Teignbridge District Council
Air Quality Action Plan

In fulfilment of Part IV of the Environment Act 1995
Local Air Quality Management

2024 - 2029

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Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the actions Teignbridge District Council pursue to improve air quality in its district from March 2024 to March 2029 with a milestone review of progress in March 2027.

This action plan replaces the previous action plan which ran from March 2010 till March 2024. The projects since 2010 that have been implemented completed or in some cases not pursued are set out in Appendix B Table B1

Teignbridge District Council is committed to compliance with national objectives for local air quality and reducing wherever possible the exposure of people to poor air quality to improve human health for the wider population and reduce the financial consequences it brings.

In this AQAP we outline how we intend to tackle air quality issues within our control. We also recognise that there are many other policies that although beyond the Council's direct control, have the potential to influence local air quality (such as vehicle emissions standards agreed in Europe). So, the Council will continue wherever possible to work with regional and central government on developing and influencing such policies to deliver as far as possible a positive impact on local air quality.

From the 106 measures listed in the previous action plan, we have distilled and developed 26 measures all of which fall within one of the 9 broad EU Action Categories listed below in ranking order of cost/benefit:

- Action 1: Promoting low emission transport
- Action 2: Alternatives to private vehicle use
- Action 3: Traffic management
- Action 4: Promoting travel alternatives
- Action 5: Vehicle fleet efficiency
- Action 6: Policy guidance and development control
- Action 7: Public information
- Action 8: Freight and delivery management
- Action 9: Transport planning and infrastructure

(see Table 5.4 for the full lay out and account of what the 26 measures are)

Responsibilities and Commitment

This AQAP was prepared by the Environmental Protection Team of Teignbridge District Council with the consultation and support of the following officers and departments:

Neil Blaney	Head of Place and Commercial Services	Teignbridge District Council
David Eaton	Environmental Protection Manager	Teignbridge District Council
Colin Bignall	Principal Environmental Health Officer	Teignbridge District Council
Becky Wotton	Environmental Protection Officer	Teignbridge District Council
William Elliot	Climate Change Officer	Teignbridge District Council
Estelle Skinner	Green Infrastructure and Habitat Regulations Officer	Teignbridge District Council
Fergus Pate	Economy and Delivery Manager	Teignbridge District Council
Michelle Luscombe	Planning Policy Manager	Teignbridge District Council
Alison Dolley	Private Sector Housing Manager	Teignbridge District Council
Nigel Hunt	Head of Devon Building Control Partnership	Teignbridge District Council
Chrissie Drew	Project Officer Green Spaces and Active leisure	Teignbridge District Council
Rosie Wilson	Corporate Procurement Officer	Teignbridge District Council
Chris Braines	Waste and Cleansing Manager	Teignbridge District Council
TBC	Head of Development Management	Teignbridge District Council
Josh Manning	Transport Planning officer	Devon County Council
John Amosford	Public Health Consultant	Devon County Council

Reporting Progress of the AQAP:

Appraisal and the reporting of progress will be on a quarterly basis via the Council Strategy to the Teignbridge District Councillors. This progress is then reported to the Overview and Scrutiny Committee.

The Executive Member with responsibility for this area of work will receive regular updates at their monthly meetings.

Progress will be reported externally to **"Defra"** in the form of an Annual Status Report (ASR), as part of the Council's statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to;

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Table of Contents

List of Tables

1 Introduction

Population profile Teignbridge
Teignbridge has a population of 132,800 with an age distribution as follows, with the national population average as a comparison;

Teignbridge DC	**National**
16% are aged 0 – 15	19%
8% are aged 16 - 24	11%
27% are aged 25 - 49	33%
23% are aged 50 - 64	19%
26% are aged 65+	18%

The district of Teignbridge has a population density of 197 people per square kilometre with
45% of residents report their health as very good, 35% as good, and 15% as fair. Of the remaining 5%, it is 4% of residents report their health as bad, and finally 1% reported as very bad.

Indeed, 20% of the population are recorded as having a long-term limiting illness or disability (national average is 17%). In terms of life expectancy, living in the Teignbridge area, compares favourably with the national average as follows;

Females	84 years old (National Average 83)
Male	80 years old (National Average 79)

1.1 The scale and cost to human health

Nitrogen Dioxide is the significant component of the air pollution that impacts on human health and raises morbidity rates. It is recognised as a contributing factor in the onset of heart disease and cancer, and particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often found in the less affluent socio-economically disadvantaged areas of society[1,2]. Deprived communities are more likely to experience adverse health effects from poor air quality because they are more exposed to air pollution, for example, by being close to major roads.[4]

According to a study by Prof Steven Barrett from the Massachusetts Institute of Technology in 2010 more than 5,000 people in the UK die prematurely from conditions like lung cancer and heart disease because of emissions. To put that into context, exhaust fumes and the Nitrogen Dioxide (NO_2) it contains kills more than twice as many people as road accidents in Britain.

2 The scale and cost to the UK economy

The World Health Organisation (W.H.O.) 2015 report into 'Economic cost of the health impacts of air pollution in Europe' is the first assessment of its kind to estimate the economic burden of deaths and diseases resulting from outdoor and indoor air pollution, including NO_2 as a significant contributor. The report estimates the economic cost to be £54 billion, and accounts for 3.7% of the GDP in Britain, where 29,000 people are currently estimated to die prematurely each year because of this. In addition, the annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion.

[1] Environmental equity, air quality, socioeconomic status and respiratory health, 2010
[2] Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

1.3 The plan outline

Within the district of Teignbridge local air quality is generally very good, however there are locations where NO_2 levels are high, typically along busy congested roads, with the highest levels being experienced where the roads are either narrow and/or have a steep incline and/or have street canyons (i.e. roads with properties close to the side of the road on both sides.)

This plan has been developed in recognition of the legal requirement placed on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

Primary Aim

The primary aim of this Action Plan therefore is to meet the National Objective target for Nitrogen Dioxide. NO_2 being one of eight pollutants that has a National Objective target, derived from European Directives and set out in The Air Quality Regulations 2000 and Air Quality (England) Regulations 2010 (as amended).

Table 1.1 – National Objectives for Nitrogen Dioxide

Pollutant	National Objectives	Averaging period
Nitrogen Dioxide (NO_2)	200µg/m^3 not to be exceeded more than 18 times a year	1-hour mean
	40µg/ m^3	Annual mean

Specifically, this Action Plan outlines the actions that Teignbridge District Council will deliver between 2024 and the end of 2029, to deliver a reduction in concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to Teignbridge district, and minimising the financial burden that poor health puts upon society.

Public Health Strategy

Whilst the primary aim is to reduce NO_2 at hotspot locations (where there is human exposure), to below the national objective, this plan goes further by including actions that reference to a wider “Public Health Strategy” to deliver benefit to the broader community.

This less objective based Public Health strategy runs in tandem with the primary aim, and seeks to inform, encourage and empower the wider community to take steps to reduce, or even avoid their exposure to lower-level air pollution. Thereby this plan will be delivering exposure reduction across the wider population, to and beyond the time when the primary aim has been achieved.

This Action Plan will be reviewed at five years at the latest and progress on measures set out within this Action Plan will be reported on annually within Teignbridge District Council’s air quality Annual Status Report (A.S.R.).

2 Summary of the Current Air Quality within the District

Despite the national and international measures detailed in the UK Air Quality Strategy, it is recognised that areas of poor air quality will remain, and that these will be best dealt with using local measures implemented by local authorities and the Local Air Quality Management (LAQM) regime.

The role required of Teignbridge District Council is therefore to review and assess, from time to time the current and likely future air quality within its district, and compare these findings against a total of eight current health based "National Objectives", one of which is for NO_2 .Where an exceedance is identified a Council must formulate an Air Quality Action Plan to pursue actions that reduce the level of that pollutant down to consistently well below the relevant national objective. Current advice from Defra considers "consistently well below" to mean more than 10% below and maintained consistently as such for at least three consecutive years.

2.1 Nitrogen Dioxide (NO_2)

This review and assessment process commenced in 2005 resulting in four Air Quality Management Areas (AQMA's) being declared because it was established that the National Air Quality objective of would not be met for NO_2.

The original four AQMA's were: -

- Dawlish (Iddesleigh Terrace)
- Teignmouth (A381 Along Bitton Park Road)
- Kingskerswell (the original A380)
- Newton Abbot (Town Centre) * * Kingsteignton

* * In 2008 a Detailed Assessment was carried out which resulted in the boundary of the Newton Abbot Town Centre AQMA being revised and expanded to include Wolborough Street, and in Kingsteignton, Newton Road and Gestridge Road

Dawlish (Iddesleigh Terrace):

From 2014 to 2016 monitoring results showed a general reduction year on year with only a very slight increase in 2017 (reflected across whole district for 2017). 2015 saw the first year where the levels of pollution monitored were “well below” (more than 10%) below the National Objective target for NO_2 at all four of monitoring locations in Dawlish.

This trend continued for consecutive years up to and including 2019 which meant the data easily satisfied the minimum “3-year” criteria set out by Defra that will qualify an AQMA for its revocation. (see Table 2.1 below). An application was therefore made and this AQMA was revoked in 2019.

Table 2.1 – NO_2 tube results Dawlish 2016 to 2018

Tube	Dawlish	2016	2017	2018
17	Whitecourt, Iddesleigh Terrace	32.84	33.57	31.86
30	1A Piermont Place	33.5	35.74	33.64
45	4 Commercial Rd	25.34	24.9	23.79
46	3 Iddesleigh Terrace	26.83	28.48	24.54

Note: Specifically, the “3-year” criteria for pollutant data means that pollution levels are demonstrably and consistently well below the current national objective for Nitrogen Dioxide (NO_2) of 40µg/ m^3 . (Consistently well below... to mean by at least 10% for at least 3 consecutive years).

Kingskerswell (old A380):

With the completion of the Kingskerswell by-pass in 2016 the monitoring results along the old A380 have dropped dramatically (50 to 60%), “well below” the National Objective target for NO_2. This fall was maintained to the end of 2018 satisfying the “3-year” criteria set out by Defra to qualify this AQMA for its revocation. An application was therefore made and this AQMA was revoked in 2019.

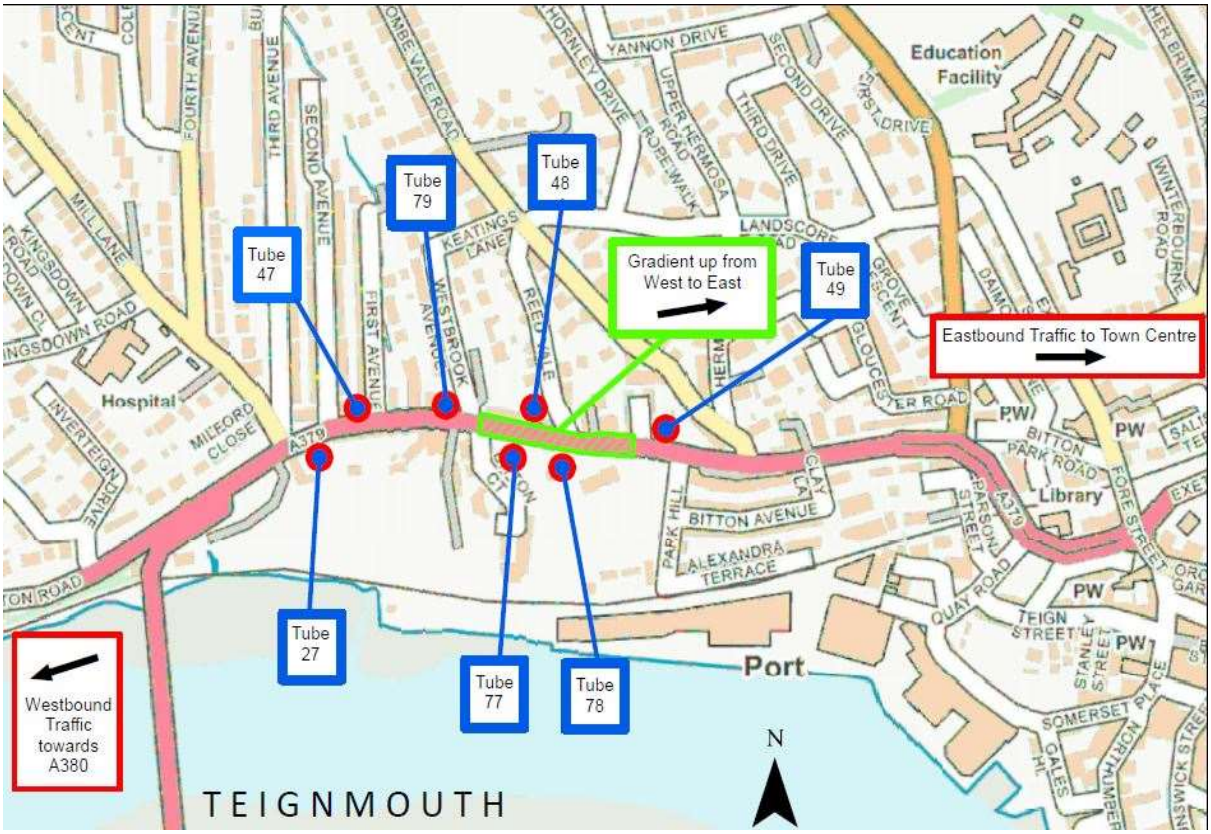
Table 2.2 – NO_2 tube results Kingskerswell 2016 to 2018

Tube	Kingskerswell	2016	2017	2018
56	Wywurree Bungalow, Addison Rd	24.22	27.03	23.86
1	Aller Brake Rd	24.1	32.72	28.46
14	Bus Stop Westcombe Caravan park, Torquay Rd	16.67	16.97	13.71
50	Lamp post Newton Rd Opp Priory Ave	21.46	21.25	18.4
66	Halfway House Torquay Rd	21.2	20.5	18.84
67	Coventry Cottage Torquay Rd	20.87	23.63	19.67
58	L/Post opp 28 Water Lane Torquay Rd	17.41	19.71	16.25
36	Westhill House	15.88	15.39	12.66
41	Aller Farmhouse	14.14	15.31	12.31
12	The bus stop by Datal Ltd office, Torquay Rd	21.86	20.87	17.31
39 DCC	Rock House 1 Maddicombe Rd	17.58	19.68	18.32
28 DCC	Western Cottages 1 Greenhill Rd..	11.44	12.27	12
29 DCC	Corner Huxnor Road and Edginswell lane	11.82	11.62	11.91

Teignmouth (Bitton Park Road):

According to the 2021 census the population profile for Teignmouth is 15,312 covering an area of 3.770 km² and a population density of 4,062/km².

The 700m stretch of the Bitton Park Road declared as an AQAMA is the only main road (A381) feeding from the west into Teignmouth centre and through the town. See diagram below (Also in Appendix E).



Looking at this AQMA from west to east, the first 250m of this main road is broadly flat. For the next 180m the road gradient climbs steeply. Then it levels out for the remaining 270m.

In the other direction east to west the A381 provides the only main exit for traffic westward from Teignmouth, along the estuary to meet the major A380 (M5).

When this AQMA was first declared, 7 monitoring locations were installed. Four were installed on the eastbound side (Tube No's 5,47,48, and 49), and three were installed on the westbound side. (Tube No's 2, 27, and 60).

In the early years the data revealed that the pollution levels for NO_2 on the westbound side were much lower than the eastbound side. Indeed since 2018 pollution levels westbound have been “consistently well below” (>10%) the national objective for NO_2. (See Table 2.3 below).

Table 2.3 – NO_2 tube results Teignmouth 2019 to 2023

Tube	Teignmouth		2019	2020 covid	2021	2022	2023	Qualify Revoke
5	96 Bitton Park Road	E / Bound	40.28		35.23	34.96	37.7	
48	1 Reed Vale Lodge	E / Bound	54.85		47.01	45.3	46.07	
49	68 Bitton Park Road	E / Bound	48.83		39.27	36.95	38.06	
47	114 Bitton Park Road	E / Bound	23.41		20.95	20.41	20.65	Y
79	Golden Curry, Bitton Pk Rd	E / Bound				23.99	25.1	
77	LP no.9 Bitton Park Road	W / Bound				26.57	29	
78	LP no.8 Bitton Park Road	W / Bound				29.38	26.5	
27	173 Bitton Park Road	W / Bound	38.26		31.23	31.08	32.7	Y
2	155 Bitton Park Road	W / Bound	33.15		28.55	29.18	29.2	Y
60	Analyser - Bitton Park Road	W / Bound	21.19		17.83	17.93	17.84	Y

KEY		
Exceeds the National Objective = 40		
Well below the N Objective Y= Qualifies for revocation		
WITHIN 10% of N objective = or > 36		
NO TUBE or removed		

With our attention then focused on the monitoring results for eastbound traffic it was clear the gradient of the 180m climb was having a significant impact on pollution levels, and therefore to achieve compliance, actions would need to target this specific 180m gradient stretch of the AQMA.

Given that residential exposure occurs only on the eastbound side of Bitton Park Road, consideration was given to repositioning this gradient stretch of the road by moving the centre of the road south (away from the residential facades) by a further 7 metres. However, the cost of such a realignment was identified to be in the order of £millions and given that Devon County Highways no plans in the foreseeable future for road improvement on this road, this potential action was quickly discarded.

Equally, consultations since with Devon County Highways have also established that due to the complexity of traffic flows in this area they maintain that there is no engineering solution available based on a redesign of traffic flows.

In 2023 officers' research led to the opening of a dialog with a company called Roadvent. From those initial discussions it appears that applying this system to the gradient stretch of the road could be very effective at capture of pollutants at source (in the order of 90%) with treatment and removal of pollutants before release.

Given that this is system expensive (with a modular price per unit length of 10m), and that the gradient stretch had only 3 monitoring tubes along a total of 180m of road, we decided in 2024 to install a further 6 sampling tubes at 10m intervals along this section to enable us to accurately determine the exact extent in metres where exceedance is occurring.

With a full set of results from 9 monitoring locations during 2024 we will then be able to put together a targeted and costed business plan for approval to the council's elected members.

Kingsteignton (part of the Newton Abbot and Kingsteignton AQMA)

Apart from a slight increase across all locations for 2017 the year-on-year trend for all the other sampling locations in this AQMA shows pollution levels gradually reducing.

Significantly the latest data covering the four most recent and valid years (ie excluding 2020 being a covid year), shows very clearly (see Table 2.4 below) that all the locations in the Kingsteignton town area satisfies the "3-year" criteria set out by Defra that would qualify an AQMA for its revocation.

Table 2.4 – NO_2 tube results Kingsteignton 2019 to 2023

Tube	Kingsteignton	2019	2020 COVID	2021	2022	2023	Qualify Revoke
38	26 Newton Road	31.62		25.7	25.36	25.9	Y
32	21 Oakford, Broadway Rd	24.15		18.4	18.55	19	Y
52	29 Vicarage Hill (Blindwell	34.33		31.4	31.51	30.45	Y
3	9 Gestridge Road	35.34		31.4	27.57	28.3	Y
64	22 Gestridge Road	18.21		16.4	15.58	14.47	Y
54	3 Gestridge Road	34.07		28.1	26.07	26.72	Y

KEY
Exceeds the National Objective (currently 40)
Well below the N Objective and Y= Qualifies for revocation
WITHIN 10% of N Objective = or > 36
NO TUBE or removed

Newton Abbot (part of the Newton Abbot and Kingsteignton AQMA)

From the 2021 census Newton Abbot has a population of 29,638 covering an area of 7.420 km² giving a population density of 3,994/km², and as can be seen in table 2.5 below the "3-year" criteria for revocation is also satisfied across the whole of Newton Abbot area, except for 2 hotspot locations.

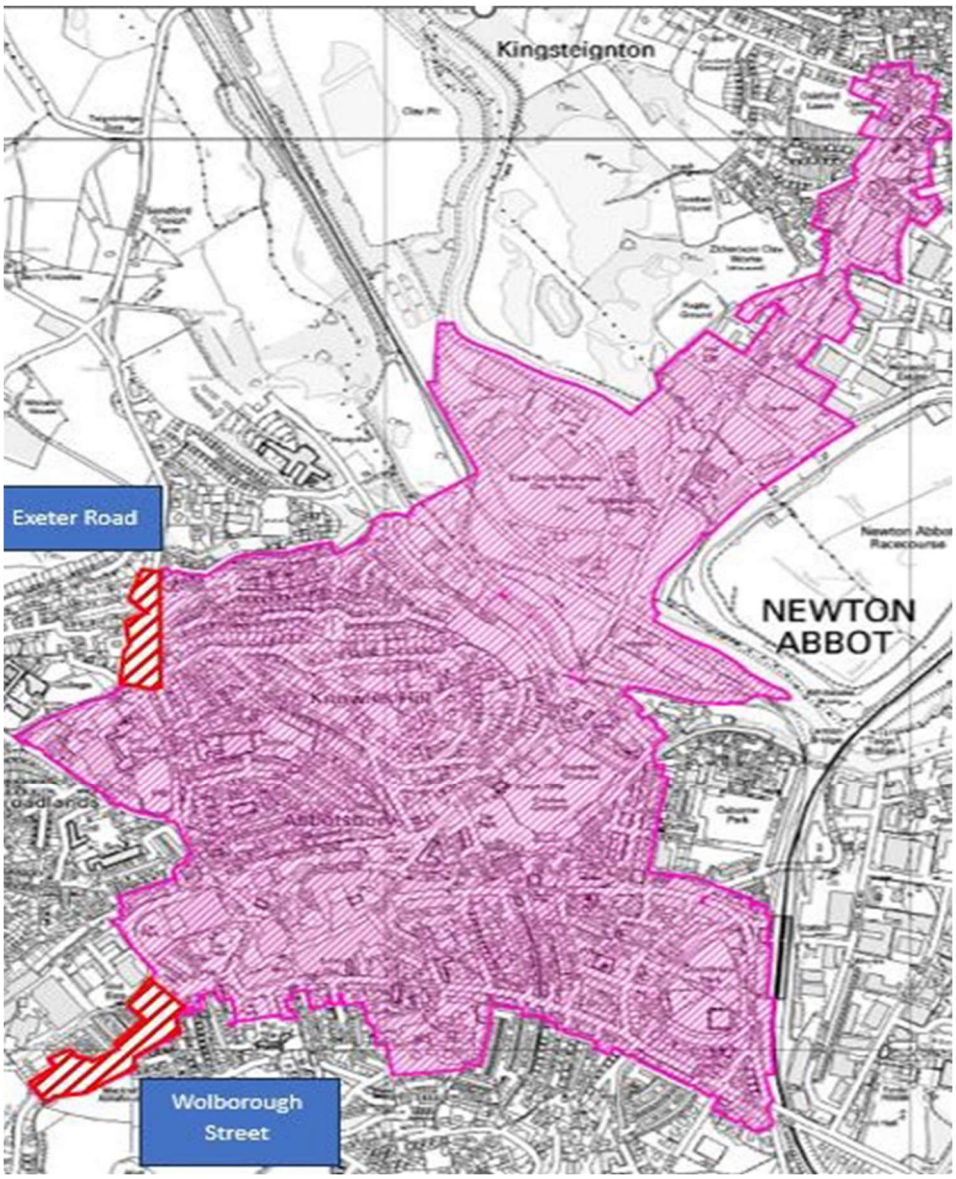
Table 2.5 – NO_2 tube results Newton Abbot 2019 to 2023

Tube	Newton Abbot	2019	2020 COVID	2021	2022	2023	Qualify Revoke
23	108-110 Queen Street F/ Floor	32.06		28.33	28.38	26.9	Y
31	108-110 Queen Street	33.57		28.45	27.7	28	Y
6	157 Queen Street	31.1		27.59	26.96	25.7	Y
8	57 East Street	31.11		26.74	26.16	25.7	Y
11	12 Torquay Road	32.3		28.03	29.31	25.9	Y
24	87 East Street	39.6		32.07	32.57	32	Y
21	Jetty Marsh Rd lamp post No 28 (Westward)	37.32		34.22	31.69	33.2	Y
22	Jetty Marsh Rd lamp post No29 (Eastward)	35.41		31.21	30.95	30.0	Y
40	Exeter Road	51.89		43.67	42.11		
57	West Golds Way	12.57		10.3	9.82	10.4	Y
25	7 Station Road	34.07		29.01	28.53	29.5	Y
33	DP 30-34 Bradley Court, Highweek Street	40.21		31.81	32.76	19	Y
34	Nox Analyser, Halcyon Road	25.18		20.63	20.48	20.7	Y
4	85 Wolborough Street	42.81		40.14	37.72	30.5	
55	DP 79 Wolborough Street	43.57		37.86	37.24	37.0	
53	90 Wolborough Street	39.192		32.58	32.9	34.8	Y
65	96 Wolborough Street	28.517		24.11	21.86	21.0	Y
37	Telegraph pole Ringslade, Highweek	16.13		16.11	15.27	14.6	Y
15	38 Ashburton Road	25.71		21.6	21.58	23.3	Y
73	LP 132 Ashburton Rd			22.19	15.57	17.9	Y
74	LP 15 Ashburton Rd			34.37	32.94	29.7	Y
42	Lay by A382 (opp MG Garage)	23.92		20.74	21.33	20.8	Y

KEY
Exceeds the National Objective (currently 40)
Well below the N Objective and Y= Qualifies for revocation
WITHIN 10% of N Objective = or > 36
NO TUBE or removed

From table 2.5 above one can immediately identify these 2 hotspot locations, namely Exeter Road and Wolborough Street.

Diagram: Hot Spot locations Newton Abbot AQMA below



Exeter Road Newton Abbot

Looking at the first of these hotspots, Exeter Road receives a heavy loading of southbound traffic arriving from the A382 from Bovey Tracey. This is supported by the information available from the County Council's traffic monitoring records (See Appendix C) There is a significant upward gradient on the southbound side of Exeter Rd, starting at the Jetty Marsh Road roundabout and ending at the roundabout that serves the Ashburton Road westward, and the road southward down into the town centre.

Although the southbound traffic flow on the Exeter Road is heavy, the air quality modelling carried out by SLR Consultants (on behalf of Devon County Highways) for the A382 improvements scheme predicts that once the A382 improvements are completed, which includes a new road linkage behind Newton Abbot Hospital into West Golds Way, traffic flow into Exeter Road is predicted to reduce by somewhere in the region of 50%.

Therefore, it can be reasonably be expected that as a result of the A382 improvement scheme the exceedance on Exeter Road will self-resolve within the next 2 to 3 years.

Wolborough Street Newton Abbot

The second hotspot location where air pollution levels are still in exceedance is Wolborough Street, which receives traffic from the A381 Totnes Road as it approaches the town from the south. (see below diagram and Appendix E for location within the AQMA)

The key factors here that contribute to the elevated levels of pollution is the canonisation of the residential buildings, which is aggravated by a narrowing pinch point in the road width that significantly hinders traffic flow, and regularly prompts sporadic give and go driving in times of peak flow.

In conclusion, to revoke the Newton Abbot and Kingsteignton AQMA in the next 2 to 3 years actions and resources will need to be targeted at Wolborough Street.

3 Teignbridge District Council's Air Quality Priorities

3.1 Public Health Context

3.1.1 General

Air pollution affects mortality from cardiovascular and respiratory conditions, including lung cancer. In its report on 'The Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the United Kingdom', published in 2010, the Committee on the Medical Effects of Air Pollutants17 (COMEAP) estimated the mortality burden of existing levels of air pollution on the population of the UK as being equivalent to 29,000 deaths and an associated loss to the population of 340,000 life-years (i.e. The years of lost life expectancy associated with attributable deaths).

3.1.2 Reference to Breathable "fine" particulate matter ($PM_{2.5}$) and its connection with the Public Health Outcomes Framework (PHOF)

$PM_{2.5}$ is the fraction of breathable (fine) particles whose diameter is less than 2.5 microns, and as a pollutant its public health significance has always been known such that it has its own "National Objective" target of 10 micrograms/m^3. However local authorities are not required to carry out any additional local review and assessment (including monitoring) but instead make use of national monitoring (4). and to work towards reducing emissions and concentrations of $PM_{2.5}$ in their local area as practicable.

To assist in the pursuit of compliance Department of Health has developed a tool detailed within the Public Health Outcomes Framework (P.H.O.F.) (5)

This a data tool is intended to focus public health action on increasing healthy life expectancy and reducing differences in life expectancy between communities. The tool uses indicators to assess improvements. Recognising the significant impact that poor air quality can have on health, the P.H.O.F. includes an indicator relating to fine particulate matter ($PM_{2.5}$).

4. http://uk-air.defra.gov.uk/data/data_selector

5. (https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency

3.2 Planning and Policy Context

There are several related policies and strategies at regional and local level that can be tied directly with the aims of the AQAP and will contribute to improving the overall air quality within the district. These strategies and policies relate to air quality are as follows:

3.2.1 Teignbridge Local Plan 2013 – 2033 (TDC L/Plan)

The adopted Teignbridge Local Plan 2013-2033 sets out the Council's long-term strategy for development, and specifically in relation to Air Quality

Section EN6 states; To minimise harm to public health, the Council will act to improve the air quality of the district and meet national targets for air quality.

Where a significant impact is indicated within an existing Air Quality Management Area or which could itself result in the declaration of an additional Air Quality Management Area, the development will be required to mitigate negative impacts through the production and implementation of a tailored Low Emission Strategy which proposes management and other measures including implementation of relevant proposals within the Air Quality Action Plan.

Supporting Policies
In addition, there are several supporting policies referenced within our Local Plan that seek to ensure that new development minimises harmful impacts on air quality. The following extracts illustrate this commitment; OBJ

Heart of Teignbridge

Section HT1 (Movement)
The Heart of Teignbridge policy commits to improving connectivity and accessibility within the Heart of Teignbridge the following proposals will be supported:

- Measures to improve air quality.
- New pedestrian and cycle crossings of major transport networks.
- Investigate the potential for Park and ride or park and change facilities on the main routes into the Heart of Teignbridge, including a coach parking area.

- A freight transfer station on the A38 and/or the A380 transport corridor.

Section 6 (AQMAs)
The Heart of Teignbridge policy contains two Air Quality Management Areas and supports any proposal or initiative which helps to improve air quality in those areas. The plan encourages the use of more sustainable forms of transport, improved frequency of public transport and reducing the need to travel. Along with advances in technology to reduce vehicle emissions significant improvements to air quality could be made.

Section 9 (Sustainable Transport)
Promoting active and sustainable modes of travel and minimising dependence on cars. Also, provision of strengthened and improved public transport, cycling and walking networks

Section 11 (Pollution)
The impact of noise, air, water, light, land and other forms of pollution will be reduced where possible through planning.

Section 14 Newton Abbot identified as a location to improve air quality

Section 15 Kingsteignton identified as a location to improve air quality

Section 18 Teignmouth identified as a location to improve air quality

https://www.teignbridge.gov.uk/localplan

The current Local Plan continues to set out the commitment to improving air quality within Teignbridge and the importance of this was reflected in the comments received. The Plan acknowledges that a large contributor to air pollution in Teignbridge is from traffic generation, and places great emphasis on the provision of sustainable travel links as part of new development.

Relevant policies include:
Draft Policy GP1: Sustainable Development, promotes sustainable travel and considers effects of pollution or nuisance arising from the proposed development, including from associated traffic both during construction and once occupied.

Draft Policy CC4: Sustainable Transport, requires major development to ensure that most trips should be made by walking, cycling and public transport.

Draft Policy EN7: Air Quality, requires new development to minimise harm to human health, the natural environment and biodiversity and, to prevent unacceptable living conditions and, also to improve air quality, particularly where it is failing national targets.

The Proposed Submission Local Plan to 2040 will be published for consultation and, following an Examination in public, when it is adopted will replace the Local Plan 2013-2033.

https://www.teignbridge.gov.uk/article/21628/Council-Strategy-2016---2025

3.2.2 Teignbridge D.C. Infrastructure Delivery Plan (TDC InfraS/D/Plan)

The TDC InfraS/D/Plan contains a list of infrastructure projects that are required to deliver the development set out in the adopted Teignbridge Local Plan 2013-2033. It identifies new, and enhanced infrastructure such as schools, roads, sewers, and recreations facilities that will be needed to deliver the local Plan. The following will specifically play a key part in delivering either a reduction in NO_2 levels and/or providing opportunities to reduce the level of exposure to pollution.

Critical Projects

A) Local Cycling and Walking Infrastructure Plan, put together with Devon County Council to highlight the key needs for cycling & walking in the Teignbridge area including in and around both the Newton Abbot and Kingsteignton AQMA

Heart of Teignbridge Local Cycling and Walking Infrastructure Plan - Have Your Say (devon.gov.uk)

Final adopted document is linked under Teignbridge at;

Transport planning - Roads and transport (devon.gov.uk)

B) A382 improvements: Separate Cycle and Pedestrian paths and redirecting traffic flow via new roundabout. (Just outside the northern boundary of the Newton Abbot and Kingsteignton AQMA)

Important Projects

A) Newton Abbot Public (Transport): Town centre bus interchange and railway station. (This is in the middle of the Newton Abbot and Kingsteignton AQMA)

B) Kingsteignton GI (Green infrastructure): Cycle and Pedestrian network i.e. KS1 Sands Cops KS2 Ware Barton KS3 Abbrook KS6 Penns Mount KS7 Passage house (within the vicinity of the Newton Abbot and Kingsteignton AQMA)

C) Ware Barton Park and Change (Transport): 100 space Park & Change site (within the vicinity of the Newton Abbot Kingsteignton AQMA)

D) Aller Valley Reserve (Green infrastructure): Cycle and Pedestrian trail along the Aller Brook leading in/out of Newton Abbot (within the vicinity of the eastern side of the Newton Abbot and Kingsteignton AQMA). If feasible and delivered it would likely provide good on-foot connections, as well as connecting to Nature for a potential biodiversity net gain.

E) Park & Change facilities at Forches Cross as part of the A360 road improvements scheme

Desirable Projects

A) Jetty Marsh phase 2: Jetty Marsh to Whitehill Cross and a new roundabout on the northern side of the Newton Abbot AQMA

B) A381 AQ Improvement: New link through Bakers Park to Bradley Lane as the corridor into the western side of the Newton Abbot AQMA.

3.2.3 Sustainable Community Strategy for Teignbridge 2010 – 2030

This document sets out the ambitions for the local environment over the next 20 years and will look to bring together local organisations to work together and support the measures in the AQ Action Plan to create a cleaner environment in our main urban areas.

3.2.4 Teignbridge D.C. Green Travel Plan (TDC G/T/Plan)

This plan acknowledges that as a major employer, the Council has a responsibility to provide community leadership to promote sustainable travel whenever and wherever possible, to reduce what is a large travel carbon 'footprint'. It recognises that;

a) *The main Centre's of population of Newton Abbot, Teignmouth and Dawlish all have areas of poor air quality associated with transport*

b) *Seeks contribute to a reduction in congestion in these areas of poor air quality by identifying ways to reduce this footprint and influence as far as possible the way employees travel to and from work, or around the district on Council business.*

3.2.5 Teignbridge D.C. Car Parking Strategy (TDC C/Park Strategy)

The TDC C/Park Strategy is nearing the end of a complete review, but it currently reflects local planning policy and aims to moderate car travel and create more environmentally sustainable forms of urban development. Following on from the consultation and review process it is anticipated there will be reference to amongst other things developing an electric charging point infrastructure and offer incentives for the use of for electric cars in the new Strategy.

3.2.6 Devon County Council Local Transport Plan 3 (Devon LTP3)

The Devon LTP 3 (soon to be superseded by LTP4) contains Devon County Council's Implementation Plan and Market & Coastal Towns and Rural Devon Strategy, and it states that Devon County Council will;

a) Seek to attract funding for a range of small locally identified schemes that meet the specific needs of a community and reduce congestion. Initiatives could include cycle infrastructure and bike hire facilities; car clubs or junction and public realm improvements.

b) Build on existing enthusiasm from the community for sustainable alternatives. To support the market for electric vehicles it will be essential to have a network of charging points in convenient locations for example, park & ride sites could become places that users 'park & plug'.

It also identifies the importance of when passengers arrive at bus and rail transport interchanges that they can easily continue their journey by foot, bicycle, public transport, taxi or car, and this will be made easier by providing:

c) Good interchange facilities at bus and rail stations such as bus waiting areas and timetable information

d) Good quality accurate transport information

e) Were feasible the provision of low cost of park and change sites along core bus routes to enable people to connect to key urban areas and other towns.

It further identifies the importance of interchanging on page 44 stating

f) In the case of the rail network, delivery partners will be urged to make best use of the track asset, **for** example by providing more rolling stock to lengthen trains and increase frequencies where necessary, also by enhancing stations at interchanges between different travel modes

The term 'transport asset' refers to the infrastructure that makes up the transport network, for example the road and rail networks, cycleways, footpaths, bus stops and road signs. Maintenance and protection of the transport asset is important to protect investment and get the best value out of the transport services that already exist.

3.2.7 Devon County Council Cycling & Multi-User Trail Strategy:

The County Council are also in developing a Countywide Local Cycling and Walking Infrastructure

Devon County Council (middevon.gov.uk)

3.3 Source Apportionment

A successful and cost-effective action plan relies on carefully researched and targeted actions. To do this source apportionment can help do this identifying the amount of pollution as a percentage of the total that each contributor is making, so that you can focus actions on the biggest culprits (be it cars, or heavy goods vehicles and so on) where ever possible and there by generate the biggest impact in those areas where the worst levels of air pollution and exposure is occurring, often termed “hot spots”.

A source apportionment exercise was carried using traffic modelling data made available by Devon County Council. The data was split between 4 categories (motorcycle, car/taxi, van/lorry, and Bus/Coach) and looked at three locations, one in Teignmouth and two in Newton Abbot. (See Table 3.1 below).

Table 3.1 – NO_2 emissions from road traffic based on Devon County Council emissions modelling data.

Location	%Nox Motor cycles	%Nox Cars and Taxis	%Nox Vans & Lorries	%Nox Buses and Coaches	TOTAL
Bitton Park Road T'mouth	0.259502579	61.53551557	28.31446069	9.890521	100
East Street N/Abbot	0.286101292	47.86971567	49.82452194	2.019661	100
Station Road Newton Abbot	0.161507355	41.8500546	46.66969494	11.31874	100

The information from this exercise was then applied to known “hot spot” areas and where the highest levels of air pollution and exposure persist namely;

- Gradient section of Bitton Park Road, Teignmouth
- Wolborough Street Newton Abbot
- Exeter Road /Jetty Marsh Road Newton Abbot

Table 3.2 – Source apportionment data applied to the 3 "hot spot" areas.

(All figures are in µg/m_3)

Tube	Location	Regional Background NO_2	local background NO_2	L-NO_2 Motorbikes	L-NO_2 Cars	L-NO_2 Vans and lorries	L-NO_2 Buses coaches
Teignmouth							
2	155 Bitton Park Rd	2.88	6.42	0.07	17.03	7.83	2.74
5	96 Bitton Park Rd	"	"	0.09	20.17	9.28	3.24
27	173 Bitton Park Rd	"	"	0.08	19.06	8.77	3.06
47	114 Bitton Park Rd	"	"	0.04	10.36	4.76	1.66
49	68 Bitton Park Rd	"	"	0.1	23.35	10.74	3.75
Newton Abbot (Wolborough St)							
53	90 Wolborough St	"	"	0.11	16.99	17.69	0.72
4	85 Wolborough St	"	"	0.11	19.02	1980	0.81
55	79 Wolborough St	"	"	0.11	18.37	1912	0.77
65	96 Wolborough St	"	"	0.06	9.75	1015	0.41
Newton Abbot (Exeter Rd)							
40	Exeter Road	"	"	0.09	14.79	15.39	0.62

We also used the Emissions Factor Toolkit prepared by (Bureau Veritas on behalf of Defra). This toolkit allows users to calculate road vehicle pollutant emission rates based on a defined fleet composition for a given year, road type, and area.

In addition the toolkit enables assessment of measures implemented as part of the policy interventions on road traffic emissions and other measures that form part of the UK national plan on compliance with their quality standards.

Table 3.3 Road Vehicle Pollutant Emission Rates (Emissions Factor Toolkit)

Primary Inputs		Pollutant		Standard Outputs		Additional Outputs	
Area	England URBAN *Not London	NO_x	Y	Air Quality Modelling (g/km/s)	N	Breakdown by Vehicle	
Year	2018	PM_{10}	N	Emissions Rates (g/km)	Y	Source Apportionment	Y
Traffic Format	Basic Split	$PM_{2.5}$	N	Annual Link Emissions	N	PM by Source	N
All must be selected		CO_2	N			Primary NO_2 Fraction	N
						Export Outputs	Y

INPUTS

Source ID	Road Type	Traffic Flow AADT	% HDV	Speed(kph)	No of Hours	Link Length (km)	% Gradient
Bitton Pk Rd	Urban not London	18238.354	2.8	27	24	0.6	6
Wolbrough Steet	Urban not London	16496.615	2.14	26	24	0.35	0
Exeter Road	Urban not London	18478.29	2.41	26	24	0.3	6

OUTPUTS

Source Name	Pollutant Name	All Vehicles (g/km)	All LDVs (g/km)	All HDVs (g/km)	All LDVs (%)	All HDVs (%)
Bitton Pk Rd	NOx	9,387.89430	7,364.35878	2,023.5355	78.4%	21.6%
9,387.89430	NOx	7,954.06955	6,793.07597	1,160.9935	85.4%	14.6%
Exeter Road N.A.	NOx	9,390.01740	7,588.10816	1,801.9092	80.8%	19.2%

Conclusions

This exercise identified that in general, at the “hot spot” locations, neither the bus/coach or motorcycle category are a significant contributor to the high pollution levels being generated.

The key contributor at the Bitton Park Road “hot spot” location (in red) was in the main from the car category, but with still a fairly significant contribution from van/lorry.

In all the Newton Abbot “hot spot” locations the contribution was pretty much an even spread between the car and van/lorry category.

3.4 Required Reduction in Emissions

Having identified the key sources at each “hot spot” location and their percentage contribution to pollution levels, then processed this information in line with Technical Guidance LAQM.TG122 to filter out the influence of background pollution levels and derive the percentage reduction in real terms of NO_2 that will be needed in order to achieve the primary aim, that of compliance with the current National objective for NO_2. (See table 3.3 below).

Table 3.3 – Calculated reduction of NO_2 Required

Tube	Location	Tube NO_2	B/Gd NO_2	NO_2 Conc	local B/Gd NO_2	Road Concn current	NO_2 40	Road Conc NOx 40	reduction required	% reduction Required
Teignmouth										
48	Reed Vale Bitton Pk Rd	46.07	6.42	91.4	8.59	83.23	74.0	65.43	17.6	19.02
Newton Abbot										
40	Exeter Road	41.55	7.61	74.81	10.24	64.57	71.4	61.16	3.41	5.28

Note that the table 3.3 above does not refer to Queen Street Newton Abbot, or East Street Newton Abbot. The reason for this is that although the NO_2 levels at these monitoring locations were elevated, they are still less than the National Objective target, and crucially year on year the levels continue reducing.

3.5 Key Priorities

The action measures presented in Table 5.3 of this report are intended to be targeted towards the predominant sources of emissions within Teignbridge's area.

Based on the information above we concluded that the areas can be prioritised for action is as follows:

- Priority 1 – Bitton Park Road Teignmouth
- Priority 2 – Wolborough Street Newton Abbot
- Priority 3 – Exeter Road Newton Abbot

4 Development and Implementation of Teignbridge District Council AQAP

4.1 Consultation and Stakeholder Engagement

In developing/updating this AQAP, we have worked with other local authorities, agencies, businesses and the local community to improve local air quality, and have consulted as is required under Schedule 11 of the Environment Act 1995. In addition, we have undertaken other stakeholder engagement of local business via a Freight Transfer study that we commissioned from Transport and Travel Research Ltd in 2013 with grant assistance from DEFRA.

Several meetings were held with a combination of internal and external stakeholders to review the March 2010 Air Quality Action Plan and evaluate the existing actions with the result that all previous aspirational or idealistic actions were removed to leave a concise prioritised set of achievable actions.

Table 4.1 – Stakeholders

Stakeholders involved in review	Consulted
Devon County Council (Highways authority)	Yes
Public Health England	Yes
Local business interests	Once the Councillors have had the opportunity of being fully briefed then businesses' are to be consulted through the business briefing
All key internal departments	Yes including Planning development, Building Control, Housing, Economy and Assets, Environment and Leisure
Environment Agency	N/A
Secretary of State	N/A
Elected Members	Executive Member for Environmental Health.

(Responses to stakeholder engagement are distilled and presented in Appendix A).

4.2 Steering Group

The ongoing delivery of the actions derived from the initial consultation will be achieved as mentioned above in 3.1.2 by utilising the emerging Council strategy. This will set a project performance and monitoring framework which will report to officers and members on the delivery of the AQAP.

5. AQAP Measures

5.1 Ranking of Measures

Clearly the delivery of each of these measures set out in this Action Plan will require and rely on securing a sufficient and consistent level of funding, and although current Government guidance does not expect a detailed cost-benefit analysis, it is necessary to provide a broad indication of costs so that the proposed measures can be ranked according to the cost and the expected improvement to air quality.

Each of the actions in this plan has been given a ranking based on the financial cost against the health benefits that action should deliver and the time scale for implementing the measures. Availability of funding will largely dictate what the timescale is likely to be.

The ranking helps to ensure that focus is maintained upon delivering the maximum health benefits from the finite resources available and where possible in a timely manner.

Table 5.1 – Likely level of Funding required.

Likely level of Funding required
Very Low' cost is taken to be £10K and under
'Low' cost is taken to be £10 - £50K
'Medium' cost is £50 - 500K
'High' cost is £500K - £2 million
'Very High' cost is over £2 million

Table 5.2 – Likely impact on Air Quality level of Health Benefit derived

Likely level of Health Benefit derived	Comment
Low: Imperceptible but a step in the right direction	Improvements unlikely to be detected within the uncertainties of monitoring and modelling
Medium: A perceptible improvement of up to 2µg/m^3 NO_2	Perception being based for example on what is shown by a modelling scenario as a reduction, but not necessarily shown by monitoring (due to real time confounding factors such as the weather).
High: A significant improvement of more than 2µg/m^3 NO_2	Can be clearly demonstrated by either modelling or monitoring. Note: typically a significant improvement is only likely to be delivered by a package of options rather than by a single intervention.

Table 5.3 – Likely timescale rankings for implementation

Timescale	Comment
Short term	These are measures that can reasonably be expected to be implemented within the financial year
Medium term	Measures that will take between 2 to 5 years to implement fully
Long term	Measures that may have large funding requirements to be overcome, or relies on development opportunities to arise. Take 6+ years

By applying tables 5.1, 5.2 and 5.3 above to each of the AQAP actions it is possible to allocate each with a ranking (see Table 5.3 below) which briefly highlights what the Council's priorities need to be. The table also includes;

- a list of the actions that form part of the plan
- the responsible individual and departments/organisations who will deliver this action
- estimated cost of implementing each action (overall cost and cost to the local authority)
- expected benefit in terms of pollutant emission and/or concentration reduction
- the timescale for implementation
- how progress will be monitored

NB: Regular annual updates on implementation of these measures will be contained within the Council's Annual Status Report (ASR) for local air quality.

Table 5.4 – Actions and Measures Evaluation

Action 1	**EU Category: To promote low emission transport**
Measures	**1 Electric Car Charging points** **2 Eco Stars**
Likely impact on Air Quality within AQMA's	**1** Promoting the use of clean electric vehicles is being tackled in several ways. TDC has partnered with a consortium led by Devon County Council to develop charging infrastructure in car parks at strategic locations for example within AQMAs. Initially impact of this improvement will be **LOW**, however as the "plug in revolution" gathers momentum this will deliver perceptible reductions, but they will be generic and could not be targeted geographically. **2** Eco-Stars scheme should deliver year on year improvements in emissions from fleets and therefore might deliver only a small broad-based improvement, and so delivery will be **LOW**
Likely cost	**1**, The faster the rate of charge, the greater the cost for EV charging units, and so units can reach figures in excess of £30,000 each. The rate at which infrastructure is delivered will be solely dependent on funding opportunities from government such as LEVI funding secured by Devon County Council, the consortium for which this council is seeking to join. However to deliver a significant pollution reduction to a targeted location in an AQMA would require a **VERY HIGH** investment. **2**, **LOW** TO **MEDIUM**
Predicted timescale	**1**, By law, the UK's emissions must be net zero by 2050 however progress toward this target will be subject to ongoing fund availability and when development opportunities arise to incorporate and grow the ChargePoint network. The time scale therefore for a perceptible reduction will be in the **MEDIUM** to **LONG** term **2**, The Eco Stars fleet recognition scheme, **MEDIUM** to Ongoing

Action 2	EU Category: Alternatives to private vehicle use
Measures	**3 Park and Change Opportunities (buses)** **4 Park and Change Opportunities (trains)** **5 Car Clubs**
Likely impact on Air Quality within AQMA's	**3** Opportunities typically arise out of new development initiatives, or road improvement schemes. In particular the A382 improvement scheme that feeds into the Jetty Marsh / Exeter Rd area of the Newton Abbot AQMA will significantly change traffic flows and introduce a new park and change facility. Where schemes such as this occur where they can at the very least influence traffic behaviour and at best facilitate a modal change. The impact predicted reduction of traffic flow in the vicinity of Exeter Rd Jetty Marsh Rd is expected to be 50% a **HIGH** impact on this hotspot location. It is worthy to note that in time (especially with a modal change) this could deliver a broader population exposure reduction for the wider community. **4**, Whilst in a travel sense a "bike to train to bike" journey is logical joined up thinking, there is currently very of this being displayed by the various train services who accommodate maybe a handful bicycles on board. However, cycling is a rapidly growing mode of transport so this position may have to change due to customer demand. An alternative approach would be bike hire facilities at the destination station. Certainly Newton Abbot and Teignmouth train stations are big enough to accommodate this at scale and could deliver population exposure reduction for the wider community. However, impact on the specific hot spot locations is likely to be **LOW.** **5**, Electric Car clubs lend themselves to the park and change culture be it Train or Bus to/or from an Electric car. Given the cost to purchase EVs and the practical charging disadvantages that smaller less affluent households face (such as terraces without off street options) it may be that leasing and hiring could be an early answer to filling this demand. However car clubs would require large scale growth to have a perceptible impact on air quality in the AQMAs **LOW**
Likely cost	**3** Whist the cost of including bus change opportunities in development schemes range from **LOW** to **MEDIUM** but realistically will only assist in population exposure reduction, not removal of hotsppots **4** It would depend on the scale Bike hire at destination stations but costs would be **LOW** (MEDIUM?) **5** On an individual basis car club costs are **LOW**
Likely Timecale	**LONG** term

Action 3	EU Category: Traffic Management
Measures	**6 Reducing speed limits to even traffic flow** **7 Reducing congestion by investigating viability of traffic flow changes** **8 Targeted Anti Idling campaigns**
Likely impact on Air Quality within AQMA's	**6, 7,** Congestion is one of the key contributors to elevating air pollution levels. Where actions are applied in a manner similar to the "Clean Air Zone" model outlined in the "UK Plan" by targeting specific hot spot areas this is likely to deliver a medium to high improvement in Air Quality. To apply targeted actions such as re-routing or changing traffic flows, extending one-way systems, removing bottlenecks to the hot spot locations of Wolborough Street and Bitton Park Road Teignmouth, could deliver significant **HIGH** pollution reduction benefits! Again, however, such targeted actions would have to demonstrate that; • They will also support local growth thus delivering a decoupling of local growth and pollution. • The objectives of the Department of Transport document "Plan for Drivers" (https://assets.publishing.service.gov.uk/media/651fe3022548ca000dddee82/the-plan-for-drivers.pdf) are maintained, in particular that support is secured from local people and businesses, that may be affected. • Accelerate the transition to a low emission economy. • Give encouragement, in favour of public transport, park and ride, car sharing, the uptake of ultra-low emission vehicles, and so on in these locations. Finally, in keeping with the National Institute for Health and Care Excellence guidelines on air pollution, additional monitoring to identify any potential adverse knock-on effects outside any targeted area would be needed. **8**, What came out of the Personal Exposure pilot study (see measure 10) was that in addition to the potential for rolling out this scheme across other schools within the AQMA 's the scheme format itself could/should be extended to include tackling exposure to pollution from idling vehicles parked outside the school gates. Although this would not assist the primary aim of this AQAP the population health benefits could be significant.
Likely cost	**6, 7** As set out above the requirements set out in the UK Plan for the implementation of fully comprehensive clean air zone are "extremely onerous", so costs are **VERY HIGH** with no explicit resource (as yet) allocated to our Highways Authority even for scoping to assess feasibility. **8**, **VERY LOW**
Predicted timescale	**MEDIUM** to **LONG** term

Action 4	EU Category: Promoting Travel Alternative
Measures	**9 Incentivise active travel** **10 Cycle routes to schools and colleges** **11 Health impact assessments, promoting alternate routes reduce levels of exposure (walking to school)** **12 Travel Plans: Workplace / Green / School**
Likely impact on Air Quality within AQMA's Health Benefits to be gained	**9 & 10**, Early consultation leading to the launch of Teignbridge Council's 10-year Strategy resulted in "sustainable travel options" being agreed as one of 7 key objectives for the Council to deliver between 2016 and 2025. In particular "Heart of Teignbridge Local Cycling and Walking Infrastructure Plan" has delivering significant improvements in terms of connectivity, for example across the A38 between Newton Abbot to Bovey Tracey. Of the 10 super project teams set up to deliver this strategy two include air quality officers namely "Health at Heart" (to improve health and wellbeing) and "Moving up a Gear" (to improve travel options). Because of the wide scope of influence, it is likely over this 10-year period to deliver some beneficial population exposure reductions, with projects like the Queen St Pedestrian Enhancements project in Newton Abbot for example. However despite Queen Street being in the centre of the Newton Abbot AQMA and despite the welcome prospect of reduction in pollution levels in the town centre, there are no exceedances in Queen Street and the impact of these projects on the hotspots is likely to be **LOW.** **11 & 12**, In 2015/16 a very successful pilot study was conducted by Teignbridge DC in collaboration with other Council's in Devon and with funding from Public Health England. It first set out to measure the levels of exposure suffered by school children making their way to school on foot. An alternative travel plan was then designed so as to reduce and minimise that exposure. The study showed the alternative route delivered a sixfold reduction in pollution exposure levels. The next stage could be to roll out this study and promote this to the other vulnerable schools within AQMA's using our own monitoring kits. Although these actions would not impact at all on the primary aim to remove hotspots, as part of the Public Health Strategy element of this plan it could deliver a fundamental behavioural shift, leading to sustained reductions in exposure population exposure reduction and significant health benefits
Likely cost	9, 10 The "UK Plan July 2017" calls for expressions of interest in technical support to assist with development of local walking and cycling investment plans.

	Again, it is unclear but if this support will be open to local authorities not identified in the UK Plan as likely to remain above the legal limits without "additional measures", such as Teignbridge DC then the cost of this sort of development could be **VERY LOW** 11, 12, **LOW** (Purchase of personal exposure monitor kits)
Predicted timescale	9, LONG term 10, **LONG** term 11, **MEDIUM** term 12, **MEDIUM** term

Action 5	EU Category: Efficiency (Fleet Vehicles)(other)
Measures	**13 Low emission buses and taxis** **14 Fuel/emission efficiency systems** **15 Promote advanced driving courses to improve efficient use of fuel**
Likely impact on Air Quality withIn AQMAs	**13** Source apportionment shows that buses and taxis pay little contribution to overall pollution levels. Likely impact is **LOW** **14** Such bespoke retro fit systems typically claim the dual benefit of reduced emissions and greater fuel efficiency, but the science that supports this is relatively new, but the data available suggests very impressive emission reductions on a per-vehicle basis. However "Fuel Efficiency" performances do vary. The proliferation of such systems will likely depend on the fuel efficiency performance and crucially the length of the payback period. Only if these systems became common place could they have the potential to deliver a reduction in NO_2 emissions at the local hotspot locations within the AQMA's, and at best these impacts could be **MEDIUM** **15** Driving courses deliver a before and after performance for fuel consumption that is measurable but would have to be on a very large scale to deliver a perceptible difference **LOW**
Likely Cost	**13** The rate of change and replacement to low emission vehicles in a fleet can be **HIGH** depending on the timescale over which the scheme is implemented. There is the potential of "additional funding" expected via a grant Scheme referred in Table 2 of Defra's "UK plan for tackling roadside nitrogen dioxide concentrations (UK Plan July 2017). It is not clear yet if this funding opportunity will be extended to local authorities such as TDC not are identified in this UK Plan as likely to remain above the legal limits without "additional measures" However, if this extra funding were available then costs could be nearer to a **MEDIUM** classification. **14** To have an impact on NO_2 levels within the AQMA's any investment would need to be either targeted to incentivising take up by locally based vehicles, by for example funding a modest local discount scheme for locally based vehicle fleets, or possibly even private individual vehicles would have a **LOW** cost. Alternatively, an investment in the Council's vehicle fleet as a model, to promote uptake by local private motorists, the cost of this would likely be **LOW** **15 LOW**

Predicted timescale	**13 MEDIUM** term **14 SHORT/MEDIUM** term **15 SHORT** ter

Action 6	EU Category: Policy Guidance and Development Control
Measures	**16 Local planning & development process to avoid or limit new exposure** **17 Ensure that local air quality impact is an integral part of the Council's Sustainable Procurement Guidance**
Likely impact on Air Quality within AQMAs	**16 & 17** The requirement to improve or maintain air quality has been explicitly affirmed in the Teignbridge Local Plan. The on-going application of knowledge and experience when considering the design of a development is likely to have a **HIGH** impact on air quality. For any proposed development that requires a transport assessment we will expect to see it accompanied by a Travel Plan that addresses Local Air Quality. Likewise where the proposal contains more than 50 dwellings. This to be achieved through the consultation process and working with Highway Development Management arm of the County Council. Finally all future residential development proposals (with off street parking) will need to demonstrate they will be "electric ready" to accommodate EV charging.
Likely cost	**16, 17** Cost for the Council is **LOW**

Action 7	EU Category: Public Information
Measures	**18 Informed "Real Time" travel decisions** **19 Educational information at car parks** **20 Provide and promote evidence-based information on the Council's website**
Likely impact on Air Quality within AQMAs	**18** In recent years there has been an increase in the rate of roll out of "real time" signage on the main bus routes in the main towns (including Newton Abbot and Teignmouth), but whilst they reassure and inform travellers, the air quality benefits are very difficult to quantify. Increased confidence, use and reliance will encourage investment in fleet improvements and deliver a reduction in pollution population exposure, but impact on the specific hot spot locations will be **LOW.** **19** The Council's Car parking strategy is currently under review but it is expected that information about the availability and locations of electric car charging points will be available. Likely impact is **LOW** **20**, Evidence and information is already placed on the Council's website but this is not a working document and is not regularly updated. Likely impact is **LOW**
Likely cost	**18**, Installation cost for real time signs are **LOW** to **MEDIUM.** Future funding is unlikely to be available if it's solely for air quality reasons. **19, VERY LOW** **20**, **VERY LOW**
Predicted timescale	On going

Action 8	EU Category: Freight and Delivery Management
Measures	**21 Freight management (Distribution Centre)**
Likely impact on Air Quality within AQMA's	Consultants for Teignbridge Council carried out a freight distribution study in 2012, which confirmed that the case for a freight distribution network was not proven. This was due to the national retailers already being serviced by their own distribution networks and many of the other businesses in the area being too small to sustain a consolidation centre on their own. However there was strong potential identified for a seasonal consolidation centre to service Teignmouth and Dawlish, supplemented with goods destined for Newton Abbot. This would be promoted to operators (rather than to local businesses). Given that the source apportionment profile shows a significant proportion of traffic in Teignmouth are lorries and vans, then a seasonal consolidation centre could reduce this element for 4 to 5 months of the year, to give an impact that would certainly be **LOW** possibly even **MEDIUM** on Air Quality. In the longer term should the seasonal service grows and establishes, then a site (in or around Ware Cross) could be developed to accommodate the seasonal consolidation centre as a component of a shared site with a complementary or separate operation.
Likely cost	For the first two years would require **LOW** funding (to purchase a vehicle and driver services), after which the service should be self-sustaining. If the case for evolution into a distribution centre is proven then costs for this (land purchase, construction etc.) is likely to be **MEDIUM** to **HIGH**, as its strategic location would also benefit Newton Abbot.
Predicted timescale	A seasonal consolidation centre would be a **MEDIUM** timescale once decided. A full distribution centre would be **LONG** term.

Action 9	EU Category: Transport Planning and Infra-structure
Measures	**22 Bypass for Wolborough Street** **23 Bringing forward new cycle networks and pedestrian. infrastructure** **24 Increasing or reducing availability of car parking.** **25 Green Streets Walls and Trees** **26 Roadvent extraction system for Teignmouth**
Likely impact on Air Quality within AQMAs	**22** Delivery of a new road to link between the Totnes Road A381 and the end of Bradley Lane Newton Abbot would alleviate the loading of the traffic flow through Wolborough Street, which exhibits some of the highest pollution levels in the district. It is referenced as a potential scheme in the Teignbridge Local Plan, and the improvement in air quality it would deliver would be **MEDIUM**. **23** Collaborative work has and will continue to be done with the Council's Green Infrastructure & Habitat Registration Officer to deliver joined up cycle path networks. For example "Heart of Teignbridge Local Cycling and Walking Infrastructure Plan" Although such facilities would encourage local residents to leave the car at home, this wouldn't apply to through traffic, and if anything would serve as more enticement for more holiday makers to visit the area in their cars. The likelihood is that net improvements in pollution are very difficult to identify but impact on air quality could be **MEDIUM** Note; In contrast significant public health benefits could be derived as a result of the setting apart of human receptors from road traffic pollution, and also expand the health benefits of physical exercise.
Likely impact on Air Quality	**24** Managing the availability of car parking under the Council's control is an effective way of influencing driver behaviour. However the approach must be in the round to avoid the knock on effect that simply moves a problem elsewhere. Consultation is ongoing with the Council's Economy Manager, (Strategic Place - Economy & Assets) who is currently revising the Council's Car Parking Strategy. This revision will include the strategic placement of electric charging points and charging concessions. **25** The research in the field suggests that unless there is careful design the effectiveness of street greening applications to reduce pollution levels can vary wildly. (The range of effectiveness being less than 10% to as much as a 40% improvement in air quality) **26** Whilst this is a new innovation its principle is simple. To capture traffic pollution close to source. Then drawn away for treatment to remove pollutants. Efficiency is stated as being 90% but even if real in-situ performance were only 50%, this impact would still be considered as **HIGH**

Likely cost	**22**, Costs for a new road to link are prohibitively **HIGH,** not in development, and unlikely to be in the foreseeable future. **23**, Section 106 money is accumulated to support funding for cycle networks but government funding will be essential. Contributions to Cycle/pedestrian infra structure are **LOW** **24**, Individual costs are **LOW** but across the AQMA's it is more likely to have a **MEDIUM** cost **25,** installation costs are **LOW** but ongoing maintenance could effect this. **26** Capital cost is modular per 10m of roadway. **MEDIUM** with on-costs for filter servicing depends on rate and volume captured (maybe 6 to 12 monthly) **LOW**
Predicted timescale	22**, LONG** term 23**, MEDIUM** TO LONG 24, **MEDIUM** 25, **MEDIUM** 26, **MEDIUM**

5.4.2 Evaluation Matrix

Based on the 3 core elements discussed in table 5.4 namely
A Health impacts (positive). B Likely Timescale for delivery. C Likely costs`

From this a broad scoring matrix can be derived as follows….

A HEALTH IMPACTS		B LIKELY COST		C LIKELY TIMESCALE	
LOW	5	HIGH	2	LONG	2
MEDIUM	10	MEDIUM	5	MEDIUM	5
HIGH	15	LOW	10	SHORT	10

Scoring

Measure	Score
1	6-9
2	12-18
3	17-25
4	14
5	14
6	14-17
7	14-17
8	22-25
9	22+
10	22+
11	25
12	25
13	17-20
14	20-25
15	30
16	20-22
17	20-22
18	9-12
19	12-14
20	12-14
21	6-12
22	12
23	20
24	10
25	10
26	14

Measure	High to low value
15	30
11	25
12	25
8	22-25
9	22+
10	22+
14	20-25
3	17-25
16	20-22
17	20-22
23	20
13	17-20
2	12-18
6	14-17
7	14-17
4	14
5	14
26	14
19	12-14
20	12-14
22	12
18	9-12
21	6-12
24	10
25	10
1	6-9

Table 5.5 – Air Quality Action Plan Measures

Action	EU - Category	EU-Classification	Measure Number *Funding secured	Measure	Lead Authority	Plan Phase Date	Implem Phase Date	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estim Complete Date
1	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote low emission vehicles, EV recharging and gas fuel recharging	**1***	**Expanding a network of standalone electric car charging points**	TDC	complete	ongoing	TDC C/Park Strategy (under review)	Working towards consultation of revised Car Parking Strategy	Subject to identifying appropriate actions and funding	2018
1	Promoting Low Emission Transport	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	**2**	**Eco Stars scheme**	JOINT Devon District council	complete	ongoing	#	Evaluation report may be able determine target reduction	limited	Not pursued
2	Alternative to private vehicle use	Bus based Park and Ride	**3**	**Park and Change Opportunities (buses)**	DCC	ongoing	ongoing	Devon LTP3 (see 3.2.7 (e) of this report)	Quantified at planning application stage.	ongoing	ongoing
2	Alternative to private vehicle use	Rail based Park & Ride	**4**	**Park and Change Opportunities (trains). Capacity for bicycles**	DCC	ongoing	ongoing	Devon LTP3 (see 3.2.7 (f) of this report)	Quantified at planning application stage.	Subject to identifying appropriate actions and funding	ongoing
2	Alternative to private vehicle use	Car Clubs	**5**	**Car Clubs**	TDC	ongoing	ongoing	TDC 10yr Strategy (see 3.2.2 of this report "Move up a Gear")	Evaluation report may be able to determine target reduction	Subject to identifying appropriate actions and funding	Ongoing
3	Traffic Management	Reduction of speed limits, 20mph zones	**6**	**Reducing speed limits to even traffic flow**	DCC	ongoing	ongoing	Devon LTP3 (see 3.2.7 (a) of this report)	Evaluation report may be able to determine target reduction	Subject to identifying appropriate actions and funding	2026

Action	EU Category	EU Classification	Measure Number *Funding secured	Measure	Lead Authority	Plan Phase date	Implem Phase date	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estim Complete Date
3	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, inc Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	**7**	**Reducing congestion by investigating viability of traffic flow changes inside AQMA (such as one way or priority traffic schemes, turning lanes etc).**	TDC/ DCC	ongoing	ongoing	Devon LTP3 (see 3.2.7 (a) of this report)	Evaluation report may be able to determine target reduction	Subject to identifying appropriate actions and funding	2033
3	Traffic Management	Anti-idling enforcement	**8**	**Targeted Anti Idling campaigns e.g.; school gate pick up zones**	TDC	ongoing	ongoing	TDC 10yr Strategy (see 3.2.2 of this report "Health at Heart")	Evaluation report may be able to determine target reduction	See website for details of progress	2025
4	Promoting Travel Alternative	Intensive active travel campaign & infrastructure	**9***	**Incentivise active travel....**	TDC	ongoing	ongoing	TDC 10yr Strategy (see 3.2.2 of this report "Moving up a Gear") and TDC G/T/Plan (see 3.2.5 (b) of this report)	#	See website for details of progress	2025
4	Promoting Travel Alternative	Promotion of cycling	**10***	**Cycle routes to schools and colleges**	TDC	ongoing	ongoing	Devon LTP3 (see 3.2.7 (a) of this report)	#	Subject to identifying appropriate actions and funding	2033
4	Promoting Travel Alternative	Promotion of walking	**11**	**Health impact assessments, promoting alternate routes to reduce level of exposure (school walking to school)**	JOINT	ongoing	ongoing	TDC 10yr Strategy (see 3.2.2 of this report "Health at Heart")	#	See website for details of progress	2025

Action	EU - Category	EU-Classification	Measure Numbers ***Funding secured**	Measure	Lead Authority	Plan Phase Date	Impleme Phase Date	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estim Complete Date
4	Promoting Travel Alternative	Workplace Travel Planning	**12**	**Travel Plans: Workplace / Green / School**	JOINT	ongoing	ongoing	TDC 10yr Strategy (see 3.2.2 of this report ("Health at Heart")	#	See website for details of progress	2025
5	Efficiency (Fleet Vehicles)	Promoting Low Emission Public Transport	**13***	**Low emission busses and taxis Refuse Collection Vehicles**	TDC	ongoing	ongoing	Review of Hackney carriage policy and RCV	Dependent on agreement and any subsequent retrofit funding	Plans well advanced to make RCV fleet electric	End 2024
5	Efficiency	Other	**14**	**Fuel/emission efficiency systems**	TDC	ongoing	pending	TDC L/Plan (see 3.2.1 (c) of this report) also TDC 10yr Strategy (see 3.2.2 of this report "Zero Heros")	#	ongoing	2025
5	Efficiency	Other	**15**	**Promote advanced driving courses to improve efficient use of fuel**	TDC	ongoing	ongoing	TDC G/T/Plan (see 3.2.5 (b) of this report)	#	ongoing	2025
6	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	**16**	**Use local planning and development process to avoid or limit new exposure and reduce the need to drive by good design**	TDC	ongoing	ongoing	TDC L/Plan (see 3.2.1(a)-(i) of this report)	ongoing	ongoing	2033
6	Policy Guidance and Development Control	Sustainable Procurement Guidance	**17**	**Ensure that local air quality impact is an integral part of the Council's Sustainable Procurement Guidance**	TDC	ongoing	ongoing	TDC 10yr Strategy (see 3.2.2 of this report "Zero Heros" and "Moving up a Gear"))	Quantified at planning application stage	Ongoing	2025
7	Public Information	Other	**18**	**Informed "Real Time" travel decisions**	TDC/ DCC	ongoing	Autumn 2014	Devon LTP3 (see 3.2.7(d) of this report)	Evaluation may derive a target	completed	delivered

Action	EU - Category	EU-Classification	Measure Numbers ***Funding Secured**	Measure	Lead Authority	Plan Phase Date	Impleme Phase Date	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estim Complete Date
7	Public Information	Via other mechanisms	**19**	**Educational information at car parks**	TDC	ongoing	ongoing	TDC C/Park Strategy (under review)	Working towards consultation of revised Car Parking Strategy	pending	Pending
7	Public Information	Via the Internet	**20**	**Provide and promote evidence based information on the Council's website, and issue press releases to radio and television networks**	TDC	ongoing	ongoing	Evidence of Information on website	#	See website for details of progress	2025
8	Freight and Delivery Management	Freight Consolidation Centre –	**21**	**Freight management (Distribution Centre)**	TDC	complete	pending	TDC L/Plan (see 3.2.1 (b) of this report)	Evaluation report may be able to determine target reduction	Subject to identifying appropriate actions and funding	pending
9	Transport Planning and Infra-structure	Other	**22**	**Bypass for Wolborough Street**	TDC	complete	pending	TDC Infrastruct/ D/Plan (see 3.2.3 (h) of this report)	Evaluation report may be able determine target reduction	Subject to identifying appropriate actions and funding	pending
9	Transport Planning and Infrastructure	Cycle network	**23***	**Bringing forward new cycle networks and pedestrian infrastructure**	TDC	ongoing	ongoing	TDC L/Plan (see 3.2.1 (a,c)) Also TDC Infrastruct/ D/Plan (see 3.2.3 (a,b,d,f) of this report	#	See website for details of progress	2033
9	Transport Planning and Infrastructure	Other	**24**	**Increasing or reducing availability of car parking**	TDC	ongoing	ongoing	TDC C/Park Strategy (under review)	Working towards consultation of revised Car Parking Strategy	pending	pending

Action	EU - Category	EU-Classification	Measure Numbers ***Funding Secured**	Measure	Lead Authority	Plan Phase Date	Impleme Phase Date	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estim Complete Date
9	Transport Planning and Infrastructure	Other	**25**	**Green Streets Walls and Trees**	TDC	ongoing	ongoing	TDC 10yr Strategy	Evaluation report may be able to determine target reduction	Subject to identifying appropriate actions and funding	2025
9	Transport Planning and Infrastructure	Other	**26**	**Roadvent extract system**	TDC/ DCC	ongoing	pending		90% at hotspot	Subject to DCC support identifying funding	pending

Table Key……

Devon LTP3 : Devon County Council Local Transport Plan Devon's Implementation Plan

DCC T/Plan : Devon County Council Travel Plan

TDC 10yr Strategy: Teignbridge District Council 10 year Strategy 2016-2025

TDC L/Plan: Teignbridge District Council Local Plan 2013 – 2033

TDC Infrastruct/D/Plan: Teignbridge District Council Local Plan (infrastructure delivery)

TDC C/Park Strategy: Teignbridge District Council Car Park Strategy (currently under review)

TDC G/T/Plan : Teignbridge District Council Green Travel Plan

 # : Boxes are left intentionally blank

Appendix A: Response to Consultation

Table A.1 – Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

The responses to this stakeholder engagement have been distilled and are given in Appendix A.

Consultee	Feedback	Response
Local Chamber of Commerce	Local Chamber of Commerce disagreed with plan to remove parking on High Street in favour of buses and cycles; consider it will harm business of members. Equally their members confirmed they have no need or desire for any freight hub or service.	In response..... Measure 21 remains referenced as future circumstances are likely to change that could make this option more attractive to local businesses
Neil Blaney (Economy Manager) Strategic Place - Economy & Assets	At the time of writing the current Teignbridge DC Car parking strategy is under review.	In response ..... LEVI funding for electric vehicle charging infrastructure, is being pursued in partnership with Devon County Council to deliver on street residential charging.
	For delivery of measure 1 and 24 funding opportunities are being pursued to make improvements within the car parks that meet future technological changes that also help with reducing environmental impact.	Real time data on availability of car park spaces is being rolled out. and automatic Number Plate Recognition are being investigated

Jonny Miller Green Infrastructure & Habitat Reg Officer	A/ With opening of lots of new cycle routes and success of mums and babies cycle rides I think Teignbridge could work with Active Devon to establish community cycle rides or promote existing leisure rides with other local authorities. B/ Working with DCC on a range of sustainable transport improvements. To include Growth Deal bid for cycle/ped network improvements throughout Newton Abbot including B 1) Queens Street B 2) Ashburton Rd	A/ Attempts were made to work on developing parent & baby rides, but since a key officer** role was not continued there hasn't been any capacity within the council to pursue this. B1) The Queen Street enhancement scheme (Newton Abbot) is a partnership project with Devon County Council. Construction is underway, thanks to funding via the Future High Street Fund and Active Travel Fund **Queen Street (Newton Abbot) Enhancement Scheme - Roads and transport (devon.gov.uk)** B2) The Ashburton Road East – West active travel route has been delivered by DCC as far as Orchard Grove, and TDC have supported with some CIL funds **Newton Abbot East - West shared use path - Roads and transport (devon.gov.uk)**

	B 3) Lemon trail.	B3) Making the Lemon trail cycle-able has been found to be unfeasible as it doesn't align with priorities of the National Trust & conservation along the watercourse. There is an existing shared-use route along the River Lemon from just outside Bakers Park to ASDA then linking to NCN2. This route now extends via Steppes Meadow and Bakers Park and there will be a further phase of delivery to link into Buntings Close (for Ogwell) and to Bradley Road (to Wolborough) **Local Cycling and Walking Infrastructure Plan (LCWIP) (arcgis.com)**
	C/ Promotion and facilitation of the NCN Route 2 Newton Abbot to Teignmouth. Route to Bishopsteignton and approval for CPO agreed at cabinet. Planning application expected summer 2015.Landowner negotiations ongoing. Route to Bishop will cost c. £4m.	C/ This is a top priority for both DCC & TDC. Being jointly funded this received planning approval in Dec 2021. The Council is currently working on an outline business case using CIL funding and provided this evidences a good benefit cost ratio (showing good potential to secure external funding) then up to £950k CIL will be provided to support the County Council in land acquisition and further design work: see item 72 from **Agenda for Full Council on Tuesday, 28th November, 2023, 10.00 am - Teignbridge District Council**

	D/ Cycle parking programme; with Devon County Council (DCC) evaluated most market and coastal towns for cycle parking and installed some; funding in 2015/16 to continue is unconfirmed. Could benefit from additional AQ funding.	D/ There is funding & install of new cycle racks by DCC at suitable locations of demand in Newton Abbot. There was also install of new cycle racks in 2018 in a suite of new locations in Teignmouth (ahead of the Teign Estuary Trail and Teignmouth – Dawlish route delivery).
	E/ Teignmouth to Dawlish cycle path; continue to promote/facilitate with DCC; future funding needed.	E/ This remains a priority but resources are currently focused on progressing the Kingsteignton – Teignmouth (Teign Estuary Trail) stretch.
Rosalyn Eastman (Principal Planning Officer) Strategic Place - Development Management	Looking to improve facilities for non-car mode. Reallocation of road space for buses, pedestrians and cycles as part of the redevelopment of Newton Abbot	In response to date..... Reallocation is underway for the Work on the Queen Street Enhancement scheme began in May 2024 The works affect the section of Queen Street between Courtenay Street and The Avenue, and a number of the surrounding junctions and side roads.
	Key projects include the A382 enhancements that will deliver a cycle path from Newton Abbot to Drumbridges as well as town centre redevelopment proposals.	Works for A382 enhancement are well on the way to completion in late 2024 early 2025

Christopher Baines (Waste & Cleansing Manager)	Teignbridge council fleet - purchase of Euro 6 refuse trucks fleet arrived 2015 and contract review/ renegotiation available in 2021 Teignbridge DC fleet efficiency savings spreadsheet Teignbridge DC - refuse trucks avoid congested streets	In response..... Funding has been secured to pursue the upgrading of supply from National grid to the depot and for the installation of chargepoint infrastructure to cater for the
Lewis Ward (Transport Planning Officer) Planning, Transportation and Environment, Devon County Council AND **Andrew Ardley** (Transportation Manager (Policy)) Transportation and Environment, Devon County Council	Provide information boards at entrance to Brunel Industrial Estate, Newton Abbot and Broadmeadow Industrial Estate Reallocation of road space for buses, pedestrians and cycles as part of the redevelopment of Newton Abbot. Part of tic town centre work. Some ideas and thoughts from dcc at this stage. Re-routing of roads (Highweek Street), as part of the redevelopment of Newton Abbot. Park and Ride or Park and Change schemes are planned on A382 near Forches Cross as part of development and needs growth deal funding for link road to A383. Improvements to Newton Abbot bus interchange. wrapped up with Sherborne rd. and town centre redevelopment - includes review of parking. Led by tic as commissioning authority.	In response..... No progress due to concern about the maintenance implications Subsequently abandoned due to the Wolborough study and Bradley Lane Industrial Estate redevelopment projects stalling and the disproportionate cost of road design and delivery. This initiative has not been incorporated into the County Highways delivery of the A382 upgrade works.
	Promotion and implementation of school travel plans	Access to education work has been ongoing.

	Develop and implement travel plans with local employers.	This approach has changed - roadshow has visited key employers through Local Strategic Transport Forum (LSTF).
	Financially support additional local train services and promote rail travel - through provision of publicity and timetables.	
Chrissie Drew (Walk This Way Co-ordinator) Environment & Leisure - Open Spaces AND **Jane Nicholls** (Green Spaces Engagement Officer) Environment & Leisure - Open Spaces	Promotion and continuation of 'Walk This Way' initiative	As referenced above, since a key officer** role was not continued there hasn't been any capacity within the council to pursue this.
	TDC have funding for 3 years from Active Devon, as local delivery partners New volunteers are trained twice yearly	As referenced above, since a key officer** role was not continued there hasn't been any capacity within the council to pursue this.
	Scheme is district wide with twice weekly walks in the AQMAs areas Overall, the scheme is run by 48 volunteer leaders with 200 regular walkers each week	As referenced above, since a key officer** role was not continued there hasn't been any capacity within the council to pursue this.
	Work in partnership with NHS Devon to promote good health to encourage walking and cycling	Ongoing
	Cycle to Your Hearts Content	Ceased when NHS PCT funding ran out
	DCC project Cycling & Walking works sat with districts for one year but since Jan 2014 sits with DCC	Ongoing

	Parent & baby cycle rides from Forde House, Newton Abbot car park over an 8 week course and trained a volunteer cycle champion to continue the rides	As referenced above, since a key officer** role was not continued there hasn't been any capacity within the council to pursue this.
	Buggy runs – parents with pushchairs met weekly for 8 weeks Teignmouth sea front for jogging & walking	As referenced above, since a key officer** role was not continued there hasn't been any capacity within the council to pursue this.

The remaining officers took part and made generic contributions in a group consultation day namely;

Alex Lessware Teignbridge District Council
((Senior Planning Officer) Strategic Place - Development Management)

Chris Braines Teignbridge District Council
((Waste & Cleansing Manager) Environment & Safety -Waste, Recycling & Cleansing)

Alison Dolley Teignbridge District Council
((Private Sector Housing Team Leader) Housing & Health – Housing)

Andrew Carpenter Teignbridge District Council
((Head of Building Control Partnership) Strategic Place - Building Control)

Carly Wedderburn Teignbridge District Council
((Corporate Procurement Officer) Corporate Services & Transformation - Legal)

Chrissie Drew Teignbridge District Council
((Walk This Way Co-ordinator) Environment & Leisure - Open Spaces)

Nicola Glassbrook Devon County Council
((Senior Public Health Officer) Health Inequalities).

Appendix B: Reasons for Not Pursuing Action Plan Measures

Table B.1 – Action Plan Measures Not Pursued and the Reasons for that Decision

Original Action ref	Action description	Reason action is not being pursued
	Introduce a green procurement code - environmentally friendly purchasing	Implemented
1 / 6.1.1	Formation of Freight Quality Partnership	Implemented
2 / 6.1.1	Production of driver's maps for freight industry	Implemented
3 / 6.1.1	Install information signs on main routes into Newton Abbot showing location of industrial estates	Implemented
4 / 6.1.1	Provide information boards at entrance to Brunel Industrial Estate, Newton Abbot and Broadmeadow Industrial Estate, Teignmouth	Implemented
10 / 6.1.5	Teignbridge DC council fleet - purchase of Euro 5 refuse trucks	Implemented
11 / 6.1.6	Smarter driving for Refuse Fleet employees at TDC	Implemented
15 / 6.1.6	Smarter driving for TDC employees	Implemented
23 / 6.1.13	Increased green time for traffic signals in Bitton Park Road, Teignmouth	Implemented
27 / 6.1.17	Install VMS in Newton Abbot to inform drivers of availability of car parking spaces	Implemented
29 / 7.2	Decriminalised parking enforcement	Implemented
30 / 7.3	Appointment of traffic manager to co-ordinate road works within the AQMAs	Implemented
31 / 7.4	Installation of Automatic Number Plate Recognition Cameras	Implemented
35 / 7.6.1	Re-routing of roads (Highweek Street), as part of the redevelopment of Newton Abbot	Implemented
43 / 7.13	Improvements to Newton Abbot bus interchange	Implemented
51 / 8.6.2	Car Clubs - apply to DEFRA for grant to buy 2 new vehicles for Newton Abbot	Implemented
52 / 8.6.3	Install teleconferencing facilities at Teignbridge District Council	Implemented

59 / 8.6.5	Installation of cycle racks for members of the public at Teignbridge District Council offices	Implemented
60 / 8.6.6	Provision of bikes for Teignbridge staff to use for local meetings and lunch visits	Implemented
62 / 8.8	Introduction of workplace charging parking scheme	Implemented
93 / 12.2	Include the smoky vehicle hotline on Teignbridge District Council website	Implemented
	Bus emissions - emission scenario modelling to be undertaken (subject to DEFRA funding)	completed
5 / 6.1.2	Feasibility study into mini freight transfer depot for Newton Abbot	Completed and not pursued
9 / 6.1.4	Investigate delivery times outside peak hours	Completed and not pursued
12 / 6.1.6	Teignbridge DC fleet efficiency savings spreadsheet	Completed and not pursued
28 / 7.1	South Devon Link Road, Kingskerswell	Completed
18 / 6.1.10	Vehicle emissions testing in Highweek Street, Newton Abbot and Bitton Park Road, Teignmouth	Completed
40 / 7.10	Consider installation of priority red route schemes on major roads	Completed but not pursued
47 / 8.3	Provision of real-time information at bus stops	Completed
49 / 8.5	Devon wide concessionary fares scheme	Completed
64 / 9.1.1	Undertake regional scale dispersion modelling of the air quality impact of the strategic growth of Newton abbot and the surrounding area	not pursued
65 / 9.1.2	Possible dispersion modelling of the air quality impact of the strategic growth of Teignmouth and Dawlish	not pursued
84 / 10.1.2	Progress the proposal for a rail freight depot at Hackney sidings	not pursued
85 / 10.2	Financially support additional local train services where justified	not pursued
104 / 3.13	Encourage Teignbridge suppliers to apply for the DEFRA ' Ecolabel'	Has been superseded by EcoStars.

106 / 3.13	Incorporate sustainability considerations into tender evaluations	Action is now redundant as it is now standard practice.
6 / 6.1.2.2	Promote and implement Motorvate Scheme	Action is now redundant
7 / 6.1.2.3	Undertake freight study along Bitton park Road, Teignmouth, subject to DEFRA grant funding	Completed and outcome of findings was not justifiable to proceed further.
14 / 6.1.6	Teignbridge DC - Energy Saving Trust green fleet review	Now redundant
26 / 6.1.15	Maintain links with the University of Birmingham in the development and demonstration of hydrogen fuelled cell vehicles	The link officer to the University has left the authority so link no longer exists.
36 / 7.6.2	Consider installation of a mini roundabout at Shaldon Bridge Junction, Teignmouth	Completed this was in relation to the proposed Morrison's site and results of modelling of Air Quality for this application showed no justification for a roundabout.
46 / 8.2	Consideration of implementation of bus emissions standards within AQMA once scenario testing complete	completed
63 / 9.1	LDF needs to identify AQMAs	LDF superseded by the Local Plan which identifies AQMA's.
66	Specific measures will be defined by completing the above two measures	completed
72 / 9.6	Produce SPD guidance on air quality and Section 106	Withdrawn
79 / 9.13	Training provided to promote and encourage renewable and low carbon energy generation in new developments	not pursued
44 / 8.1	Formation of bus quality partnership	Implemented

Appendix C: Year on year comparisons of NO_2 at monitoring tube locations 2014 to 2019

Key 2014/2015	
Tubes Relocated end 2014	= 10
NEW Tube locations 2015	= 11
Exceeds National Objective (40) in 2015	= 9
Levels worsened but below Objective	= 3
Levels improved and below Objective	= 42

Tube	Location	2014	2015	Improved?
1 (2014)	62 Queen St, Newton Abbot	20.8	#	n/a
1 (2015)	Aller Brake Road N Abbot	#	27.65	n/a
2	155 Bitton park Road, Teignmouth	38.88	36.96	
3	9 Gestridge Rd, Kingsteignton	38.41	37.37	
4	85 Wolborough St, Newton Abbot	51.4	50.11	Improved
5	96 Bitton Park Rd, Teignmouth	46.05	42.08	Improved
6	157 Queen St, Newton Abbot	36.79	34.96	
7	54 Newton Rd, Newton Abbot	30.72	30.75	
8	57 East St, Newton Abbot	31.62	30.75	
9	Forde House offices, Newton Abbot	16.51	13.83	
10	Control	0.11	0.12	n/a
11	12 Torquay Rd, Newton Abbot	37.41	31.46	
12 (2014)	1 Northernhay, newton Abbot	15.05	#	n/a
12 (2015)	The bus stop/ datal office Torquay Rd	#	37.64	n/a
13	22 Courtenay Road, newton Abbot	8.93	8.32	
14 (2014)	10 Hameldown Way, Newton Abbot	13.51	#	n/a
14 (2015)	Bus Stop Westcombe Caravan Pk Tqy Rd	#	31.38	n/a
15	38 Ashburton Road N Abbot	30.77	27.08	
16	46/48 Newton Rd, Kingsteignton	36.57	36.4	
17	Whitecourt, Iddlesleigh Terrace, Dawlish	40.07	36.02	
18	Flat 2, Birchwood Court, Addison Rd, NA	25.25	22.67	
19	49 The Avenue, Newton Abbot	28.05	24.18	
20	16 Queen Street Ground floor	21.21	19.44	
21	17 Queen Street 1st Floor	21.07	19.38	
22	Opp Aster House, Starcross	28.45	25.49	
23	108-110 Queen Street 1st Floor	38.62	36.33	
24	87 East St, Newton Abbot	42.46	39.91	
25	7 Station Rd, Newton Abbot	36.67	36.02	
26	34 Bradley Lane, newton Abbot	22.08	21.56	
27	173 Bitton park Rd, Teignmouth	44.74	40.27	Improved
28	Western Cottages 1 Greenhill Rd Kingskerswell	#	9.71	n/a
29	Junction of Huxnor Rd and Edginswell lane	#	11	n/a

Tube	Location	2014	2015	Improved?
30	1A Piermont Place, Dawlish	29.64	34.29	
31	108-110 Queen St, Newton Abbot	42.71	38.08	
32	21 Oakford, Broadway Rd, Kingsteignton	26.43	25.11	
33	30-34 Bradley Court, Highweek Street NA	43.58	41.28	Improved
34	NOx Analyser, halcyon Road, Newton Abbot	29.06	28.1	
35	Lamp post St Mary Church Road	30.33	27.49	
36	Westhill House, Kingskerswell	37.78	34.17	
36	Westhill House, Kingskerswell	37.78	34.17	
37 (2014)	Aller Cottages, Kingskerswell	39.04	#	n/a
37 (2015)	Telegraph pole Ringslade, Highweek	#	17.81	n/a
38	26 Newton Road, Kingsteignton	34.76	32.9	
39	Rock House 1 Maddicombe Rd Kkwell	#	14.99	n/a
40 (2014)	8 Gestridge Road, Kingsteignton	13.81	#	n/a
40(2015)	Downpipe 8 Firzcap Kingsteignton	#	13.48	n/a
41	Aller Farmhouse, Kingskerswell	45.9	24.56	
42	The lay by Exeter Rd Opp Vauxhall Garage	#	20.38	n/a
43	NOx Analyser, Halcyon Road, Newton Abbot	29.31	27.45	
44	NOx Analyser, Halcyon Road, Newton Abbot	28.64	27.64	
45	4 Commercial Rd, Dawlish	27.65	26.35	
46	3 Iddlesleigh Terrace, Dawlish	41.81	32.3	
47	114 Bitton Park Rd, Teignmouth	28.34	26.12	
48	1 Reed Vale Lodge, Teignmouth	70.43	41.35	Improved
49	68 Bitton Park Rd, Teignmouth	48.7	47.25	Improved
50 (2014)	The Toll House Teignmouth from Sept 2011	23.31	#	n/a
50 (2015)	Lamp post Newton Rd opp Priory Ave	#	44.72	n/a
51	St Mary's Court, Highweek St, NA	26.58	26.08	
52	29 Vicarage Hill, Kingsteignton	24.54	19.92	
53	90 Wolborough Street Newton Abbot	44.15	45.89	Worsened
54	3 Gestridge Road, Kingsteignton	36.73	35	
55	79 Wolborough St, Newton Abbot	50.69	48.76	Improved
56	Wywurree Bungalow, Addison Road NA	26.35	25.45	
57	Aster House, The Strand, Starcross	33.53	32.27	
58 (2014)	50 Exeter Rd, Kingsteignton	23	#	n/a
58 (2014)	Lamp post opp 28 Water Lane Tqy Rd Kkwell	#	42.35	n/a
59	Newton Road, Kingsteignton	30.5	29.35	
60	NOx Analyser - Bitton Park Road, Teignmouth	23.45	20.92	
61	NOx Analyser - Bitton Park Road, Teignmouth	23.01	21.3	
62	NOx Analyser - Bitton Park Road, Teignmouth	22.73	21.26	
59	Newton Road, Kingsteignton	30.5	29.35	
60	NOx Analyser - Bitton Park Road, Teignmouth	23.45	20.92	
61	NOx Analyser - Bitton Park Road, Teignmouth	23.01	21.3	
62	NOx Analyser - Bitton Park Road, Teignmouth	22.73	21.26	

Tube	Location	2014	2015	Improved?
63	3 Gestridge Rd, Kingsteignton (Broadway Rd)	12.13	22.28	
64 (2014)	Street sign, Oakford, Kingsteignton	21.16	#	n/a
64 (2015)	Telegraph pole 22 Gestridge Rd	#	23.36	n/a
65	96 Wolborough St, Newton Abbot	30.88	30.76	
66 (2014)	Newton Rd, Kingsteignton (South of Pottery Rd)	28.43	#	n/a
66 (2015)	Halfway House Tqy Rd Hare & Hound Kkwell	#	39.03	n/a
67 (2014)	Orchard Court opposite Asda NA	25.07	#	n/a
67 (2015)	Coventry Cottage Tqy Rd (southbound) Kkwell	#	41.43	n/a
68	68 Cliff Park Bishopsteignton Rd, Teignmouth	30.53	25.92	
69	Highweek Inn N Abbot	#	12.86	n/a

Key 2015/2016	
Discontinued end of 2015	
Exceeds National Objective in 2016 (40)	= 5
Got Worse but below Objective	=16 (12 only slight)
Improved and below Objective	= 48

Tube	Location	2015	2016	Improved?
1	Aller Brake Road N Abbot	27.65	24.067	
2	155 Bitton park Road, Teignmouth	36.96	28.766	
3	9 Gestridge Rd, Kingsteignton	37.37	31.32	
4	85 Wolborough St, Newton Abbot	50.11	45.001	Improved
5	96 Bitton Park Rd, Teignmouth	42.08	40.767	Improved
6	157 Queen St, Newton Abbot	34.96	34.245	
7	54 Newton Rd, Newton Abbot	30.75	28.158	
8	57 East St, Newton Abbot	30.75	28.319	
9	Forde House offices, Newton Abbot	13.83	13.642	
10	Control	0.12	0.0957	
11	12 Torquay Rd, Newton Abbot	31.46	29.697	
12	The bus stop/ datal office Torquay Rd	37.64	21.862	
13	22 Courtenay Road, newton Abbot	8.32	8.9161	slight
14	Bus Stop Westcombe Caravan Pk Tqy Rd	31.38	16.672	
15	38 Ashburton Road N Abbot	27.08	27.647	slight
16	46/48 Newton Rd, Kingsteignton	36.4	31.944	
17	Whitecourt, Iddlesleigh Terrace, Dawlish	36.02	32.844	
18	Flat 2, Birchwood Court, Addison Rd, NA	22.67	21.815	
19	49 The Avenue, Newton Abbot	24.18	24.467	slight
20	16 Queen Street Ground floor	19.44	20.59	slight
21	17 Queen Street 1st Floor	19.38	19.835	slight
22	Opp Aster House, Starcross	25.49	24.54	
23	108-110 Queen Street 1st Floor	36.33	34.375	
24	87 East St, Newton Abbot	39.91	37.946	
25	7 Station Rd, Newton Abbot	36.02	32.682	
26	34 Bradley Lane, newton Abbot	21.56	22.105	slight
27	173 Bitton park Rd, Teignmouth	40.27	26**	
28	Western Cottages 1 Greenhill Rd Kingskerswell	9.71	11.439	
29	Junction of Huxnor Rd and Edginswell lane	11	11.823	slight
30	1A Piermont Place, Dawlish	34.29	33.507	
31	108-110 Queen St, Newton Abbot	38.08	36.304	
32	21 Oakford, Broadway Rd, Kingsteignton	25.11	20.6	
33	30-34 Bradley Court, Highweek Street NA	41.28	35.845	
34	NOx Analyser, halcyon Road, Newton Abbot	28.1	26.425	
35	Lamp post St Mary Church Road	27.49	25.772	
36	Westhill House, Kingskerswell	34.17	15.88	

Tube	Location	2015	2016	Improved?
37	Telegraph pole Ringslade, Highweek	17.81	18.27	slight
38	26 Newton Road, Kingsteignton	32.9	29.94	
39	Rock House 1 Maddicombe Rd Kingskerswell	14.99	17.57	slight
40	Downpipe 8 Firzcap Kingsteignton	13.48	#	n/a
41	Aller Farmhouse, Kingskerswell	24.56	14.13	
42	The lay by Exeter Rd Opp Vauxhall Garage	20.38	21.79	slight
43	NOx Analyser, Halcyon Road, Newton Abbot	27.45	26.9	
44	NOx Analyser, Halcyon Road, Newton Abbot	27.64	26.85	
45	4 Commercial Rd, Dawlish	26.35	25.33	
46	3 Iddlesleigh Terrace, Dawlish	32.3	26.83	
47	114 Bitton Park Rd, Teignmouth	26.12	25.16	
48	1 Reed Vale Lodge, Teignmouth	41.35	50.45	worsened
49	68 Bitton Park Rd, Teignmouth	47.25	31.09	
50	Lamp post Newton Rd opposite Priory Ave	44.72	21.45	
51	St Mary's Court, Highweek St, NA	26.08	25.11	
52	29 Vicarage Hill, Kingsteignton	19.92	20.82	slight
53	90 Wolborough Street Newton Abbot	45.89	42.03	Improved
54	3 Gestridge Road, Kingsteignton	35	32.17	
55	79 Wolborough St, Newton Abbot	48.76	52.76	Improved
56	Wywurree Bungalow, Addison Road NA	25.45	24.22	
57	Aster House, The Strand, Starcross	32.27	27.12	
58	Lamp post opp 28 Water Lane Tqy Rd Kkwell	42.35	17.41	
59	Newton Road, Kingsteignton	29.35	23.43	
60	NOx Analyser - Bitton Park Road, Teignmouth	20.92	20.89	
61	NOx Analyser - Bitton Park Road, Teignmouth	21.3	21.01	
62	NOx Analyser - Bitton Park Road, Teignmouth	21.26	20.76	
63	3 Gestridge Rd, Kingsteignton (Broadway Rd)	22.28	25.1	
64	Telegraph pole 22 Gestridge Rd	23.36	18.34	
65	96 Wolborough St, Newton Abbot	30.76	26.75	
66	Halfway House Tqy Rd Hare & Hound Kkwell	39.03	21.19	
67	Coventry Cottage Tqy Rd (southbound) Kkwell	41.43	20.87	
68	68 Cliff Park Bishopsteignton Rd, Teignmouth	25.92	26.91	slight
69	Highweek Inn N Abbot	12.86	13.31	slight

Key 2016/2017
Discontinued (Consistently well below)
New Location for 2017
Exceeds National Objective (40) in 2017 = 10
Worsened but below Nat Objective = 44
Improved and below Nat Objective = 9

Tube	Location	2016	2017	Improved?
1	Aller Brake Road N Abbot	24.067	32.72	
2	155 Bitton park Road, Teignmouth	28.766	41.36	
3	9 Gestridge Rd, Kingsteignton	31.32	37.3	
4	85 Wolborough St, Newton Abbot	45.001	47.36	worsened
5	96 Bitton Park Rd, Teignmouth	40.767	42.68	worsened
6	157 Queen St, Newton Abbot	34.245	36.12	
7	54 Newton Rd, Newton Abbot	28.158	30.74	slight
8	57 East St, Newton Abbot	28.319	33.21	
9	Forde House offices, Newton Abbot	13.642	15.15	slight
10	Control	0.0957	0.33	slight
11	12 Torquay Rd, Newton Abbot	29.697	31.98	slight
12	The bus stop/ datal office Torquay Rd	21.862	20.87	
13	22 Courtenay Road, newton Abbot	8.9161	8.41	
14	Bus Stop Westcombe Caravan Pk Tqy Rd	16.672	16.97	slight
15	38 Ashburton Road N Abbot	27.647	30.05	
16	46/48 Newton Rd, Kingsteignton	31.944	36.92	
17	Whitecourt, Iddlesleigh Terrace, Dawlish	32.844	33.57	slight
18	Flat 2, Birchwood Court, Addison Rd, NA	21.815	24.46	
19	49 The Avenue, Newton Abbot	24.467	26.91	
20	16 Queen Street Ground floor	20.59	21.78	slight
21	17 Queen Street 1st Floor	19.835	#	n/a
21	Jetty Marsh Rd West LP No 28	#	43.13	n/a
22	Opp Aster House, Starcross	24.54	#	n/a
22	Jetty Marsh Rd East Lp No 29	#	38.75	n/a
23	108-110 Queen Street 1st Floor	34.375	37.28	
24	87 East St, Newton Abbot	37.946	39.95	
25	7 Station Rd, Newton Abbot	32.682	37.36	
26	34 Bradley Lane, newton Abbot	22.105	#	n/a
27	173 Bitton park Rd, Teignmouth	26**	41.11	
28	Western Cottages 1 Greenhill Rd Kingskerswell	11.439	12.27	slight
29	Junction of Huxnor Rd and Edginswell lane	11.823	11.62	
30	1A Piermont Place, Dawlish	33.507	35.74	
31	108-110 Queen St, Newton Abbot	36.304	41.07	
32	21 Oakford, Broadway Rd, Kingsteignton	20.6	26.12	
33	30-34 Bradley Court, Highweek Street NA	35.845	43.77	
34	NOx Analyser, halcyon Road, Newton Abbot	26.425	28.19	

Tube	Location	2016	2017	Improved?
35	Lamp post St Mary Church Road	25.772	26.48	slight
36	Westhill House, Kingskerswell	15.88	15.39	
37	Telegraph pole Ringslade, Highweek	18.27	20.17	slight
38	26 Newton Road, Kingsteignton	29.94	32.19	slight
39	Rock House 1 Maddicombe Rd Kkwell	17.57	19.68	
40	Downpipe 8 Firzcap Kingsteignton		#	n/a
40	Exeter Rd Opp Combeshead Academy	#	52.84	
41	Aller Farmhouse, Kingskerswell	14.14	15.31	slight
42	The lay by Exeter Rd Opp Vauxhall Garage	21.79	22.79	slight
43	NOx Analyser, Halcyon Road, Newton Abbot	26.9	26.93	
44	NOx Analyser, Halcyon Road, Newton Abbot	26.85	27.6	slight
45	4 Commercial Rd, Dawlish	25.33	24.9	
46	3 Iddlesleigh Terrace, Dawlish	26.83	28.48	slight
47	114 Bitton Park Rd, Teignmouth	25.16	27.17	
48	1 Reed Vale Lodge, Teignmouth	50.45	57.99	
49	68 Bitton Park Rd, Teignmouth	31.09	54.04	
50	Lamp post Newton Rd opp Priory Ave	21.45	21.25	
51	St Mary's Court, Highweek St, NA	25.11	24.97	
52	29 Vicarage Hill, Kingsteignton	20.82	25.74	
53	90 Wolborough Street Newton Abbot	42.03	46.46	
54	3 Gestridge Road, Kingsteignton	32.17	36.29	
55	79 Wolborough St, Newton Abbot	52.76	47.09	
56	Wywurree Bungalow, Addison Road NA	24.22	27.03	
57	Aster House, The Strand, Starcross		#	n/a
57	West Golds Way	27.12	12.34	n/a
58	Lamp post opp 28 Water Lane Tqy Rd Kkwell	17.41	19.71	
59	Newton Road, Kingsteignton	23.43	30.94	
60	NOx Analyser - Bitton Park Road, Teignmouth	20.89	21.69	slight
61	NOx Analyser - Bitton Park Road, Teignmouth	21.01	21.67	slight
62	NOx Analyser - Bitton Park Road, Teignmouth	20.76	21.13	slight
63	3 Gestridge Rd, Kingsteignton (Broadway Rd)	25.1	28.71	
64	Telegraph pole 22 Gestridge Rd	18.34	19.93	slight
65	96 Wolborough St, Newton Abbot	26.75	29.45	
66	Halfway House Tqy Rd Hare & Hound Kkwell	21.19	20.5	
67	Coventry Cottage Tqy Rd (southbound) Kkwell	20.87	23.63	
68	68 Cliff Park Bishopsteignton Rd, Teignmouth	26.91	#	n/a
69	Highweek Inn N Abbot	13.31	14.3	slight

Key 2017-2018
Too close to National Objective in 2018 = 6
Exceeds the national Objective in 2018 = 5
Levels reduced year on year
Slight but negligible increase < 2 = 7

Tube No	Location	2017	2018	
1	Aller Brake Road N Abbot	32.72	28.46	
2	DP 155(153) Bitton Park Road, Teignmouth	41.36	32.62	
3	9 Gestridge Rd, Kingsteignton	37.29	32.93	
4	DP 85 Wolborough St, N Abbot	47.36	44.18	
5	96 Bitton Park Rd, Teignmouth	42.68	42.19	
6	157 Queen St, N Abbot	36.12	31.91	
7	54 Newton Rd, Kingsteignton	30.74	27.18	
8	57 East St, Newton Abbot	33.21	31.01	
9	Forde House Offices, N Abbot	15.15	14.43	
10	Control	0.33	0.22	
11	12 Torquay Rd, Newton Abbot	31.98	30.5	
12	Bus Stop/Datal office Torquay Rd, N Abbot	20.87	17.31	
13	22 Courtenay Road, N Abbot	8.41	8.56	
14	B.Stop Westcombe Caravan Park Tqy Rd, KKWell	16.97	13.71	
15	38 Ashburton Road	30.05	25.03	
16	46/48 Newton Rd, Kingsteignton	36.92	31.39	
17	Whitecourt, Iddesleigh Terrace, Dawlish	33.57	31.86	
18	DP Flat 2, Birchwood Court, Addison Rd, NA	24.46	21.64	
19	DP 49 The Avenue, N Abbot	26.91	22.14	
20	Specsavers 16 Queen Street Gd Flr N Abbot	21.78	18.51	
21	Jetty Marsh Rd lamp post no. 28 Westward	43.13	36.99	
22	Jetty Marsh Rd lamp post no. 29 Eastward	38.75	33.69	
23	108-110 Queen St First Floor level N Abbot	37.28	33.3	
24	87 East St, Newton Abbot	39.95	39.23	
25	DP 7 Station Rd, Newton Abbot	37.36	33.14	
26	Elm Rd/New link Rd, Dawlish	##	6.49	##
27	DP 173 Bitton Park Rd, Teignmouth	41.11	35.91	
28	Western Cottages 1 Greenhill Road Kingskerswell	12.27	12	
29	Jct of Huxnor Rd and Eddginswell Lane Kkwell	11.62	11.9	
30	1A Piermont Place, Dawlish	35.74	33.64	
31	DP 108-110 Queen St, Newton Abbot	41.07	32.68	
32	21 Oakford, Broadway Rd, Kingsteignton	26.12	22.63	
33	DP 30-34 Bradley Court, Highweek Street NA	43.77	38.68	
34	NOx Analyser, Halcyon Road, N Abbot	28.19	25.66	
35	Lamp post St Mary Church Road Newton Abbot	26.48	26.11	
36	DP Westhill House, Kingskerswell	15.39	12.66	
37	Telegraph pole Ringslade, Highweek	20.17	20.47	
38	DP 26 Newton Road, Kingsteignton	32.19	29.27	

Tube No	Location	2017	2018	
39	Rock House 1 Maddacombe Rd KKwell	19.68	18.32	
40	Exeter Road, Newton Abbot	52.84	53.69	
41	DP Aller Farmhouse, Kingskerswell	15.31	12.31	
42	Lay By Exeter Rd (opp Vauxhall Garage) N Abbot	22.79	21.32	
43	NOx Analyser, Halcyon Road, Newton Abbot	26.93	24.99	
44	NOx Analyser, Halcyon Road, Newton Abbot	27.6	25.18	
45	DP 4 Commercial Rd, Dawlish	24.89	23.79	
46	DP 3 Iddesleigh Terrace, Dawlish	28.48	24.54	
47	DP 114 Bitton Park Rd, Teignmouth	27.17	22.58	
48	DP 1 Reed Vale Lodge, Teignmouth	57.99	53.59	
49	DP 68 Bitton Park Rd, Teignmouth	54.04	39.23	
50	L/Post Newton Road (opp Priory Ave) Kkwell	21.25	18.4	
51	DP St Mary's Court, Highweek St, NA	24.97	25.18	
52	DP 29 Vicarage Hill, Kingsteignton (Blindwell)	25.74	27.99	
53	90 Wolborough Street Newton Abbot	46.46	38.43	
54	DP 3 Gestridge Road, Kingsteignton	36.29	32.12	
55	DP 79 Wolborough St, Newton Abbot	47.09	44.67	
56	DP Wywurree Bungalow, Addison Road NA	27.03	23.86	
57	West Golds Way Newton Abbot	12.34	12.5	
58	L/Post 28 Water lane, Torquay Rd Kkwell	19.71	16.25	
59	LP Newton Rd, by Jctn Pottery Road, Kingsteignton	30.94	26.99	
60	NOx Analyser - Bitton Park Rd, Teignmouth	21.69	21	
61	NOx Analyser - Bitton Park Rd, Teignmouth	21.67	20.47	
62	NOx Analyser - Bitton Park Rd, Teignmouth	21.12	21.1	
63	DP 3 Gestridge Rd, Kingsteignton	28.71	26.68	
64	Tel Pole, 22 Gestridge Road, Kingsteignton	19.93	18.02	
65	96 Wolborough St, Newton Abbot	29.45	28.19	
66	Halfway House Tqy Road (by Hare+Hound) Kkwell	20.5	18.84	
67	Coventry Cottage Torquay Road (Southbound)	23.63	19.67	
68	Shorland Hse, Elm Grove Rd Dawlish	##	13.04	##
69	Highweek Inn crossroad	14.36	14.35	

KEY 2018-2019
No tube
Too close to National Objective in 2019 = 4
Exceeds the national Objective in 2019 = 6
Levels reducing year on year = 29
Slight but negligible increase < +2 = 19

Tube	Location	2018	2019	Improve ?
1	Aller Brake Road N Abbot	28.46	28.2	
2	DP 155(153) Bitton Park Road, Teignmouth	32.62	33.15	
3	9 Gestridge Rd, Kingsteignton	32.92	35.34	
4	DP 85 Wolborough St, N Abbot	44.18	42.81	
5	96 Bitton Park Rd, Teignmouth	42.19	40.27	
6	157 Queen St, N Abbot	31.91	31.1	
7	54 Newton Rd, Kingsteignton	27.18	27.8	
8	57 East St, Newton Abbot	31.01	31.1	
9	Forde House Offices, N Abbot	14.43	14.15	
10	Control	0.22	0.09	
11	12 Torquay Rd, Newton Abbot	30.5	32.3	
12	Bus Stop/Datal office Torquay Rd, N Abbot	17.31	17.31	
13	22 Courtenay Road, N Abbot	8.56	8.13	
14	B.Stop Westcombe Caravan Park Tqy Rd, N Abbot	13.71	14.97	
15	38 Ashburton Road	25.03	25.7	
16	46/48 Newton Rd, Kingsteignton	31.39	31.34	
17	Whitecourt, Iddesleigh Terrace, Dawlish	31.86	33.03	
18	DP Flat 2, Birchwood Court, Addison Rd, NA	21.64	21.48	
19	DP 49 The Avenue, N Abbot	22.14	23.13	
20	Specsavers 16 Queen Street Ground Flr N Abbot	18.51	18.34	
21	Jetty Marsh Rd lamp post no. 28 Westward	36.99	37.32	
22	Jetty Marsh Rd lamp post no. 29 Eastward	33.69	35.41	
23	108-110 Queen St First Floor level Newton Abbot	33.3	32.06	
24	87 East St, Newton Abbot	39.23	39.6	
25	DP 7 Station Rd, Newton Abbot	33.14	34.07	
26	Elm Rd/New link Rd, Dawlish	6.49	6.63	
27	DP 173 Bitton Park Rd, Teignmouth	35.91	38.26	
28	Western Cottages 1 Greenhill Road KKwell	12	10.62	
29	Jct of Huxnor Rd and Eddginswell Lane Kkwell	11.9	10.47	
30	1A Piermont Place, Dawlish	33.64	33.88	
31	DP 108-110 Queen St, Newton Abbot	32.68	33.57	
32	21 Oakford, Broadway Rd, Kingsteignton	22.63	24.16	
33	DP 30-34 Bradley Court, Highweek Street NA	38.68	40.21	
34	NOx Analyser, Halcyon Road, Newton Abbot	25.66	25.18	
35	Lamp post St Mary Church Road Newton Abbot	26.11	26.35	

Tube	Location	2018	2019	Improve ?
36	DP Westhill House, Kingskerswell	12.66	12.61	
37	Telegraph pole Ringslade, Highweek	20.47	16.13	
38	DP 26 Newton Road, Kingsteignton	29.27	31.62	
39	Rock House 1 Maddacombe Rd KKwell	18.32	16.91	
40	Exeter Road, Newton Abbot	53.69	51.89	
41	DP Aller Farmhouse, Kingskerswell	12.31	11.27	
42	Lay By Exeter Rd (opp Vauxhall Garage) N Abbot	21.32	23.92	
43	NOx Analyser, Halcyon Road, Newton Abbot	24.99	24.83	
44	NOx Analyser, Halcyon Road, Newton Abbot	25.18	25.26	
45	DP 4 Commercial Rd, Dawlish	23.79	24.22	
46	DP 3 Iddesleigh Terrace, Dawlish	24.54	25.5	
47	DP 114 Bitton Park Rd, Teignmouth	22.58	23.4	
48	DP 1 Reed Vale Lodge, Teignmouth	53.59	54.85	
49	DP 68 Bitton Park Rd, Teignmouth	39.23	43.83	
50	L/Post Newton Road (opp Priory Ave) Kkwell	18.4	17.84	
51	DP St Mary's Court, Highweek St, NA	25.18	24.05	
52	DP 29 Vicarage Hill, Kingsteignton (Blindwell)	27.99	34.33	
53	90 Wolborough Street Newton Abbot	38.43	39.19	
54	DP 3 Gestridge Road, Kingsteignton	32.12	34.07	
55	DP 79 Wolborough St, Newton Abbot	44.67	43.57	
56	DP Wywurree Bungalow, Addison Road NA	23.86	23.9	
57	West Golds Way Newton Abbot	12.5	12.57	
58	L/Post adj to 28 Water lane Torquay Rd Kkwell	18.4	17.84	
59	LP Newton Rd, by Jctn Pottery Road, Kingsteignton	26.99	27.87	
60	NOx Analyser - Bitton Park Road, Teignmouth	21	21.19	
61	NOx Analyser - Bitton Park Road, Teignmouth	20.47	21.033	
62	NOx Analyser - Bitton Park Road, Teignmouth	21.1	19.87	
63	DP 3 Gestridge Rd, Kingsteignton	26.68	25.95	
64	Tele Pole, 22 Gestridge Road, Kingsteignton	18.02	18.21	
65	96 Wolborough St, Newton Abbot	28.19	28.51	
66	Halfway House Tqy Road (by H+H) Kkwell	18.84	18.17	
67	Coventry Cottage Torquay Rd (Southbound)	19.67	21.38	
68	Shorland Hse, Elm Grove Rd Dawlish	13.04	13.01	
69	Highweek Inn crossroad	14.35	11.55	
70	LP o/s Kenn Primary School	##	5.35	
71	LP opposite Kenn Post Office	##	4.82	
72	LP o/s Kenn Centre	##	6.64	##

Appendix D: Traffic Data made available from Devon County council Highways team

Jetty Marsh Road October 2023 Whole Month Average Traffic Flows

	M.Cycle	Car/Light Van	Car or Light Van+ trailer	Heavy Van	Light Goods	Rigid Lorry	Rigid Lorry + trailer	Artics	Minibus	Coach	Average Total Flow
AM Peak	07:00:00	11:00:00	11:00:00	08:00:00	06:00:00	10:00:00	11:00:00	09:00:00	08:00:00	10:00:00	11:00:00
Peak Volume	9	1103	5	160	0	8	2	3	8	5	1279
Pm Peak	16:00:00	15:00:00	13:00:00	16:00:00	15:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	16:00:00
Peak Volume	13	1132	4	156	0	6	3	3	7	4	1311

Monthly Summary Report (VOLUME) January to October 2022
Location Bitton Park Road Teignmouth

All directions																
	<--	Workday		-->	<--	7 Day		-->	<--	Workday		-->	<--	7 Day		-->
Date	12Hr	16Hr	18Hr	24Hr	12Hr	16Hr	18Hr	24Hr	am Peak Hour	am Peak Flow	pm Peak Hour	pm Peak Flow	am Peak Hour	am Peak Flow	pm Peak Hour	pm Peak Flow
Jan 2022	16868	18880	19225	19479	16057	17870	18206	18462	11:00:00	1499	16:00:00	1551	11:00:00	1506	12:00:00	1541
Feb 2022	16898	18966	19338	19603	16199	18100	18471	18753	11:00:00	1469	16:00:00	1549	11:00:00	1501	12:00:00	1515
Mar 2022	17832	20085	20446	20714	17156	19222	19592	19874	08:00:00	1602	16:00:00	1642	11:00:00	1554	16:00:00	1587
Apr 2022	18057	20552	20975	21264	17317	19647	20084	20385	11:00:00	1596	16:00:00	1643	11:00:00	1595	12:00:00	1611
May 2022	18201	20746	21195	21497	17411	19798	20259	20583	11:00:00	1574	16:00:00	1640	11:00:00	1588	12:00:00	1594
Jun 2022	18168	20941	21467	21777	17226	19760	20269	20594	11:00:00	1584	16:00:00	1605	11:00:00	1577	12:00:00	1568
Jul 2022	18396	21485	22090	22441	17553	20412	21017	21383	11:00:00	1578	17:00:00	1649	11:00:00	1583	12:00:00	1583
Aug 2022	17790	20737	21280	21619	17222	20071	20629	20983	11:00:00	1592	16:00:00	1601	11:00:00	1595	12:00:00	1567
Sep 2022	17576	20047	20463	20762	16980	19270	19699	20011	11:00:00	1526	16:00:00	1594	11:00:00	1555	14:00:00	1559
Oct 2022	17818	20065	20451	20741	17075	19156	19546	19846	11:00:00	1549	16:00:00	1633	11:00:00	1571	14:00:00	1575
Nov 2022	17716	19906	20281	20561	16835	18824	19205	19496	08:00:00	1628	16:00:00	1620	11:00:00	1526	12:00:00	1554
Dec 2022	17518	19634	20062	20344	16386	18303	18729	19035	11:00:00	1555	16:00:00	1618	11:00:00	1548	12:00:00	1572

Monthly Summary Report (VOLUME) January to October 2023
Location Bitton Park Road Teignmouth

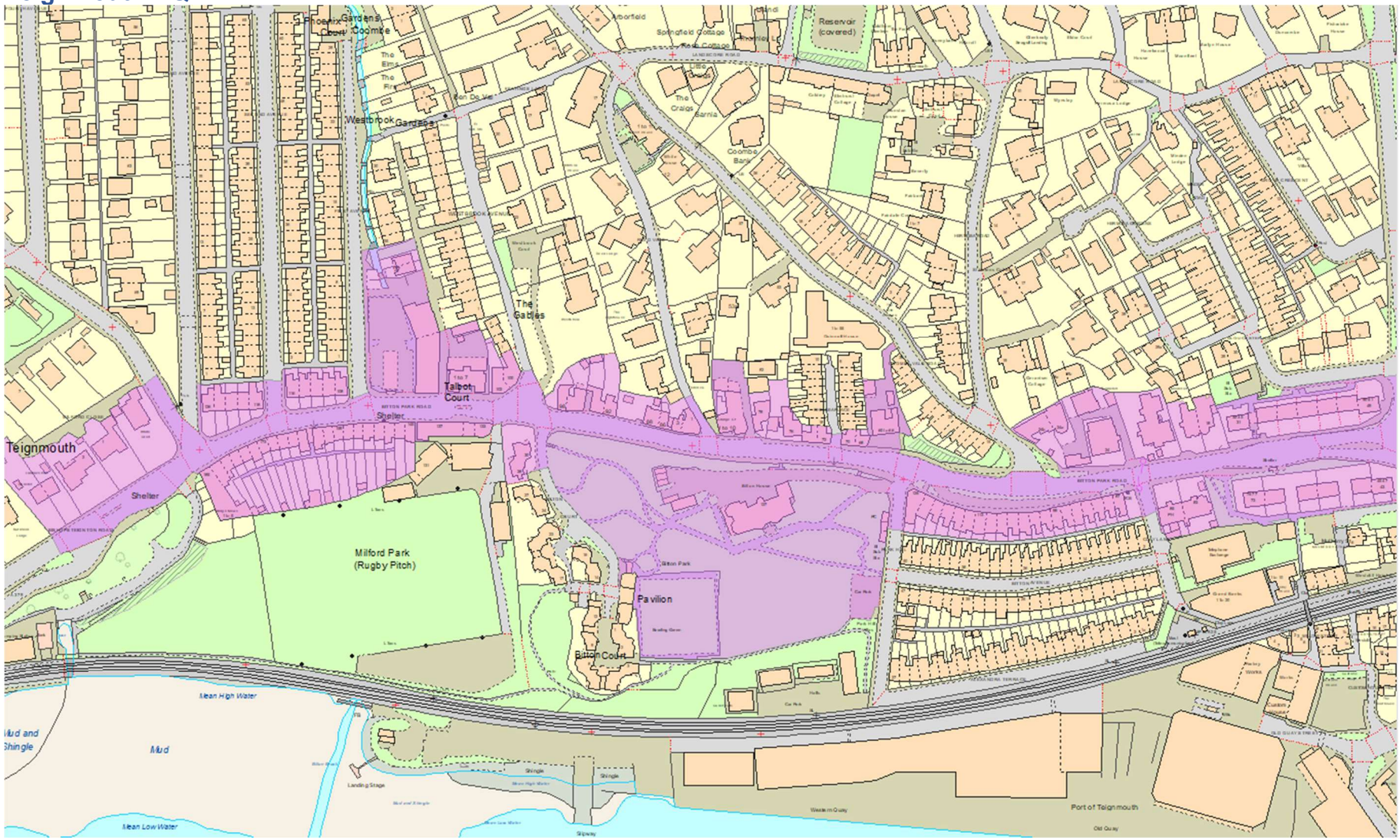
All directions																
	<--	Workday	-->	<--	7 Day	-->	<--	Workday	-->	<--	7 Day	-->	11:00:00	1506	16:00:00	1539
Date	12Hr	16Hr	18Hr	24Hr	12Hr	16Hr	18Hr	24Hr	am Peak Hour	am Peak Flow	pm Peak Hour	pm Peak Flow	am Peak Hour	am Peak Flow	pm Peak Hour	pm Peak Flow
Jan 2023	17467	19558	11914	20194	16407	18285	18637	18920	08:00:00	1692	16:00:00	1679	11:00:00	1506	16:00:00	1539
Feb 2023																
Mar 2023	17921	20225	20616	20901	17110	19212	19605	19907	08:00:00	1568	16:00:00	1619	11:00:00	1566	12:00:00	1569
Apr 2023	17949	20387	20804	21085	17172	19466	19906	20205	11:00:00	1604	16:00:00	1640	11:00:00	1602	12:00:00	1595
May 2023	18005	20661	21077	21362	17302	19825	20270	20576	11:00:00	1576	16:00:00	1639	11:00:00	1570	16:00:00	1587
Jun 2023	18620	21646	22160	22465	17784	20597	21113	21436	11:00:00	1598	17:00:00	1672	11:00:00	1597	16:00:00	1591
Jul 2023	18393	21227	21745	22052	17507	20125	20661	20989	10:00:00	1602	17:00:00	1642	11:00:00	1595	12:00:00	1598
Aug 2023	18152	20949	21441	21749	17458	20075	20579	20899	10:00:00	1615	16:00:00	1635	11:00:00	1604	14:00:00	1633
Sep 2023	18271	20904	21305	21578	17463	19914	20334	20621	11:00:00	1579	17:00:00	1647	11:00:00	1582	12:00:00	1585
Oct 2023	15976	18195	18551	18823	15585	17610	17973	18260	11:00:00	1357	16:00:00	1454	11:00:00	1397	16:00:00	1430

Yearly Growth Rate Report _VOLUME 2021 to 2023 (Bitton Park Road All Lanes and all Vehicle types)

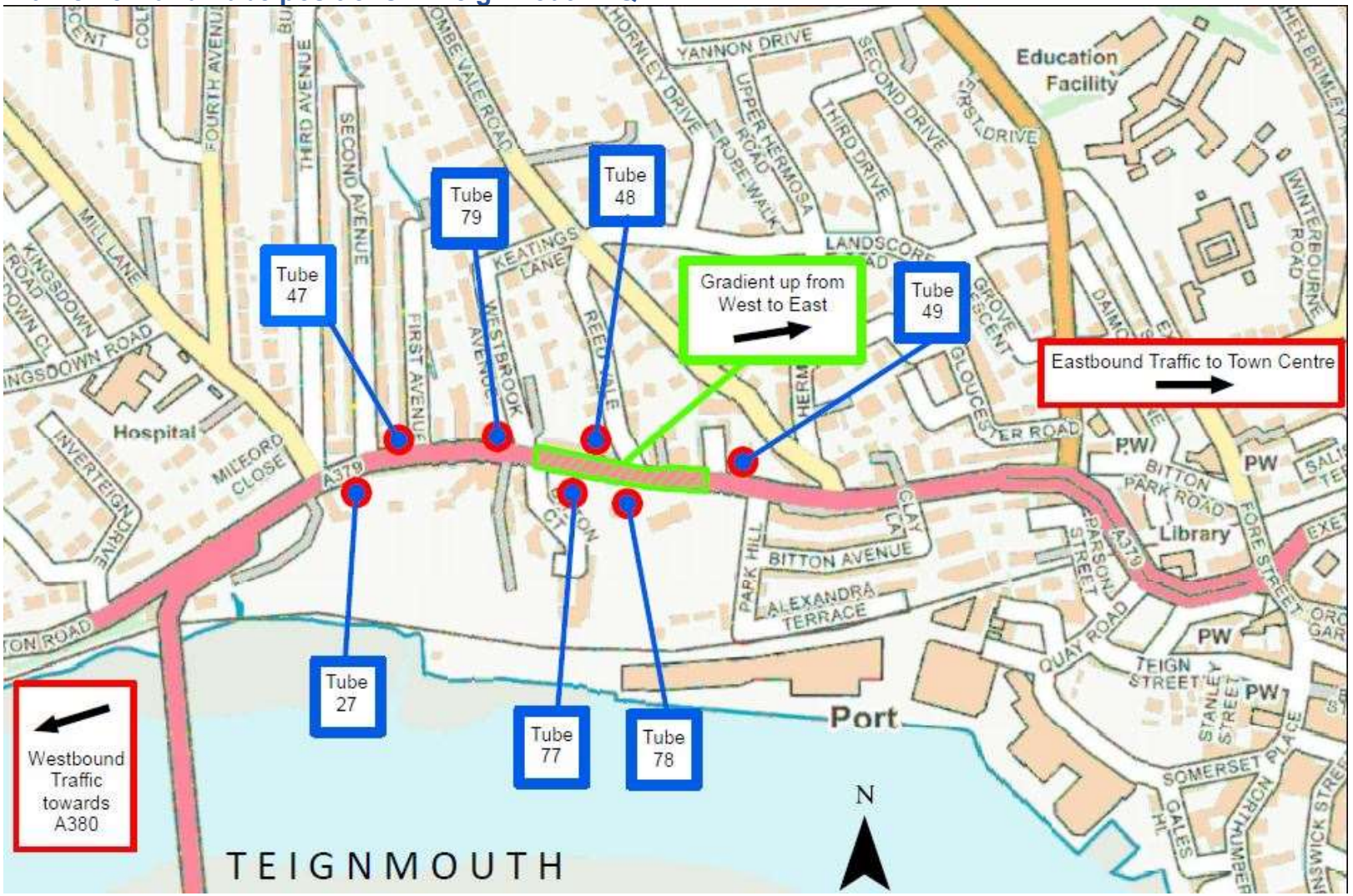
Date	2021	2022	2023
Jan	14004	18331	18920
Feb	15834	18753	
Mar	18322	19955	20004
Apr	19897	20341	20058
May	20220	20568	20652
Jun	21507	20673	21504
Jul	21466	21247	20851
Aug	21033	21045	20981
Sep	20520	20061	20573
Oct	20284	19856	18339
Nov	19600	19567	
Dec	18390	19035	
Year average	19269	19987	19165

Appendix E Map of the current Air Quality Management Areas

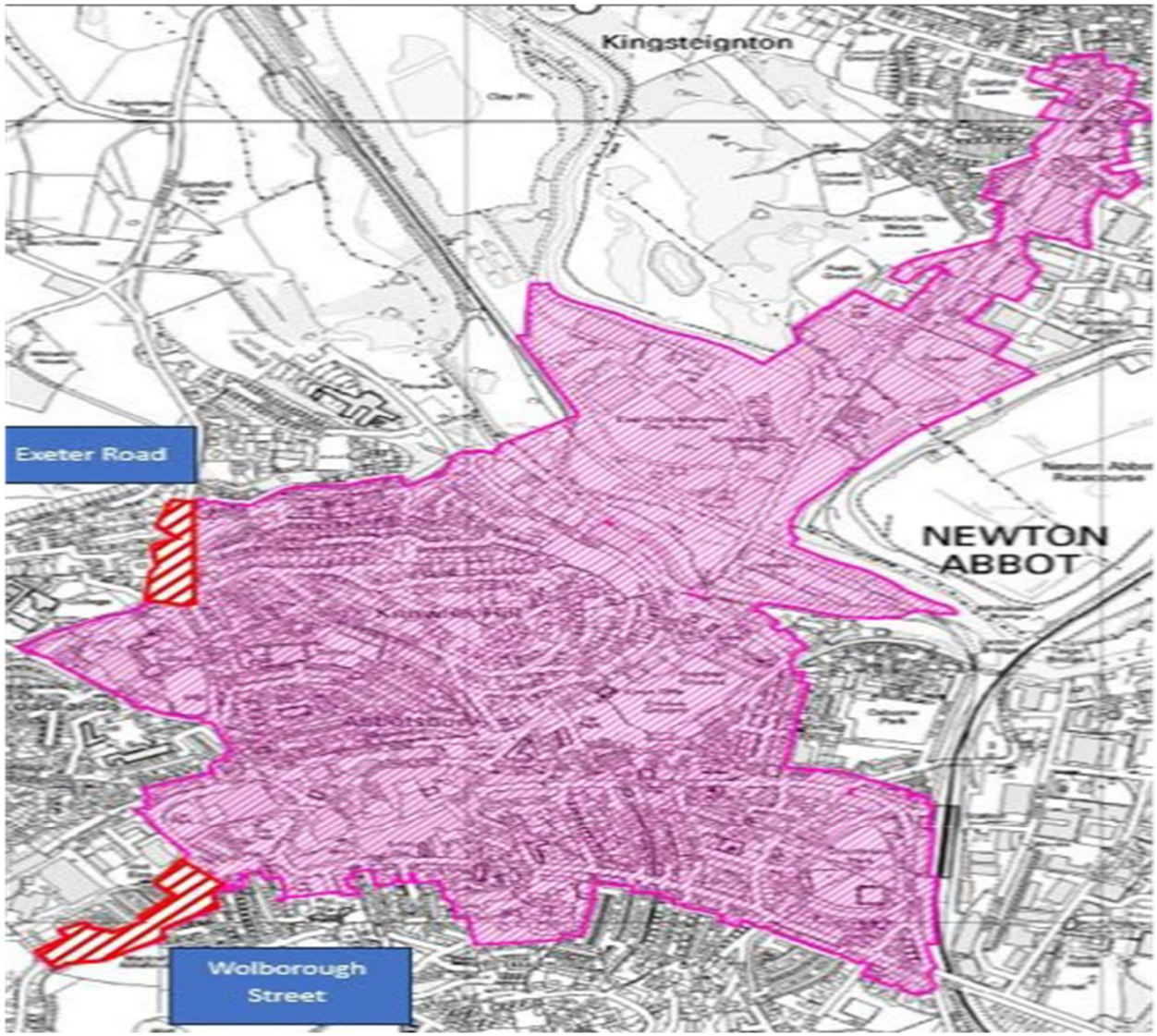
Teignmouth AQMA



Traffic flow and Tube positions in Teignmouth AQMA



Newton Abbot AQMA (see locations of Wolborough St and Exeter Rd within AQMA)



Appendix F – Air Quality Contributions for New Developments

The land use planning system is recognised to play an integral part in improving air quality, however Local planning authorities must strike a balance between economic, social and environmental considerations when making decisions about proposed developments.

Financial mitigation is a well understood concept that enables development to progress whilst offsetting the adverse impacts of that a development. Typically, this involved a document known as a Section 106 agreement being drawn up between the Council and the developer setting out in detail the financial mitigation.

In October 2014 the Community Infrastructure Levy came about to complement the section 106 mechanism, and although this changed the way that Council charges financial mitigation for developing residential and retail schemes, it has not changed what can legitimately be pursued for the improvement of local air quality.

Therefore, the same criteria agreed in the previous AQAP will be pursued where a proposed development will have an impact on local air quality, as set out below;

Development within an AQMA:

- For any developments of 10 or more residential units, £100 per dwelling unit.
- For any commercial schemes of 500m^2 and above, £10 per m^2.
- For any developments with proposed vehicle parking spaces, £50 per car parking space.
- For mixed use, contributions will be sought based on the combination of the individual elements of the development.

Development Outside an AQMA:

- For any developments of 50 or more residential units, where the traffic statement or assessment shows an increase in the AADT as a result of the development on roads within an AQMA, £100 per dwelling unit.
- For any commercial scheme which meets the criteria for a Transport Statement or Assessment as detailed in the DfT ‘Guidance on Transport Assessment’, the difference in the AADT on any road through the AQMA as a result of the development will be charged at £16 per vehicle. The AADT needs to be verified and agreed by Devon County Council.
- For mixed use contributions will be sought based on the combination of the individual elements of the development.

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Oxides of Nitrogen
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less

References

1 Environmental equity, air quality, socioeconomic status and respiratory health, 2010
2 Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006
3 Defra. Abatement cost guidance for valuing changes in air quality, May 2013
4 NICE annual Report 2017