in town. The success of this network will rely on developing the quickest, most direct and most convenient routes to places of economic activity. This will ensure that the communities will associate the network with utility trips, providing a genuine alternative to private car journeys. It is important that links from the surrounding settlements link with the network, delivering pedestrians and cyclists to their desired destination through the most coherent route possible. This includes linking the Forres Findhorn Cycleway, NCN Route 1 and the Dava Way with the proposed Forres Sustainable Network (FSN).
- 6.1.2 The development of the routes that form the FSN must serve the trip generators noted in 4.1.1 and form a coherent network across the town. There are several junctions on these key routes that could be enhanced to provide better facilities for walking and cycling. The existing situation has led to accidents as demonstrated in the 2005-2010 accident data.
- 6.1.3 The network must be endorsed and accepted by the community if it is to prove successful, to this end, it is essential that community groups are “on-board” with the network and are happy to take on the promotion of these routes. As is demonstrated at the moment, the Forres Footpaths Trust have been successful in promoting recreational routes through the area with prominent on street signage and information boards. As the Moray Council Transport budget is decreasing, alternative forms of funding and support must be investigated and groups such as the Transition Town, Community Councils and Access Groups should be encouraged to take ownership of the initiative in support of the local authority.
- 6.1.4 One of the largest communities within the study area is that of the military personnel and families based in Kinloss. It is therefore vital that the high levels of active travel shown in the 2001 Census are not lost as a new chapter in the history of the base unfolds. As the RAF disband and the Army move in, targeted promotional information will assist with making active travel a viable choice and a genuine alternative to the car.
- 6.1.5 Forres and the surrounding area are in a great position to move forward with active travel. The levels of walking and cycling are above the national and regional average and the level of community involvement demonstrated are very encouraging. Now is the ideal time to build on the successes of the towns and increase the active travel opportunities locally and regionally.

A **Appendix 1: Forres Active Travel
Network – Potential Improvements**

Route 1 – FSN Route 1 Central

Ref	Street	Start	End	Potential intervention (All subject to feasibility and design)
1a	Greshop Path	River Findhorn	A96	Upgrade existing path, improved surfacing, drainage, visibility and lighting.
1b	A96	Greshop	Nairn Road	Consider improved crossing of the A96, current provisions are only dropped kerbs on the east of the roundabout. Formalise desire lines on west of roundabout and provide improved crossing facilities.
1c	A96	Forres Railway Station	NCN at level crossing	Provide shared footway on the north of the A96 linking Forres Railway Station and NCN Route 1. Investigate pathway on north side of railway although this would include providing a crossing of the railway lines at the station.
1d	A96	Forres Railway Station	Tytlar Street	Provide improved crossing facilities with flush dropped kerbs and remove chicane barriers which cause obstruction to cyclists and wheelchair users. Provide flush dropped kerb on Tytlar Street where cyclists can choose to access carriageway.
1e	Bridge Street Roundabout	Nairn Road	Bridge Street	Consider options to reduce traffic movements at Bridge Street Roundabout, which could include movement restrictions. Signalising the roundabout and reducing the turning radii of the junctions would drastically improve cyclist safety. Improved crossing facilities should be provided regardless of feasibility to reduce traffic movements or signalise.
1f	Bridge Street/High Street/Victoria Road	Bridge Street	Victoria Street	Provide cycle lanes in both directions along the stretch of Bridge Street, High Street and Victoria Street. Coupled with opportunities to widen footways and reduce parking on High Street, this will significantly improve the area for active travel.
1g	Victoria Road	Victoria Road	Drumduan	Provide cycle refuge island for right turners from Victoria Road to Drumduan.
1h	Drumduan	Victoria Road	A96 shared footway	Introduce traffic calming and provide cycle lanes which will increase the perceived safety as vehicle speeds are reduced.
1i	A96	Drumduan	Forres Enterprise Park	Consider lighting sections of shared cycleway which is covered by trees where no other light sources will be visible.

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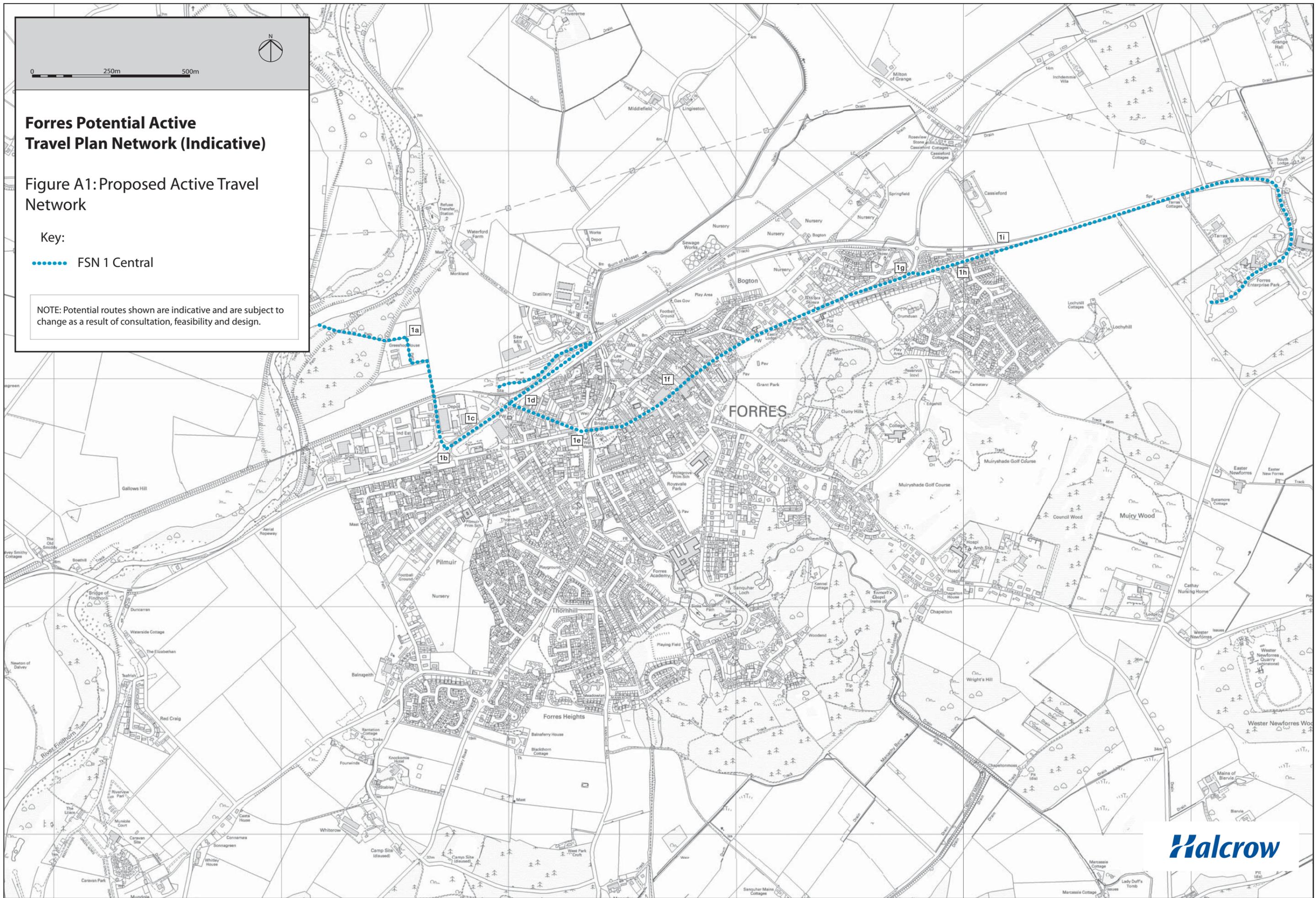
Forres Potential Active Travel Plan Network (Indicative)

Figure A1: Proposed Active Travel Network

Key:

..... FSN 1 Central

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



Route 2 – FSN Route 2 Northern

Ref	Street	Start	End	Potential intervention (All subject to feasibility and design)
2a	Invererne Road	Invererne Road	A96	Consider adding a traffic free route across the railway line which would remove cyclists from conflict with other vehicles trying to cross.
2b	A96	A96	Lee Bridge	As part of any new development, assure that high quality toucan crossing is installed on A96, providing a safe route across and down the east side of Mosset Burn. Improve the path along east side of Mosset Burn with surfacing and drainage.
2c	Caroline Street	Caroline Street	Caroline Street	Improve lighting on quiet link between two sections of Caroline Street. Remove two bollards and replace with single bollard to minimise conflict.
2d	Caroline Street	Caroline Street	High Street	Assess existing conditions on road (speed and volume surveys) to determine most suitable solution for permitting two way cycling on one way links between High Street and Caroline Street. Consider closing Caroline Street/High Street access and make a false one way street, reducing traffic flow and increasing cyclist safety.
2e	High Street	Caroline Street	Tolbooth Street	Provide cycle facility which would improve crossing from Caroline Street to Tolbooth Street. This could be short sections of widened footway and realigned toucan crossing.
2f	Tolbooth Street	High Street	Orchard Road	Block south end of Tolbooth Street to all traffic except bicycles and permit two way vehicle movements. This would reduce traffic on street and provide safer junction options at Saint Leonard's Road/Sanquhar Road.
2g	Sanquhar Road	Orchard Road	Loch View	Provide cycle lanes on entire length of Sanquhar Road which links with Forres Academy and Leisure Centre. Widen and light path through Roysvale Park to increase school pupil safety.
2h	Loch View	Loch View	Mannachie Rise	Improve links with Dava Way which would provide route for those coming from Rafford and local trips to Forres Heights.

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Forres Potential Active Travel Plan Network (Indicative)

Figure A2: Proposed Active Travel Network

Key:

●●●●● FSN 2 Northern

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



Route 3 – FSN Route 3

Ref	Street	Start	End	Potential intervention (All subject to feasibility and design)
3a	St Catherine's Road	St Catherine's Road	Orchard Road	Rationalise guard rail, narrow junction radius to slow traffic which would also give wider footway and install flush dropped kerbs for better crossing facilities.
3b	Orchard Road	St Catherine's Road	High Street	Consider traffic calming measures on Orchard Road, including the use of speed cushions and horizontal build outs.
3c	Orchard Road	St Catherine's Road	High Street	At all side road junctions on Orchard Road, introduce coloured surface raised tables to as traffic calming measure as well as creating an informal crossing point.
3d	Orchard Road	Tollbooth Street	Orchard Road	Close south end of Tollbooth Street to all vehicles except cycles and permit two-way traffic. This will reduce the number of vehicle movements on junction and provide continuous footway from Orchard Road to South Street on north side of existing roundabout.

Route 4 – FSN Route 4

Ref	Street	Start	End	Potential intervention (All subject to feasibility and design)
4a	Grantown Road	Knockomie Gardens	Mannachie Road	Consider segregated two way cycle facility on east side of Grantown Road to remove bikes from heavy traffic flows.
4b	St Catherine's Road	Mannachie Road	Bridge Street Roundabout	Consider introduction of advisory cycle lanes in both directions on St Catherine's Road between Bridge Street Roundabout and Mannachie Road.
4c	A940/Grantown Road/St Catherine's Road	Knockomie Gardens	Bridge Street Roundabout	At all side road junctions on FSN 4, introduce coloured surface raised tables. Act as traffic calming measure as well as creating an informal crossing point.



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Forres Potential Active Travel Plan Network (Indicative)

Figure A3: Proposed Active Travel Network

Key:

— FSN 3

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



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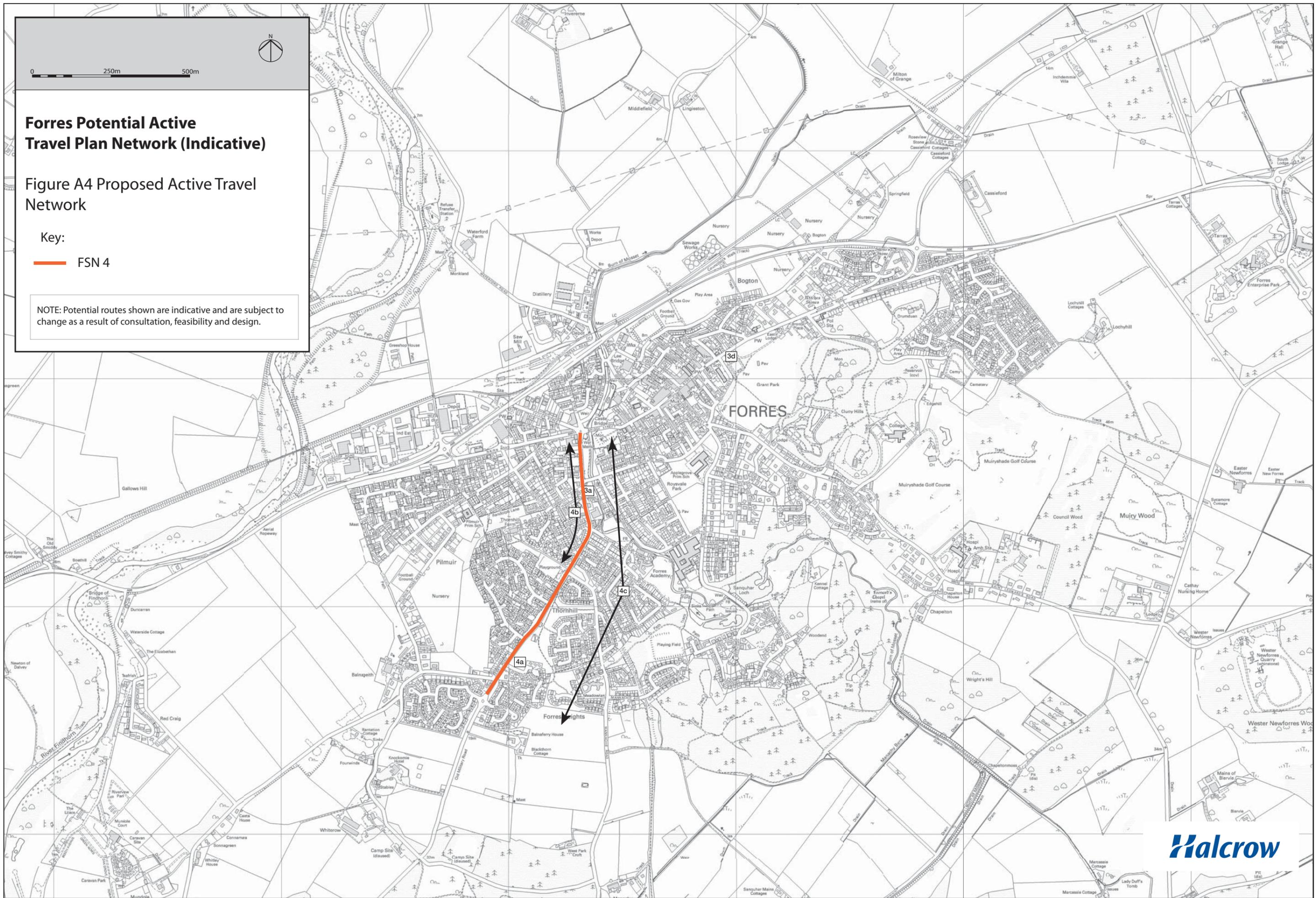
Forres Potential Active Travel Plan Network (Indicative)

Figure A4 Proposed Active Travel Network

Key:

FSN 4

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



Route 5 – FSN Route 5

Ref	Street	Start	End	Potential intervention (All subject to feasibility and design)
5a	Pilmuir Road	Pilmuir Road	Pilmuir Road	Assess existing conditions on road (speed and volume surveys) to determine most suitable solution for traffic calming and introduction of 20mph speed limit.
5b	Pilmuir Road	Pilmuir Road	Pilmuir Road	Ensure all side roads have flush dropped crossings with tactile paving.
5c	West Park Road	Pilmuir Road	West Park Road	Consider closing south side of West Park Road to all vehicles except cycles in order to reduce conflicting movements in area. Vehicles are still able to use Thornhill Road, Ramflat Road and Iowa Place to access and egress residential zone.
5d	Iowa Place	Pilmuir Road	Nairn Road	Assess existing conditions on road (speed and volume surveys) to determine most suitable solution for permitting two way cycling.

Route 6 – FSN Route 6

Ref	Street	Start	End	Potential intervention (All subject to feasibility and design)
6a	Saint Leonard's Road	Orchard Road	Leancoil Hospital	Ensure all side roads have flush dropped crossings with tactile paving.
6b	Saint Leonard's Road	Orchard Road	Leancoil Hospital	Due to existing space constraints, the only feasible form of cycle provision is to introduce cycle lanes in both directions between Leancoil Hospital and Orchard Road.

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0 250m 500m

Forres Potential Active Travel Plan Network (Indicative)

Figure A5: Proposed Active Travel Network

Key:

— FSN 5

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



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Forres Potential Active Travel Plan Network (Indicative)

Figure A6: Proposed Active Travel Network

Key:

 FSN 6

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.

