

**CONNECTING CORNWALL
IMPLEMENTATION PLAN 2015-2019 HIA
REPORT**

Cornwall Council

3513000EZ-HLV

Final

Connecting Cornwall Implementation Plan 2015-2019 HIA Report

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LIST OF ABBREVIATIONS

CAT	Cornwall Assessment Tool
DCLG	Department for Communities and Local Government
CPR	Camborne, Pool, and Redruth
DfT	Department for Transport
DoH	Department of Health
EEA	European Environment Agency
HIA	Health Impact Assessment
IDeA	Improvement and Development Agency
IoS	Isles of Scilly
LDF	Local Framework Directive
LTP	Local Transport Plan
LTP3	Local Transport Plan for 2011-2030 (Connecting Cornwall:2030)
ODPM	Office of the Deputy Prime Minister
OPSI	Office of Public Sector Information
PCT	Primary Care Trust
PPG	Planning Policy Guidance
PPS	Planning Policy Supplement
SEA	Strategic Environmental Assessment
SWPHO	South West Public Health Observatory
SWRA	South West Regional Authority
SWRDA	South West Regional Development Agency
URC	Urban Regeneration Company
UWE	University of the West of England
HIA	Health Impact Assessment

EXECUTIVE SUMMARY

A Health Impact Assessment of the Connecting Cornwall Implementation Plan for 2015 to 2019 was undertaken in support of the rapid assessment Health Impact upon the proposed Cornwall Local Transport Plan 3 (undertaken in 2010). Key objectives within both the LTP 3 and its subsequent implementation plan included the encouragement of healthy active lifestyles, promotion of safer communities and individual wellbeing as well as providing equal opportunities for everyone.

Key health issues applied within this assessment were adopted from the Cornwall LTP 3 HIA as set out by the HIA Steering Group.

Health issues considered included both direct and indirect effects from transport upon Cornwall's wider community, including its population and economy.

Community baseline data was applied to establish the demographic, social and health profiles for the population within the geographical scope of the HIA.

Sources of community baseline information included:

- Scoping Report Strategic Environmental Assessment of the Cornwall Local Transport Plan
- Strategic Development Documents for the Cornwall Local Development Framework
- Sustainable Community Strategies and Local Area Agreements

Where appropriate, this baseline information was updated with more recent published data.

An assessment of health, population, environment and deprivation was undertaken. This process used both stakeholder and consultation evidence which was gathered during the original Rapid Assessment of the Local Transport Plan.

Significant Health Impacts of the Local Transport Implementation Plan

Walking and cycling schemes, referred to as active travel, form a significant element within the Implementation Plan. Such schemes when put in place would have direct positive health impacts. These positive impacts may well negate the risk of failure to achieve 'modal shift' from private motor vehicles over to 'active travel', identified within the original LTP3 HIA as the greatest risk to health among young people.

Evidence supports active travel as one solution to tackle the increasing levels of obesity and other health problems in young people and the general population.

In order to achieve positive health impacts the Park and Ride schemes would need to be viable and reverse the current perception of bus transport in Cornwall as:

"Current bus service in Cornwall is considered by the majority of consultees as expensive and below standard".

Opportunities exist to integrate active travel into the park and ride scheme, thereby maximising air quality and noise reduction benefits as well as physical activity health issues.

The original LTP 3 promoted bus transport as the optimum vehicle; however, budgetary constraints may impact upon the level of bus subsidy from Cornwall Council thereby reducing its positive health impacts.

Increased use of public transport in Cornwall would indirectly promote increased levels of physical activities amongst public transport users. Health benefits gained from the modal shift from private motor vehicles to public transport is compounded by the increase in physical activity associated with regular use of public transport.

Failure to improve public transport provision in poor access areas could result in negative health impacts amongst the physically and economically disadvantaged, as it is often people living in these areas who are wholly dependent upon public transport.

1 INTRODUCTION

1.1 Overview

1.1.1 Cornwall Council commissioned Parsons Brinckerhoff to provide specialist practitioner support for a Health Impact Assessment (HIA) of their Local Transport Plan (LTP) 3.

1.1.2 This HIA is part of the extended assessment process, which builds upon the findings from the Rapid Participatory HIA originally undertaken upon the overarching Cornwall LTP in 2010 and now includes the four year Connecting Cornwall Implementation Plan 2015 to 2019.

1.1.3 The rationale for undertaking a Screening Assessment upon the health impacts of the Cornwall LTP3 includes:

- The commitment by Cornwall Council to integrate health into the LTP 3 process.
- A legal requirement to include consideration of 'Human Health' in a Strategic Environmental Assessment (SEA)
- To contribute to the wider agenda relating to quality of life and reducing health
- To coordinate the public health concerns in respect of air quality, noise and climate change;

1.1.4 The HIA makes reference to the Transport and Health Resource¹, published by the Department of Transport and Department of Health, to aid the initial development of transport plans, support and inform their assessment through the SEA process and help deliver LTPs strategic objectives in line with the LTP 3 Guidance.

1.2 Connecting Cornwall Implementation Plan 2015 to 2019

1.2.1 LTPs are a vital tool which enable Local Authorities and their stakeholders to strengthen the function, identity and character of the region and its delivery of services to the community. In addition it aims to establish the approach that Cornwall Council will take to tackle Cornwall's current transport problems, as well as its future challenges.

1.2.2 The LTP guidance has set out the two tiers of LTP- the strategy and the implementation programme. The strategy, 'Connecting Cornwall: 2030 moving towards a green peninsula' sets out the longer term twenty year plan, while the implementation plan is more detailed and only covers a 4 year period.

1.2.3 The Implementation Plan includes schemes that are assessed and prioritised by the Cornwall Assessment Tool (CAT). The CAT assessment methodology provides a mechanism to assess candidate schemes against a range of objectives and related criteria including tackling climate change; supporting economic prosperity; respecting and enhancing the environment; encouraging healthy active lifestyles; community safety and individual wellbeing; supporting equality and opportunity. These are aligned with the objectives for Connecting Cornwall.

1.2.4 A number of schemes within the Implementation Plan will also form part of the Strategic Economic Plan as they provide conditions for economic growth through improving connectivity. This includes access to key investment sites as well as

¹ Department of Transport, Department of Health (2011). *Transport and Health Resource; Delivering Healthy Local Transport Plans*

improving business growth across Cornwall. The Cornwall and Isles of Scilly Strategic Economic Plan sets out the plan for investment to 2020 from various sources including EU Structural and Investment Funds, Local Growth Funds and other public and private sector sources.

1.3 Main Themes within the Implementation Plan 2015 – 2019

- **Walking and pedestrian schemes** – infrastructure provision: new walkways and improvements to existing walkways, pedestrian crossings.
- **Cycling schemes** – infrastructure provision: new cycle ways, improvements to existing cycleways.
- **Bus schemes** – infrastructure provision: bus priority measures, bus gates, waiting facilities and bus stop upgrades; additional park and ride buses.
- **Community transport** – infrastructure and service provision for communities and businesses.
- **Highways** – infrastructure provision (junction improvements, roundabout, new highways, road widening, parking); information provision (signage); road safety (improving visibility, speed restrictions); traffic management (signalling, traffic restrictions).
- **Rail** – Infrastructure provision such as improving station facilities, signalling.
- **Multi-modal schemes** – infrastructure provision for a range of transport modes such as walking/ cycling routes, park and ride; traffic management – traffic calming and speed restrictions; road safety.
- **Other** – information provision, congestion schemes, ticketing, behavioural change.

1.3.1 The overarching Cornwall LTP aims to set out a strategy that will improve the quality of life for everyone who lives, works and visits the County and to;

“Provide the long-term strategy to deal with the issues and maximise the opportunities, whilst delivering the objectives – all of this is to take particular account of the DfT’s five national transport goals.”

1.3.2 The DfT national transport goals have been expanded into six goals for the purpose of the LTP 3 strategy:

- Climate Change
- Supporting Economic Prosperity
- Respect and Enhance the Environment
- Healthy Active Lifestyles
- Community Safety and Individual Well being
- Equality of opportunity

1.4 Transport and Health

1.4.1 Transport is an essential activity, connecting people to shops, employment, healthcare services, family, community and recreation. The rapid expansion of car use over the last 50 years has resulted in a sharp increase in vehicle passenger transport, with cars, vans and taxis accounting 83% of the distance travelled in 2013

compared to 23% in 1952². In turn this has resulted in a decline in walking and cycling throughout the UK³. This has had a negative impact on human health as a result of both reduced physical activity and exposure to the health risks resulting from road transport. Overall transport has a significant contribution to current health inequalities, in particular the rise in obesity levels. Transport plans are able to take account of these inequalities and provide measures that may limit or even attempt to reverse their impacts.

1.5 Introduction to Health Impact Assessment

1.5.1 According to 'Health Impact Assessment: A Practical Guide'⁴ an HIA is defined as;

"both a health protection and health promotion tool. In HIA, health is broadly defined to include assessment of both health hazards and health benefits of a proposal and the potential ways in which health and well-being can be both protected and promoted."

1.5.2 **Health Determinants** are the personal, social, cultural, economic and environmental factors that influence the health of individuals or populations. In addition to physical health, these include a range of factors such as income, employment, education, social support etc.

1.5.3 **Health Impact** is the direct effect (e.g. release of pollutant) or indirect cumulative effect (e.g. loss of jobs or income) of a proposal on the health of a population. The impact may be either short or long term.

1.5.4 **Health Inequality** can be defined as the differences in either health status or in the distribution of health determinants between different population groups. Some health inequalities are unavoidable, others are unnecessary and avoidable as well as unjust and unfair, and can lead to inequity in health.

1.5.5 Health and health inequalities are influenced by interactions between a variety of health determinants, including: income and poverty, housing, employment, the environment, transport, education, access to health services and the broader influence of well-being (Figure 1.1).

² Department for Transport (2013). *Transport Statistics Great Britain 2013*. London, The Stationary Office.

³ Department for Transport (2013) *National Travel Survey: 2012*. London, The Stationary Office.

⁴ Harris, P. Harris-Roxas, B., Harris, E., & Kemp, L. 'Health Impact Assessment: A Practical Guide.' Sydney: Centre Health Equity Training, Research and Evaluation (CHETRE) 2007

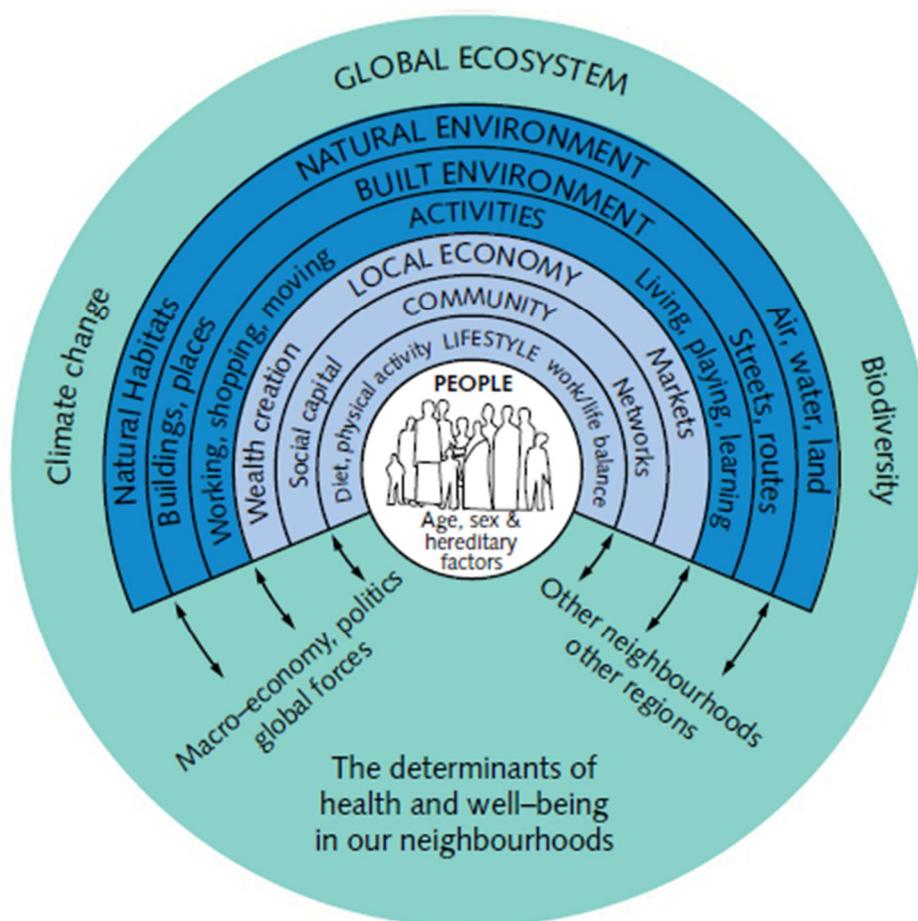


Figure 1.1: Population Health and the Environment. Hugh Barton and Marcus Grant (2006), drawing on Whitehead and Dahlgren (1991) and Barton (2005). United Kingdom Public Health Association (UKPHA) Strategic Interest Group and the WHO Healthy Cities Programme.

1.5.6 HIAs apply the above (Figure 1.1) model of health and well-being to determine the potential for any health inequality. The Socio-Environmental Model of Well-Being considers that health and well-being are a result of external influences, where an individual or family experiences a combination of adverse external factors which could result in health inequality.

1.6 Purpose of Health Impact Assessment

1.6.1 The purpose of a HIA is to identify and assess both the beneficial and detrimental effects of a proposed Scheme, enhance the benefits of the scheme whilst minimising its potential detrimental effects from its recommendations.

1.6.2 A Health Impact Assessment:

- is usually directed and governed by a **Steering Group** comprised of community representatives and health professionals
- allows an opportunity for the engagement and involvement of different people, using different methods and approaches to gather evidence.

- identifies how proposals could affect health and inequalities, where there could be a disproportionate effect on certain populations or areas.
- provides recommendations to inform the decision-making process by highlighting practical ways to enhance the positive impacts of a proposal, and to remove or minimise any health inequalities and negative impacts that might arise or exist.

1.6.3 HIAs provide organisations with a framework to deliver their statutory obligations; they are a means of introducing health considerations into the planning process.

1.7 Review of a Health Impact Assessment

1.7.1 Due to the inevitable natural filtering and focus of plans and strategies as they evolve the comprehensive assessment of a superseded strategy or plan can be used as a foundation upon which to reassess the current more focused final plan. Repetition of the complete assessment process can be avoided by using the previous assessment as a template upon which to develop a review.

1.7.2 A review of a HIA process can be conducted within the scope and terms of reference of the HIA where all assessment criteria, including Determinants of Health, Health Pathways, baseline information as well as aims and objectives remain the same.

2 CORNWALL LTP IMPLEMENTATION PLAN 2015 – 2019 HIA

2.1 Overview

2.1.1 The aim of this HIA is to extend the original HIA upon the LTP3 proposals to include the emerging Implementation Plan 2015 – 2019 and scrutinise the elements which have the potential to affect people's health, both directly and indirectly. Some effects may be positive, others could be negative. This HIA will feed directly into the SEA of the LTP3, including recommendations and opportunities to maximise the potential benefits to people's health as well as mitigation of any possible negative health impacts.

2.2 HIA Steering Group Involvement

2.2.1 Within the initial HIA conducted upon the LTP 3 proposals – 'Connecting Cornwall: 2030 moving towards a green peninsula', the role of the HIA Steering Group assisted in overseeing and managing the HIA.

2.2.2 This current HIA did not require full steering group involvement, due to the Determinants of Health, Health Pathways, baseline information and the aims and objectives of the review were retained or remained broadly unchanged from the original HIA.

2.3 Original HIA Steering Group

2.3.1 Steering Group membership of the original LTP3 HIA included major stakeholders, community representatives as well as major decision makers or their representatives:

- **Dr Peter Walsh**, HIA Specialist, Parsons Brinckerhoff Limited.
- **Jodie Boex**, Transport Policy Officer, Cornwall Council
- **Hannah Harris**, Transport Policy Officer, Cornwall Council
- **Barbara Parsons**, Cornwall Air Quality Forum, Cornwall College.
- **Mike Roberts**, Cornwall Primary Care Trust
- **Matt Lenny**, Cornwall Primary Care Trust
- **Paula Wellings**, Collision Reduction
- **Joe Lynch**, Passenger Focus
- **Matthew Vowels**, Cornwall Development Company

2.3.2 A review of the Implementation Plan 2015 – 2019 process was conducted through individual communications and emails between Peter Walsh and Steering Group members. Comments were compiled and incorporated into the final report as well as being circulated to all HIA Steering Group members for reference.

2.3.3 In the case of this HIA review process the Steering Groups role was more limited. The steering group were able to ensure that the final recommendations arising from the review were both relevant and objective.

2.3.4 The outcomes of Steering Group comments were fed directly into the SEA for the Local Transport Implementation Plans 2015 – 2019.

2.4 Aims and Objectives for the Cornwall Transport Implementation Plan 2014 - 2019 Health Impact Assessment

2.4.1 Specific aims of the HIA review process followed the same as those within the Cornwall Local Transport Plan 3 HIA, which were:

- Assess the potential health impacts, both positive and negative, of the draft Cornwall Implementation Plan 2015-2019.
- Generate recommendations which encourage positive health impacts and minimise negative ones.
- Assess the marginal, indirect, unverified and cumulative health inequalities associated with the draft Cornwall Implementation Plan 2015-2019.
- Maximise the health opportunities of the draft Cornwall Implementation Plan 2015-2019.
- Act as a resource/communication channel and forum for discussion and dialogue regarding stakeholder interests in the draft Cornwall Implementation Plan 2015-2019.
- Strengthen links between stakeholder groups, transport users and Cornwall Council.
- Consult with representatives of end users and beneficiaries regarding cross cutting key health issues of the draft Cornwall Implementation Plan 2015-2019.

3 METHODOLOGY FOR LTP IMPLEMENTATION PLAN 2015 – 2019 HIA

3.1 Introduction

3.1.1 The Cornwall Implementation Plan 2015 – 2019 HIA was undertaken as additional exercise to the original Cornwall LTP3 HIA. Figure 3.1 illustrates the stages of an HIA.

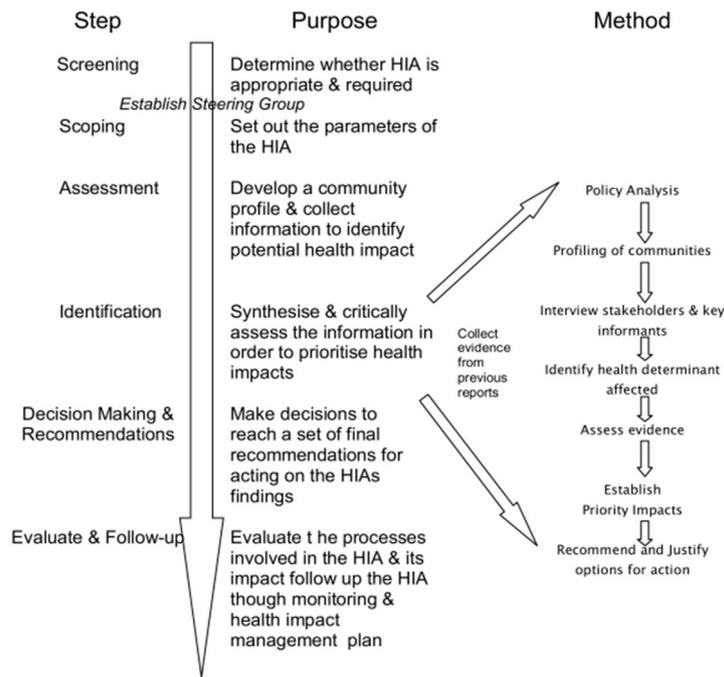


Figure 3.1: Stages in a Health Impact Assessment

3.1.2 The following HIA stages in bold were utilised, the remaining stages have already been completed within the original LTP3 HIA and was deemed not necessary for the purpose of this HIA:-

- **Screening**
- **Scoping**
- **Assessment/ Identification**
- **Decision Making/ Recommendations**
- **Evaluation & Follow up**

3.1.3 For the Implementation Plan 2015 – 2019 HIA, the LTP HIA baseline data were updated where possible and where no updated information was available, the baseline data from the LTP 3 HIA was utilised.

3.1.4 In addition evidence from both lay and expert witnesses utilised in the original LTP 3 HIA was once again drawn upon.

3.2 Screening

3.2.1 Screening of the requirement of the HIA was undertaken within the Scoping stage of the SEA for the LTP. The legal requirement to include the assessment of human health within the LTP 3 SEA dictated the need for a HIA for the Implementation Plan.

3.3 Scoping

3.3.1 The purpose of the scoping step was to define the area of influence for the HIA, identify the potentially affected communities, the key health issues and to develop the strategy to undertake the required data collection. Inputs from the Steering Group were key to the successful implementation of this phase of the HIA.

3.3.2 Scoping of the HIA was undertaken as an initial identification of health determinants and key factors by the HIA Steering Group as well as a high level desk top study of existing health information, gap analysis and literature review.

3.3.3 The Steering Group agreed that the subject of the HIA was to be restricted to the Cornwall LTP 3 broad proposals as set out within the published document 'Connecting Cornwall'.

3.4 Assessment

3.4.1 The assessment of the Cornwall LTP involved aligning available community baseline data against known direct and indirect health effects upon a set of key vulnerable groups.

3.4.2 Stakeholder evidence and interviews generated within the original LTP 3 HIA were utilised and re-analysed as part of the review process.

Baseline

3.4.3 Sources of baseline information in the original LTP3 included:

- Scoping Report of the SEA of the Cornwall LTP 3
- Strategic Development Documents for the Cornwall Local Development Framework
- Sustainable Community Strategies and Local Area Agreements

3.4.4 Community baseline data were used to establish the demographic, social and health profiles for the population within the geographical scope of the HIA.

3.5 Recommendations and Mitigation

3.5.1 Appropriate mitigation measures were sought where negative impacts of the implementation plans were identified. Negative impacts identified as being of moderate or high significance at the assessment stage were afforded particular attention and their mitigation shall be prioritised above lesser impacts.

3.5.2 This HIA was undertaken in parallel with the SEA permitting the feedback of the findings into the Assessment process at the earliest stage. Close collaboration between the HIA and SEA practitioners also avoided duplication of efforts in the development of baseline information and mitigation strategies.

3.6 Management Planning & Monitoring

- 3.6.1 Health mitigation measures identified in the recommendations stage of the review were, where appropriate, incorporated into the Environmental Report for the SEA of the Cornwall LTP 3 and Implementation Plans 2015-2019. Implementation of these measures will be overseen by Cornwall Council Transport team HIA Steering Group members and monitored by other members of the Steering Group, during their function as LTP statutory consultees in partnership with Cornwall Council.

4 DETERMINANTS OF HEALTH AND COMMUNITY CONTEXT

4.1 Principal Determinants of Health

4.1.1 The following table indicates the principal determinants of health recommended by the WHO as healthy objectives for strategic planning purposes, their examples and compatibility with relevant elements of the existing LTP 3 SEA.

Table 4.1: Compatibility between Key Determinants of Health and Element within the Cornwall Local Transport Plan 3 SEA

Principal Determinants of Health: ⁵	Examples Health Determinants	Relevant Element within LTP 3 SEA
Opportunity for healthy lifestyles	Physical exercise; use of alcohol/cigarettes/non-prescription drugs; diet; sexual activity; risk taking behaviour	Health
Social cohesion and supportive social networks	Neighbourliness; sense of belonging; local pride; social support networks; social isolation; peer pressure; family organisation; social exclusion; community identity	Accessibility
Housing quality An attractive environment with acceptable noise levels and good air quality Road safety and a sense of personal security Good water quality and sanitation Opportunity for local food production and healthy food outlets	Built environment; neighbourhood design; housing; noise, air and water quality; attractiveness of area; community safety; safety of play areas; perception of environment; indoor air quality; visual impact	Health; Accessibility; Safety and Crime, Air Quality, Noise, Landscape & Townscape, Health
Access to diverse employment opportunities	Unemployment; income; economic inactivity; type of employment; workplace conditions	Accessibility
Access to high-quality facilities – educational, cultural, leisure, retail, health and open space	Medical services; other caring services; careers advice; shops and commercial services; public amenities; transport; education and training; information technology	Accessibility
Economic, Environmental and Sustainability Factors	Government policies; gross domestic product; economic development; biological diversity; climate	Economy; Biodiversity, Flora and Fauna; Climatic Factors

⁵ Barton, H. et al. (eds) (2003) Healthy Urban Planning in practice: experience of European cities. Report of the WHO City Action Group on Healthy Urban Planning. World Health Organization, Regional Office for Europe, Copenhagen.

4.2 Geographical ScopeArea of Greatest Impact

4.2.2 The area of influence and potentially affected communities of the Cornwall LTP3 is by default the entire County of Cornwall and its population.

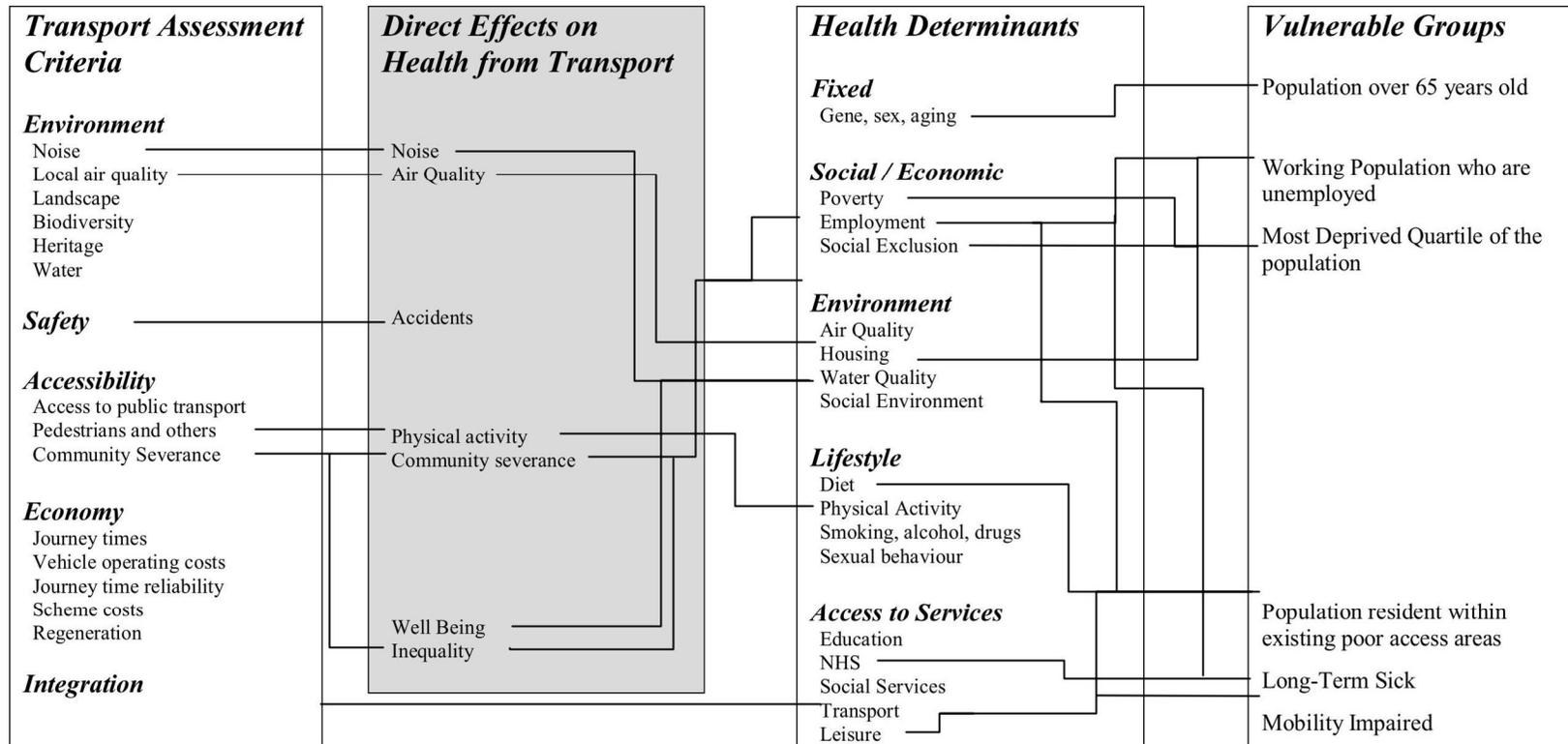
4.3 Key Community Groups

4.3.1 Specific vulnerable groups within the community were highlighted within the LTP3 SEA Scoping Report and supplemented by the HIA Steering Group. These comprise:

- Population resident within existing poor access areas
- Long-Term Sick
- Most Deprived Quartile of the population
- Population over 65 years old
- Working Population who are unemployed
- Mobility Impaired
- Population exposed to poor air quality

4.3.2 Using the associated links between direct effects on health from transport, health determinants and LTP 3 vulnerable groups (Figure 4) the scope of the original LTP3 HIA was derived and approved by the HIA Steering Group.

Figure 4.1: Links between Transport Assessment Criteria, Health Impacts, Health Determinants and LTP3 Vulnerable Groups



4.4 Community Baseline

4.4.1 Clear links exist between individual well-being and the effects of poverty, deprivation and social exclusion. From the summary of Cornwall's community baseline (Table 4.2) there is evidence of both deprivation and health inequality and it is apparent that a significant proportion of Cornwall's population are considered to be experiencing the effects of poverty, deprivation and social exclusion.

4.4.2 Explicitly primary drivers of deprivation in Cornwall are:

- Economic inactivity and
- Low wages.

4.4.3 However there are also a number of additional contributing factors to deprivation, which include:

- Lack of job security
- Low service access in rural areas
- Lack of transport options in rural areas
- Lack of skills

Table 4.2: Summary of Cornwall's Community Baseline Evidence

Health Determinant	Baseline Evidence
Lifestyle	<p>The estimated level of adult physical activity is better than average. Rates of hip fractures, sexually transmitted infections, road injuries and deaths, smoking related deaths and hospital stays for alcohol related harm are better than average⁶.</p> <p>Between September 2010 and August 2011 there were 15.6% prevalence of obese children in Year 6, compared to 19% in England.</p> <p>Between April 2012 and March 2013 there were 1,225 drug related offences recorded by Police, compared to 191,692 in England and 21 drug related deaths⁶. Cornwall registered the second highest admissions to South West Hospitals of drug related mental health and behavioural disorders⁷ in 2012.</p>
Unemployment/ Economy	<p>Between July 2013 and June 2014 there were 14,700 unemployed people in Cornwall, 5.3% of persons 16-64. In September 2014 there were 4,282 persons claiming Job Seekers allowance⁸.</p> <p>Unemployment is a mixed picture with variable levels of unemployment. Cornwall has high self-employment, however there has been a drop in business overall (-4.1% 2008-2011), reflecting the impact of the recession on the local economy. The rate of growth has been high over the last decade but in 2011 it was still the second weakest economy in the country⁹.</p>
Health	<p>In May 2012, 22,930 of the working age population claimed incapacity benefit.</p> <p>Over the last 10 years, all-cause mortality rates have fallen. Early death rates from cancer and from heart disease and stroke have fallen and are better than the England average. About 15.7% of Year 6 children are classified as obese, lower than the average for England¹⁰.</p>
Income	<p>Gross weekly pay in Cornwall in 2013 was £412</p> <p>Gross weekly pay in Great Britain in 2013 was £518</p>
Education	<p>In 2011, 22.4% of the population in Cornwall (aged 16-74) have no academic or professional qualification compared to 29% in 2001⁷.</p> <p>Levels of GCSE attainment among those under 18 are worse than the England⁸.</p>
Deprivation	<p>Deprivation is lower than average, however about 17,000 children live in poverty⁸.</p>
Transport/ Accessibility	<p>In Cornwall 2 out of 5 jobseekers say lack of transport is a barrier to getting a job</p>
Collisions	<p>In 2012 there were 213 Reported Killed and Seriously Injured casualties in Cornwall¹¹</p> <p>Cornwall is reducing its road casualty rate faster than any other similar rural road network transport authority.</p>

⁶ <http://www.westbriton.co.uk/Drug-deaths-Cornwall-reached-time-high/story-18211759-detail/story.html>

⁷ Statistics on Drug Misuse: England, 2012, The Health and Social Care Information Centre.

⁸ Office of National Statistics, nomis official labour market statistics (<https://www.nomisweb.co.uk>)

⁹ Cornwall Council (2013), Cornwall's economy at a glance, January 2013

¹⁰ NHS. Health Profile 2012, Cornwall

¹¹ Traffic Statistics 2012: Annual report of traffic and collision statistics. Cornwall Council 2013

4.5 Transport- Related Ill Health

4.5.1 Reviews undertaken by the National Institute for Health and Clinical Excellence (NICE) of the best available evidence regarding transport policy and health focussed on the built environment and the promotion of cycling and walking^{12,13,14}.

4.5.2 Key recommendations arising from the transport policy review were:

- Give the highest priority to modes of transport that involve physical activity (e.g. pedestrians and cyclists, and mobility impaired) when developing or maintaining streets and roads, using one or more of the following methods;
 - a) re-allocation of road space to support physically active modes of transport;
 - b) restrict motor vehicle access;
 - c) introduce road-user charging schemes;
 - d) introduce traffic-calming schemes to restrict vehicle speeds, and
 - e) create safe routes to schools, through using traffic-calming measures near schools, creating or improving walking and cycle routes to schools.
- To plan and provide a comprehensive network of routes for walking, cycling and using other modes of transport involving physical activity. These routes should offer everyone convenient, safe and attractive access to workplaces, homes, schools and other public facilities.

¹² National Institute for Clinical Excellence (2006) Transport interventions promoting safe cycling and walking: evidence briefing. http://cehi.org.uk/Transport_Evidence_Briefing_05-07%5B1%5D.pdf

¹³ National Institute for Clinical Excellence (2008) Promoting and creating built or natural environments that encourage and support physical activity. <http://www.nice.org.uk/nicemedia/pdf/PH008guidance.pdf>

¹⁴ National Institute for Clinical Excellence (2012). Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation. <http://www.nice.org.uk/guidance/ph41>

5 HEALTH ISSUES FROM ORIGINAL HIA

5.1 Discussion of Scope of HIA

Health Impacts

5.1.2 The full range of health impacts considered in the assessment was initially screened by the Steering Group. It was not possible to quantify all the health impacts of transport with similar confidence as health impacts from different transport modes vary considerably¹⁵

Table 5.1: Health Impacts from Different Transport Modes

	Accidents	Air Pollution	Noise	Physical Activity	Community Severance
Road Motorised	----	----	----		----
Road Motorised Bus	-	--	----	+	+
Road Non-motorised	-			+++	
Rail	-	--			-
Sea	-	-	-		

Key	Low	Medium	High
Beneficial Impact	+	++	+++
Detrimental Impact	-	--	----

5.2 Key Health Impacts

5.2.1 Scoping responses received from the Steering Group during the early stages of the HIA, identified the key transport related health impacts which could potentially arise as a result of the LTP 3.

5.2.2 The full range of the potential health impacts arising as a result of the implementation of the LTP 3 were determined by the Steering Group. Potential health impacts of the Cornwall LTP 3 included but were not restricted to:

- Impact on access to employment and health services
- Direct physical health impact of non-motorised trips
- Impact on the opportunity to training and education
- Impact on road safety

¹⁵ 'Informing transport health impact assessment in London' AEA NHS Executive, 2000

- Sustainability and broader economic impact
- Impact on the local economy
- Impact on safety and crime.

Potential Impacts and Effects

5.2.3 The assessment of health impacts was based on the type of impact and its rating as potentially positive or negative. Each health effect was rated according to its significance, taking into account:

- the likelihood of the effect occurring,
- the likely duration of the effect,
- the reversibility of the effect,
- the vulnerability of the population, and
- the magnitude of the effect.

5.2.4 The primary focus of the HIA was the Implementation Plan put forward for the period 2015 to 2019. These plans form the concrete actions arising from the LTP 3 process and were developed from the logical basis and can be justified from the overarching strategy contained within the LTP 3.

5.3 Key Issues during Original HIA Assessment

5.3.1 Buses – were considered by all consultees to be the single most important element of the LTP 3. The current bus service in Cornwall was considered by the majority of consultees to be below standard and too expensive. However the majority of those surveyed were not regular bus users.

5.3.2 Active Travel – the failure of the LTP 3 to succeed in the ‘modal shift’ from car journeys to ‘active travel’ was identified as the single highest risk to health within the LTP 3. Obesity levels among young people are predicted to rise over the next 20 years, the health of the population is inherently linked to behaviour change and increases in physical activity.

5.3.3 Walking/ Cycle Routes - were considered only appropriate for tourists, with destinations of limited use to residents, such as shops or schools.

5.3.4 Cycling - amongst younger consultees cyclists were almost exclusively male.

5.3.5 Footpaths - outside of larger towns in Cornwall were considered to be either inadequate or dangerous by a number of those surveyed.

5.3.6 Planned Reduction in Road building - was very unpopular by those surveyed - generally seen as a withdrawal of service rather a rationalisation.

5.3.7 Introduction of Variable Street lighting - was considered to generate a heightened perception that an offence could be committed, whilst being considered positive for community cohesion (e.g. empowering community to decide on their own street lighting).

- 5.3.8 Community Buses – was a popular proposal, though several stakeholders expressed that the existing service required support first, e.g. sustainability, lack of management resource, before any new community bus schemes are launched.
- 5.3.9 Mobile Services – this was considered to be an expensive provision when previously tried, providing only very generalist advice.

6 RECOMMENDATIONS AND MITIGATION

- 6.1.1 As a result of the review of the Cornwall LTP 3 HIA a series of Recommendations and Mitigations were developed (Table 6.1).
- 6.1.2 Each recommendation or mitigation relates to a specific element of the Local Transport Implementation Plans, its impact upon a specific Determinant of health has been scored.
- 6.1.3 Where relevant, evidence was provided against either a recommendation or mitigation, to either verify or substantiate the health impact or outcome against a specific element of the Local Transport Implementation Plan.

Table 6.1: High Level Health Impacts Assessment of Cornwall LTP 3 Implementation Plans 2015 to 2019

Assessment of Effects of Implementation Plan Schemes

Key:

✓	Likely Positive Health Outcome	*	Likely Negative Health Outcome	?	Uncertain Effect	0	No Effect
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	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
Walking and Pedestrian Schemes										
Improvement to footpaths, pedestrian crossings.	✓	✓	✓	0	✓	✓	✓	These schemes do not require new land take. They include improvement to existing resources rather than construction of new ones.		Concentrate on major sites of population e.g. large employers and schools to maximise effect. Joining up public transport & walking Efforts of modal shift towards targeted promotion of behaviour change through schools & healthy workplace, settings basis.
Cycling Schemes										
Scheme 23 - 2A A3047 Redruth-Blowinghouse Hill roundabout	✓	0	✓	0	✓	0	✓	This scheme provides a convenient and unhindered passage by bicycle as possible, utilising existing footways to create a widened off carriageway shared use path around the whole roundabout.	Heavily trafficked roundabouts are notoriously difficult to negotiate by bicycle.	Ensure clear signage for dual use of the crossings to ensure enough space is allowed for bicycles and pedestrians crossing the road.

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
Bus Schemes										
Priority measures, bus gates								These schemes will generally involve reconfiguration of the existing highway but can require minor widening at junctions, with small areas of land take required to accommodate this. The majority of these schemes will be located in urban areas or along main routes, as opposed to rural or countryside locations.		

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
Priority measures, bus gates (continued)		✓	✓	✓	✓	✓	✓		<p>Need for an 'Integrated and Strategic' approach to bus service provision, avoid degradation of infrastructure through lack of investment or transparency of roles, e.g. who owns the vandalised bus stops?</p> <p>Bus shelters associated with anti-social behaviour. Contributes to negative perception of public transport.</p> <p>"Current bus service in Cornwall is considered by the majority of consultees as expensive and below standard"¹⁶</p> <p>Bus fares perceived as expensive poor value for money.</p>	<p>Potential to utilise bus shelters into the community. Art in bus shelters have prevented their vandalism by people awarding the shelters a sense of value²¹.</p> <p>Need to tackle widespread negative perception of the standard & reliability of current bus services in Cornwall.</p> <p>Wider equity goals are undermined; changes to mainstream public transport provision - in particular spiralling bus fares coupled with service reductions. Introduce concessionary fare schemes/ community bus schemes; increased public subsidy.</p>
<p>¹⁶ 5.5.1 Health Impact assessment of Cornwall Local Transport Plan 3 November 2010</p> <p>¹⁷ Besser, L., Dannenberg, A. 2005 Walking to public transport: Steps to help meet physical activity recommendations</p> <p>¹⁸ Wener, R., Evans, G. 2007 A morning stroll: Levels of physical activity in car and mass transit commuting. Environment and Behaviour, 39: 62-74</p> <p>¹⁹ Most public transportation passengers exercise the recommended amount while walking to and from transit stations and stops. In U.S. physically able adults, average annual medical expenditures are 32% lower for those who achieve physical activity targets (\$1,019 per year) than for those who are sedentary (\$1,349 per year).</p> <p>²⁰ Up to 27% of households with no car in Penwith</p> <p>²¹ http://redditch.wyhub.org.uk/cms/communications/news/2010/november/bus-shelter-art.aspx</p> <p>²² Metro Yellow School Bus Project (http://www.wymetro.com/BusTravel/SchoolTransport/MyBus/MyBus/)</p> <p>²³ Current demographic and economic trends (aging population, rising fuel prices, increasing health care costs) are increasing the value of public transportation health benefits. (Evaluating Public Transportation Health Benefits June 2010) http://www.transportation.org/policy/2010/06/2010-Transport-Policy-Institute-For-The-American-Public-Transportation-Association/</p> <p>²⁴ Besser, L., Dannenberg, A. 2005 Walking to public transport: Steps to help meet physical activity recommendations</p> <p>²⁵ Wener, R., Evans, G. 2007 A morning stroll: Levels of physical activity in car and mass transit commuting. Environment and Behaviour, 39: 62-74</p> <p>²⁶ Most public transportation passengers exercise the recommended amount while walking to and from transit stations and stops. In U.S. physically able adults, average annual medical expenditures are 32% lower for those who achieve physical activity targets (\$1,019 per year) than for those who are sedentary (\$1,349 per year).</p> <p>²⁷ Population of over 65 years in Cornwall to increase 70% by 2031 (Cornwall Sustainable Community Strategy)</p>	<p>Physical activity levels among public transport users are significantly higher than among car users, and can make a major contribution to the achievement of physical activity targets of moderate physical activity each week.^{17, 18}</p> <p>Public transportation passengers able to exercise while walking to and from transit stations and stops.</p> <p>Publicly accessible bus stops and shelters are a major physical activity target.</p> <p>Physically and economically disadvantaged people of low income and low education levels are disproportionately dependent on public transportation and bus to medical services and obtain healthy, affordable care.</p>	<p>Strong bus transport promotion schemes targeted at primary school children are required.²⁴ Provides a positive experience of public transport at an early age, reducing potential negative perceptions of public transport later life.</p> <p>Opportunity for promotional activities to link physical activity and public transport between transport providers and users, and can make a major contribution to the achievement of 150 minutes of moderate physical activity each week.²⁶</p> <p>Public transportation passengers able to exercise while walking to and from transit stations and stops²⁶.</p> <p>Opportunity to promote the increase in value of public transportation, health benefits to tackle the current demographic²⁷ and economic trends (aging population, rising fuel prices, increasing health and environmental</p>								

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
Improvements to stops, services and information	✓	✓	✓	✓	✓	✓	✓	It is assumed that the schemes will not require greenfield land take.		
Highways										
Maintenance	✓	✓	✓	0	✓	0	✓	Highway maintenance schemes including resurfacing, patching, pavements, drainage, potholes, cutting verges and gritting.	Positive health economic impact and improving journey times through reducing congestion and improved air quality. Improved road surface can encourage cycle usage.	The maintenance methods should be appropriate and priority should be given to routes that are heavily used by both vehicle and no vehicle users. Noise caused during construction works should consider impact upon neighbouring communities in terms of timing and any other mitigation measures.
Junction and roundabout improvements and widening	0	✓	*	0	?	0	✓	A number of schemes to improve safety at junctions at roundabouts. It is assumed that there will be a very small loss of land to accommodate widening of junctions.	The schemes would ease congestion but is likely to lead to increase in capacity, more traffic and increased impacts on air quality and noise.	Widening of roadways and junctions could lead to increased average vehicle speeds. At junctions, cycle lanes can increase accidents, especially if the lanes are not carried through the junction ^{28, 29} . Noise caused during construction works should consider impact upon neighbouring communities in terms of timing and any other mitigation measures.
Traffic management – signage, speed	✓	?	✓	?	?	✓	✓	It is assumed that such schemes will only require minimum land take if any.	Children from socially deprived background more likely to be injured in road collision ^{30,31} .	Targeted safety measures at most vulnerable groups, e.g. Second Step Use of GIS/ Amethyst systems to

²⁸ Coates, Nigel, 1999, 'The Safety Benefits of Cycle Lanes', Proceedings of the Velo-City '99 Conference held in Graz, Austria.

²⁹ <http://www.cyclecraft.co.uk/digest/research.html>

³⁰ Strong social gradient in child pedestrian deaths (Ward and Christie, 2000)

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
restrictions									Speed restrictions upon vehicles can result in increased emissions due to a reduction in optimum performance of vehicle engines. This may result in a further reduction in air quality.	identify population at greatest risk ³² of injury through collisions. Target road safety campaigns such as 'Learn to Live'. Monitoring of the air quality impact of vehicle speed restriction should be undertaken in areas where there is existing poor air quality
Scheme 36 – Falmouth Gateway – Treluswell Roundabout	?	?	*	0	?	?	✓	The scheme involves the removal of a double mini and replacing it with single large roundabout. The scheme will enhance the Ponsanooth arm to improve capacity	The scheme will improve road safety through easing of congestion. However increased capacity can result in worsening of air quality. No improvement on accessibility, access to amenities and healthy travel.	The scheme has a beneficial effect on vehicle users, however it is anticipated that in combination with other network improvements non- vehicle users will also benefit.
Scheme 49 - A38 Cornwall Gateway (Carkeel)	0	✓	✓	0	✓	✓	✓	Scheme to deliver improvement to the Carkeel roundabout that provides access to the north of Saltash that suffers from significant congestion and delay during peak periods.	The scheme will improve congestion, improve air quality and encourage investment and economic growth.	Roundabout improvements should also ensure that they consider cyclist use of roundabout.
Scheme 50 – Newquay Growth Area (NSR 1)	✓	✓	*	0	✓	0	0	Phase 1 NSR that will provides southern access to Growth Area (before bridge) and create employment space.	The scheme will ease congestion and is part of the wider project that will also improve access to the airport. The project contributes to a long term	The proposed road should encourage non vehicle travel by ensuring suitable cycling and walking routes are incorporated in the design.

³¹ Residential areas with higher ratios of lower socioeconomic groups have higher accident rates, especially for children (Raine et al., 2000) (Pedestrian death rate for children social class V is 5 times that of social class I).

³² Increased risk of collisions and injuries through Significant potential increase in elderly driver population
Potential Increase in young drivers and motorcycle riders. Fatal collisions most prevalent in the most deprived IMD quintiles.
Potential Increase in young drivers and motorcycle riders. Declining number of road accidents linked to reduction in cycling and pedestrian rates.
(‘A poor way to die: social deprivation and road traffic Fatalities’, David D. Clarke, Pat Ward, Wendy Truman and Craig Bartle, School of Psychology, University of Nottingham, Behavioural Research in Road Safety 2008.)

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
									strategy for high quality urban growth in the Newquay area.	
Scheme 69 – A30 Temple	0	✓	0	0	0	0	✓	The scheme involves the dualling of the A30 for 4.5km between Temple and Higher Carblake.	<p>The scheme will ease congestion and road safety but is unlikely to impact air quality.</p> <p>There is limited scope for improving access to amenities but some economic growth is expected due to ease of congestion.</p>	<p>Priority should be given to cyclists at junctions.</p> <p>Need for consistency in layout, signing and markings. Unlikely to be a second chance to get cycleway design right</p> <p>Widening of roadways and junctions could lead to increased average vehicle speeds. At junctions, cycle lanes can increase accidents, especially if the lanes are not carried through the junction³³³⁴.</p>
Scheme 15 & 16 - Bodmin Highway Improvement Schemes	✓	✓	✓	0	✓	✓	✓	<p>Scheme 15 at Church Square involves the removal of the roundabout and provision of a left in left out junction.</p> <p>Scheme 16 on Launceston Road/Priory Road is a new roundabout to improve safety/capacity and to provide crossing for pedestrians/cycles</p>	<p>The scheme will improve crossings for pedestrians and cyclists thus encouraging active travel.</p> <p>They are likely to improve accessibility and improve air quality and noise.</p>	<p>The location and design of new crossings should ensure that they connect with cycling paths to encourage non vehicle travel.</p> <p>Schemes should include provision of cycle storage facilities at key interchanges and destinations along the network.</p>
Truro Schemes – 44 -48.	0	✓	✓	0	✓	✓	✓	A number of highway improvements schemes to increase capacity and reduce congestion in order to unlock housing and employment space	<p>The schemes will improve road safety, ease congestion and reduce impacts from air quality and noise.</p> <p>The scheme will enable further housing and employment space thus encouraging economic growth.</p>	<p>The location and design of new crossings should ensure that they connect with cycling paths to encourage non vehicle travel.</p> <p>Schemes should include provision of cycle storage facilities at key</p>

³³ Coates, Nigel, 1999, 'The Safety Benefits of Cycle Lanes', Proceedings of the Velo-City '99 Conference held in Graz, Austria.

³⁴ <http://www.cyclecraft.co.uk/digest/research.html>

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
										interchanges and destinations along the network. Schemes should consider potential to integrate with and reinforce connections with existing habitat corridors where possible.
	✓		✓	0	✓	✓	✓	The scheme includes cycle/pedestrian network improvements and bus lane improvements, reducing public transport journey time and supporting modal shift for new developments.	The provision of priority bus and cycling routes is expected to improve safety and encourage cycling.	The design of the priority routes are critical in ensuring they are used and cyclists are not faced with cycling routes that are patchy and narrow.
Scheme 24 – Redruth Gateway (Tolgus) A3047	✓	x	x	0	✓	✓	✓	The scheme involves downgrading the A3047 near Redruth School, from dual carriageway to single carriageway. The scheme will enable the Tolgus urban expansion with road improvement (walking and cycling links and crossings) integrating the development with the town.	The proposed changes can result in short term increases in traffic and congestion due to the reduction in capacity. This in turn can have an impact on air quality and economic growth. Change from dual to single carriageway will reduce severance and improve safety and opportunities for walking and cycling. Minimal plan information was available on this action.	The downgrading should ensure that any reduction in capacity is addressed through the provision of improved bus services and schemes that encourage active travel. Opportunity to maximise walking and cycling opportunities.
Multi Modal Scheme										
Scheme 10 – Glenthorne	✓	✓	✓	0	✓	✓	✓	The scheme will provide walking/cycle route, linking Truro to Three milestone Industrial Estate.	The limited scale of the scheme is expected to have some positive effects on air quality, road safety and increase healthier journeys.	Include neighbourhood design features that support walkability and mixed land use. Benefits gained from cycling and improve connectivity, offering an advantage over keeping healthy should outweigh negative aspects of breathing in the car, and support integrated transport opportunities fumes

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
										<p>Opportunity to promote the health benefits over safety risks of cycling³⁵, e.g. health benefits of cycling outweigh safety risks by a factor of more than 20.^{36,37} Walking and cycling to school is associated with significantly higher levels of physical activity and higher cardio respiratory fitness.³⁸</p> <p>Active travel is cost effective - cycling schemes can provide high returns, up to 1:22 in cost: benefit ratio, over half of which may be attributable to health benefits.³⁹</p>
Schemes 14 - Bodmin Camel Trail extension and 17 - TWCN network (Bodmin)	✓	✓	✓	0	✓	✓	✓	<p>Scheme 14 is a walking and cycling link between the Camel Trail and Lanhydrock to create a town wide network. Scheme 17 includes town wide walking and cycling enhancements to encourage modal shift and healthy active lifestyles.</p>	<p>It is expected that off line sections of the route that are yet to be designed will avoid or minimise any impact on environmental receptors such as trees.</p> <p>The scheme aims to improve employment and access to shops and amenities.</p>	<p>Explore extending walking and cycling routes in areas of poor rural access where currently no or little footpath provision exists or footpaths are too narrow for wheelchairs or buggies and cyclists.</p> <p>Selection of walking and cycling route locations to be coupled with the redevelopment/ transformation of an area⁴⁰.</p>

³⁵ Traffic casualty rates tend to decline as public transit travel increases in an area. Residents of transit-oriented communities have only about a quarter the per capita traffic fatality rate as residents of sprawled, automobile-dependent communities.

³⁶ Valuing the benefits of cycling – SQW / Cycling England (2007)

³⁷ 'Value for Money: An Economic Assessment of Investment in walking & cycling', DOH/ GOSW, 2010

³⁸ PEACH study: University of Bristol, <http://www.bris.ac.uk/enhs/peach/docs/ashleyhepapooster.pdf>

³⁹ Dept. Transport, 2007 Transport Analysis Guidance. Guidance on Appraisal of walking and cycling.

⁴⁰ Unattractive walking /cycle routes less likely to be used

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
										Walking/ cycle route selection can be used as a catalyst to improve the 'amenity' of an area ⁴¹ .
Scheme 61 – Goldsithney to Marazion B3302	✓	✓	✓	0	✓	✓	✓	Off road walking/cycle route. Provision of cycle facilities would link to those along the Mounts Bay seafront.	The scheme is designed to encourage cycling and walking thus improving local air quality. It is anticipated that it will increase tourism and encourage economic growth.	Explore extending walking and cycling routes in areas of poor rural access where currently no or little footpath provision exists or footpaths are too narrow for wheelchairs or buggies and cyclists
Scheme 62 – Mounts Bay to Marazion cycle path	✓	✓	✓	0	✓	?	0	The scheme provides cycle/shared use path across dunes. It also includes a car park with associated cycle parking. It is assumed that final design will avoid or minimise impacts on sensitive environmental receptors such as trees.	The scheme is expected to bring economic benefits from increased accessibility with the potential for new businesses to open.	The scheme has the potential to reduce severance and increase accessibility. However the design selected should ensure that the potential to increase access to amenities is realised.
Scheme 8 – West Cornwall Transport Interchange (WCTI St Erth)	✓	✓	✓	✓	?	✓	✓	The scheme will provide park & ride facility at St Erth to serve West Penwith. New land take is likely to be required and the scheme is expected to improve air quality at passenger destinations.	The potential gains in accessibility of the scheme will depend on the cost of travel. Improving active transport aspect may include provision for bicycles on buses similar to provision made on trains. "Current bus service in Cornwall is considered by the majority of consultees as expensive and below standard" ⁴²	All park and Ride schemes should provide adequate provisions for bike storage to encourage active travel. Active travel options should be encouraged in the first instance before motorised travel. "Failure of the LTP3 to succeed in 'modal shift from car journeys to 'active transport to 'active travel' was identified as the single most highest risk to health

⁴¹ In a walkable environment 43% of a sample population was observed to achieve physical activity targets, compared with just 27% of less walkable area residents. Populations meet physical activity targets where safe places to walk exist within ten minutes of home.

⁴² 5.5.1 Health Impact assessment of Cornwall Local Transport Plan 3 November 2010

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
										within the LTP3. ⁴³ Potentially negative impact on community cohesion due to local people being against location of park and ride scheme.
Park & Ride	✓	✓	✓	✓	?	✓	✓	Assumes redevelopment of existing car parks to provide long term parking for users of the Isles of Scilly Link.	Impacts on employment/ unemployment, deprivation and community cohesion may depend on cost of transport. Services need to be made to be regular. Improving active transport aspect may include provision for bicycles on buses similar to provision made on trains. "Current bus service in Cornwall is considered by the majority of consultees as expensive and below standard" ⁴⁴	All park and Ride schemes should provide adequate provisions for bike storage to encourage active travel. Active travel options should be encouraged in the first instance before motorised travel. "Failure of the LTP3 to succeed in 'modal shift from car journeys to 'active transport to 'active travel' was identified as the single most highest risk to health within the LTP3." ⁴⁵ Potentially negative impact on community cohesion due to local people being against location of park and ride scheme.
Walking/ cycling networks	✓	✓	✓	0	✓	✓	✓	New footpaths and cycle ways will either be within the existing highway verge or require very small areas of land.	The scheme will encourage active travel and improve safety for pedestrians and cyclists.	Walking/ cycle route selection can be used as a catalyst to improve the 'amenity' of an area ⁴⁶ . Link creation of walking and cycling

⁴³ 5.5.2 Health Impact assessment of Cornwall Local Transport Plan 3 November 2010

⁴⁴ 5.5.1 Health Impact assessment of Cornwall Local Transport Plan 3 November 2010

⁴⁵ 5.5.2 Health Impact assessment of Cornwall Local Transport Plan 3 November 2010

⁴⁶ In a walkable environment 43% of a sample population was observed to achieve physical activity targets, compared with just 27% of less walkable area residents. Populations meet physical activity targets where safe places to walk exist within ten minutes of home. 'Evaluating Public Transportation Health Benefits, 14 June 2010, Todd Litman, Victoria Transport Policy, Institute For The American Public Transportation Association

	Physical Activity	Economy	Air Quality and Noise	Crime	Community Cohesion	Inequality & Access to Services	Collisions	Scheme Description & Assumptions	Commentary	Recommendations to mitigate adverse effects or to improve schemes fit.
Rail										
Upgrade to stations and services	✓	✓	✓	0	✓	✓	0	It is assumed that the upgrade will not require any land take.	Cycle storage should be provided to encourage active travel	In instances where a proposed scheme makes changes to road crossings, the safety of pedestrians and cyclists should be considered. Station improvements could include measures to improve accessibility and safety for disabled users.
Other										
Community, information.	✓	✓	✓	0	✓	✓	×	This scheme type includes measures to encourage a modal shift (cycle to work schemes), improve accessibility where there isn't currently a suitable mode of transport (provision of mopeds or scooters, community buses, bicycle hire) and more sustainable use of transport (car shares). Schemes will not generally require development, focussing on behavioural changes.	The schemes may indirectly benefit road safety by reducing the number of vehicles on the road. Schemes such as cycle to work or provision of community buses will encourage healthier journey choices and facilitate cycling and walking as part of public transport journeys	

7 SUMMARY

7.1 Connecting Cornwall Implementation Plan 2015-2019 HIA

7.1.1 A HIA has been undertaken for the local transport Implementation Plan 2015-2019 which has emerged as part of the LTP process. The principal aims of the LTP 3, which were to encourage healthy active lifestyles, promote safer communities and individual wellbeing as well as providing equal opportunities for everyone have been successfully expressed within the implementation plans themselves.

7.1.2 As part of the original HIA conducted upon the LTP3, a set of key health issues were identified and put forward by the HIA Steering Group. These key health issues included both the direct and indirect effects from transport upon Cornwall's wider community, including its population and economy.

7.1.3 An assessment of health, population, environment and deprivation was undertaken, focusing on the consultation with key stakeholders and key informants.

7.2 Significant HEALTH Impacts of the Connecting Cornwall Implementation Plan 2015-2019

7.2.1 Walking and cycling schemes are a significant part of the Connecting Cornwall Implementation Plan. There are two cycling schemes, one aims to improve cycling parking provision and the second will provide convenient passage by bicycle at a roundabout. The majority of the walking and cycling schemes are multi modal schemes. These active travel schemes provide new sustainable transport corridors and walking schemes. They include a number of new recreational routes away from traffic that will encourage physical activity and can lead to economic growth

7.2.2 Health impacts from all of these plans were positive for nearly all of the key health issues assessed. Evidence supports active travel as one solution to the tackle the increasing levels of obesity and other health problems in young people and the general population.

7.2.3 The high priority given to active travel within the Connecting Cornwall Implementation Plan attempts to address, and to some extent negate, the risk that failure to achieve the 'modal shift' from private motor vehicles over to 'active travel' was recognised as the greatest risk to health among young people. This was identified within the original LTP3 HIA.

7.2.4 The rise in obesity levels amongst young people is inherently linked to the potential decrease in physical activity, as a result of behaviour change. Use of active travel options may increase physical activity amongst young people and reverse this risk.

7.2.5 The original LTP 3 HIA identified the positive health impacts from targeting active travel intervention towards communities who are at a higher risk of obesity. Positive health impacts could be brought about through targeted personal travel planning and 'active travel' measures at the household level.

7.2.6 Health impacts of all the Park and Ride schemes planned were assessed as positive for all of the key health issues with exception to community cohesion. As residents adjacent to the Park and Ride schemes may suffer a small loss of amenity due to noise and congestion from the schemes.

- 7.2.7 In order to achieve positive health impacts the Park and Ride schemes would need to be viable and reverse the current perception of bus transport in Cornwall as:
- “Current bus service in Cornwall is considered by the majority of consultees as expensive and below standard”.*
- 7.2.8 The opportunities exist to integrate active travel into the park and ride scheme through linking the schemes with cycle paths, secure cycle storage and cycle hire schemes, thereby maximising both the air quality and physical activity health issues.
- 7.2.9 The original LTP 3 promoted bus transport as the optimum vehicle; however, budgetary constraints may impact upon the level of bus subsidy from Cornwall Council thereby reducing its positive health impacts.
- 7.2.10 Bus schemes, as proposed within the Implementation Plan, include a bus lane and general improvements to stops, services and information provision. The proposed bus schemes health impacts are positive across all key health parameters, with the provision of improved services likely to have the most significant positive impact. Positive health impacts of bus schemes are dependent upon the current perception of bus services being substandard being dispelled. In addition ensuring that access to public transport is not undermined by spiralling bus fares will retain equality among bus users.
- 7.2.11 Success of the LTP 3 proposals may affect the increase in value of public transport, particularly the bus service. Public transport interventions aimed at school children could both influence and familiarise the future workforce with public transport.
- 7.2.12 Increased use of public transport in Cornwall would indirectly promote increased levels of physical activities amongst public transport users. Health benefits gained from the modal shift from private motor vehicles to public transport is compounded by the increase in physical activity associated with regular use of public transport.
- 7.2.13 By improving access to public transport services, there may well be a benefit to both employment and education resulting in positive health impacts. However failure to improve public transport provision in poor access areas could result in negative health impacts amongst the physically and economically disadvantaged, which are often dependent upon public transport.

APPENDIX A POLICIES REVIEWED AGAINST THE ORIGINAL LTP3 OBJECTIVES

Health Impact	LTP3 Objective	Spatial Scope	Plan / Programme / Strategy		
Air Quality	Ob1 Reduce reliance on fossil fuels and encourage low carbon technologies Ob7 Reduce the need to travel Ob8 Make the most of opportunities to protect and enhance the environment Ob11 Improve the health of our communities through active travel Ob15 Reduce noise and air quality impacts	International	EU Air Quality Framework Directive (96/63/EC) (EU, 2008) (also Daughter Directives 1999/30/EC, 2000/69/EC, 2002/3/EC, 2004/107/EC)		
			EU The Ambient Air Quality Directive (96/62/EC) (EU Council, 1996)		
		National	Air Quality Strategy for England, Scotland, Wales and N. Ireland (DEFRA, 2007)		
		Local	Cornwall LDF Core Strategy, Draft Topic paper, Soil, Air and Water Quality (June 2010)		
			Cornwall Air Quality Strategy, (Cornwall Air Quality Forum 2004)		
			Kerrier AQMA Action Plan, (Kerrier District Council, 2008)		
			North Cornwall: Bodmin AQMA Action Plan 2008		
		Cornwall LDF Core Strategy, Draft Topic paper, Climate Change, (June 2010)			
		Noise	Ob7 Reduce the need to travel Ob8 Make the most of opportunities to protect and enhance the environment Ob11 Improve the health of our communities through active travel Ob15 Reduce noise and air quality impacts	International	EU Environmental Noise Directive (2002/49/EC) (EU Council, 2002)
				National	PPG24 Planning and Noise (ODPM, 2001)
PPG note 13 – Transport (ODPM, 2001)					
The Aeroplane Noise Regulations (HMSO, 2002)					
Highways Act 1980 (HMSO, 1980)					
Civil Aviation Act (OPSI, 2006)					
Local	Newquay Airport Master Plan for Consultation (Newquay Cornwall Airport 2008)				
Inequality and Access to Services	Ob2 Support communities to live locally Ob5 Resilient and reliable transport system for goods and services Ob6 Supports rural vitality	International	Environment and Health, EEA Report No 10/2005 (EU, 2006)		
		National	Every Child Matters – 5 Green Paper (HMSO 2003)		
			White Paper: Choosing Health, Making Healthy Choices Easier (DoH, 2004)		

Health Impact	LTP3 Objective	Spatial Scope	Plan / Programme / Strategy
	<p>and integrity of our town centres</p> <p>Ob10 Provide sustainable access to Cornwall's environment</p> <p>Ob13 Reducing crime and the fear of crime in using public transport</p> <p>Ob16 Improving access to employment, education, health and leisure</p>		Smarter Choices: Changing The Way We Travel (DfT, 2005)
			PPG 13 – Transport (ODPM, 2001)
		Regional	A Sustainable Future for the South West: The Regional Sustainable Development Framework for the South West of England (South West Regional Assembly, 2001)
			Cornwall Access Strategy, annex to LTP2 (Cornwall County Council, 2006)
		Local	Cornwall LDF Core Strategy, Draft Topic paper, Health, (June 2010)
			The 2020 Health and Well Being Strategy for Cornwall and the Isles of Scilly (Cornwall PCT, 2008)
			Joint Strategic Needs Assessment (NHS, PCT, 2009) Emerging
			Cornwall Sustainable Community Strategy (Cornwall Strategic Partnership, 2003)
			The Rural Economic Strategy (Rural Cornwall and Isles of Scilly Partnership, 2003)
			Cornwall LDF Core Strategy, Draft Topic paper, Transport and Accessibility, (June 2010)
Physical Activity	<p>Ob11 Improve the health of our communities through active travel</p> <p>Ob12 Increase awareness and an understanding of the health benefits of integrating cycling and walking into our daily lives.</p>	National	Tackling Obesities: the Foresight Report (IDEA's Healthy Communities Programme, 2008)
			Social-Marketing Based Strategy for Obesity Interventions (UWE Bristol, SWPHO, 2008)
		Local	The Health of the Population: A strategy to reduce obesity in Cornwall and the Isles of Scilly (NHS, PCT, 2006)
Collisions	<p>Ob7 Reduce the need to travel</p> <p>Ob11 Improve the health of our communities through active travel</p> <p>Ob14 Improving road safety</p>	International	White paper – 'European transport policy for 2010: time to decide' (EU Council, 2001)
		National	A Safer Way: Consultation on Making Britain's Roads the Safest in the World (DfT, 2009) <i>To be updated post July 2009</i>
			Road Safety Act (DfT, 2006)
			PPG 13 – Transport (ODPM, 2001)
			Drink-driving: prevalence and attitudes in England and Wales

Health Impact	LTP3 Objective	Spatial Scope	Plan / Programme / Strategy
			(Home Office, 2002)
		Local	LTP Annual Progress Report, (Cornwall County Council, 2009)
Crime	Ob13 Reducing crime and the fear of crime in using public transport	Local	Cornwall LDF Core Strategy, Draft Topic paper, Crime and anti-social behaviour, (June 2010)
Economy	<p>Ob1 Reduce reliance on fossil fuels and encourage low carbon technologies</p> <p>Ob2 Support communities to live locally Ob5 Resilient and reliable transport system for goods and services</p> <p>Ob6 Supports rural vitality and integrity of our town centres</p> <p>Ob10 Provide sustainable access to Cornwall's environment</p> <p>Ob16 Improving access to employment, education, health and leisure</p>	International	The Lisbon Strategy (EU Council, 2000)
		National	Draft PPS4: Planning for Sustainable Economic Development (ODPM, 2007)
			PPS6: Planning for Town Centres (ODPM, 2005)
			PPS7: Sustainable Development in Rural Areas (ODPM, 2004)
			Good Practice Guide on Planning for Tourism (CLG, 2006)
			The UK Fuel Poverty Strategy (DEFRA, 2011)
		Regional	Regional Tourism Strategy: Towards 2015 - shaping tomorrow's tourism (SWRDA, 2005)
			Draft Regional Spatial Strategy for the South West incorporating the Secretary of State's proposed changes (SWRA, 2008)
			Regional Economic Strategy for South West England 2006 – 2015 (SWRA, 2006)
		Local	Camborne Pool Redruth (CPR) Urban Framework Plan (CPR URC, 2001)
			Employment Space Strategic Assessment for Cornwall & Scilly: 2007 – 2017 (Cornwall & IoS Economic Forum, 2007)
			Cornwall Countryside Access Strategy (Cornwall County Council, 2007)
			Cornwall LDF Core Strategy, Draft Topic paper, Economy, (June 2010)
Community Cohesion	<p>Ob2 Support communities to live locally</p> <p>Ob6 Supports rural vitality and integrity of our town centres</p> <p>Ob7 Reduce the need to travel</p> <p>Ob14 Improving road safety</p> <p>Ob16 Improving access to</p>	National	PPS7: Sustainable Development in Rural Areas (ODPM, 2004)
		Local	Cornwall Sustainable Community Strategy (Cornwall Strategic Partnership, 2003) The Rural Economic Strategy (Rural Cornwall and Isles of Scilly Partnership, 2003)

Health Impact	LTP3 Objective	Spatial Scope	Plan / Programme / Strategy
	employment, education, health and leisure		

APPENDIX B LTP 3 HIA CONSULTEES

Interview	Organisation
Steering Group Member	Cornwall Primary Care Trust
Steering Group Member	Cornwall Housing Partnership
Steering	Cornwall Council Transport Planners
Steering	Cornwall Council Casualty Prevention Team
Steering	Cornwall Air Quality Forum
Steering	Cornwall Development Company
Steering	Passenger Focus
Key Informant	Environmental Health Cornwall Council
Key Informant	Localism Area Managers
Key Informant	PB Technical Specialists e.g. air quality, transport planners
Key Informant	Age Concern Transport Access People
Key Informant	Volunteer Cornwall Community Service Volunteers, Health Champions: Stroll Back the Years / Pedal Back the Years; Community Health Development
Consultee	Cornwall Rural Community Council
Consultee	Schools Education & Colleges- Learning Partnership
Key Informant	Access Cornwall
Key Informant	Worklessness Groups- Cornwall Works
Key Informant	Young people