Healthy Streets Project Monitoring and Evaluation Plan

Bowes Primary & Surrounding Streets Quieter Neighbourhood

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About this document

This document sets out the monitoring and evaluation that will be undertaken in response to the implementation of the Bowes Primary Area QN.

You might also be interested in these other documents that can also be download from the project page:

❑ Project rationale: sets out the rationale for the development and delivery of this project

❑ Communications and Engagement Plan: how we will communicate, engage and consult with the community about this project

❑ Our approach to Equalities Impact Assessment (EQIA): ensuring we consider the needs of everyone when delivering this project

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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Introduction to this monitoring and evaluation plan

Overview

This plan outlines the monitoring and evaluation that will be undertaken in response to the implementation of the Bowes Primary & Surrounding Streets Quieter Neighbourhood. The plan provides a structured approach to data collection and analysis. The council has sought to, and will continue to, collect project monitoring data before and after scheme implementation, as set out in this plan.

A range of qualitative and quantitative data will be considered as part of the monitoring of Bowes Primary Area QN.

This plan outlines the various focus areas we are monitoring and how they will be applied when evaluating the scheme.

The scheme is implemented under an Experimental Traffic Order (ETO). As such this monitoring and evaluation plan may be updated as necessary.

Purpose

The purpose of monitoring is to:

- Gather information about the situation prior to implementation, against which future changes can be measured.
- Inform decision making about the future of the scheme.
- Support continuous improvement in how the council delivers active travel schemes.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

Monitoring against project objectives

The high level objectives set out for this project are:

1. Create healthier streets in the Bowes Primary Area in line with the Healthy Streets indicators

2. Significantly reduce the volume of through motor traffic on minor streets within the project area

3. Enable a longer-term increase in the levels of walking and cycling within and through the scheme area

The Project Rationale document provides more information on the context for these objectives.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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The range of data and how we will report

Data and insights will be collected from a range of sources. Reporting on each of these sources will be brought together in a formal report which will outline the data collected, methodologies for any data analysis, our findings from the data, and provide links to further detail. The report will be published for anyone to access.

A range of qualitative data (based on review and judgement) and quantitative data (based on numbers) will be considered as part of the monitoring of Bowes Primary Area QN.

Areas of focus for monitoring are listed on the next page and individually explained in more detail later in this plan. It is important to note each focus area does not have a specific target to reach in order for the project to be evaluated as successful or not. This is because the project needs to consider and balance all of the various impacts of the scheme as a whole, and their alignment with the details provided in the Project Rationale document. The report will set out the detail and invite elected members to make a decision. Decisions will be subject to the normal process of review and scrutiny. More detail on governance is available on the Council website here.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

Project monitoring areas of focus

The following table outlines monitoring activities for this project. The following slides describe each area in more detail.

Areas of focus	Data source	Further detail
Traffic speed & volume	Automatic Traffic Counts (ATCs)	Page 7-9
	Bus journey times (supplied by TfL)	Page 10-11
Cycling counts	Automatic Traffic Counts (ATCs)	Page 7-8
Pedestrian counts	CCTV	Page 7-8
Impact on emergency services	Direct engagement with emergency services	Page 12
Residents, businesses and stakeholders views	Community engagement and consultation	Page 13
Equality considerations	Community engagement and consultation	Page 14
Crime and anti-social behaviour	Direct engagement with the Metropolitan Police	Page 15
Noise quality	Noise model based on traffic data	Page 16
Air quality	Air quality model based on measured data	Page 17-22
Healthy Streets indicators	Evaluation against the Healthy Streets indicators	Page 23-34
Road collisions	Road collision database	Page 25

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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Traffic, cycling and pedestrian data

Traffic data is collected via cables across the road called Automatic Traffic Counts (ATCs). These are carried out by an external company. ATCs collect data on numbers and types of vehicles in both directions, including cyclists. They also capture speeds of vehicles.

ATCs are usually in place for a week at a time and are repeated before and after implementation in order to provide comparisons. Page 9 shows the locations of traffic data collected. Sites noted as "LBE count locations" were counted over a one week period in both July 2020, before the scheme was implemented, and November 2020, after implementation.

Due to the changing restrictions placed due to the Covid-19 pandemic, both of these data collections are impacted by varying levels. Any data collected during this time will be reviewed in light of this. We plan to carry out additional counts in 2021 as travel patterns are expected to return to more normal levels.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

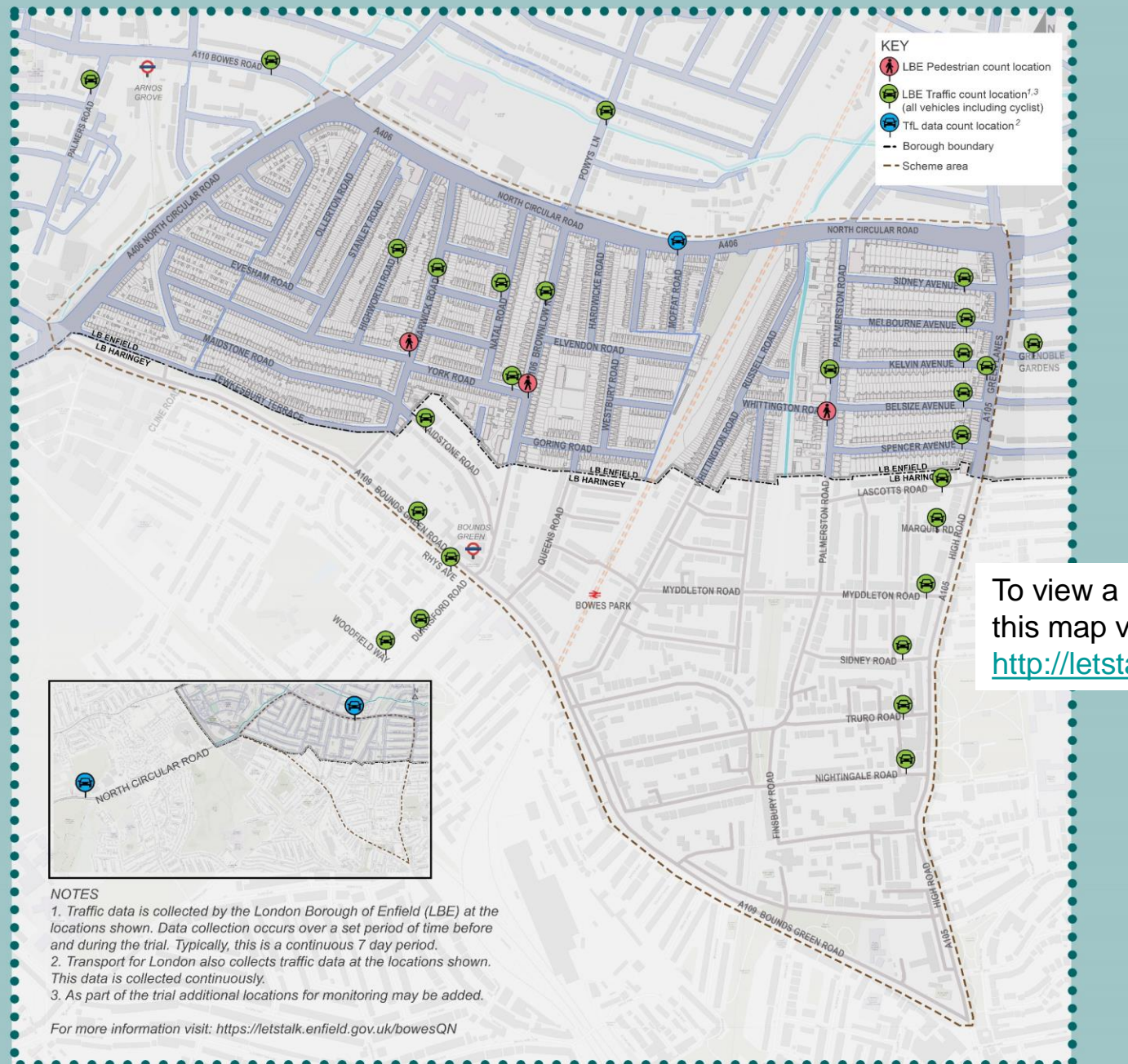# **Traffic, cycling and pedestrian data continued**

Transport for London (TfL) has two sites near this project where they collect traffic data on a continuous basis. These are also shown on the map on Page 9. We are able to use this data, along with data collected prior to the pandemic, to help inform the scale of the impact Covid-19 has on the data collected in 2020.

In addition to the traffic counts, pedestrian movements are counted in three locations on a sample of days before and after the scheme implementation.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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🚶 LBE Pedestrian count location

🚗 LBE Traffic count location[1,3] (all vehicles including cyclist)

🚌 TfL data count location[2]

-- Borough boundary

-- Scheme area

To view a high resolution version of this map visit http://letstalk.enfield.gov.uk/BowesQN

NOTES

1. Traffic data is collected by the London Borough of Enfield (LBE) at the locations shown. Data collection occurs over a set period of time before and during the trial. Typically, this is a continuous 7 day period.
2. Transport for London also collects traffic data at the locations shown. This data is collected continuously.
3. As part of the trial additional locations for monitoring may be added.

For more information visit: https://letstalk.enfield.gov.uk/bowesQN
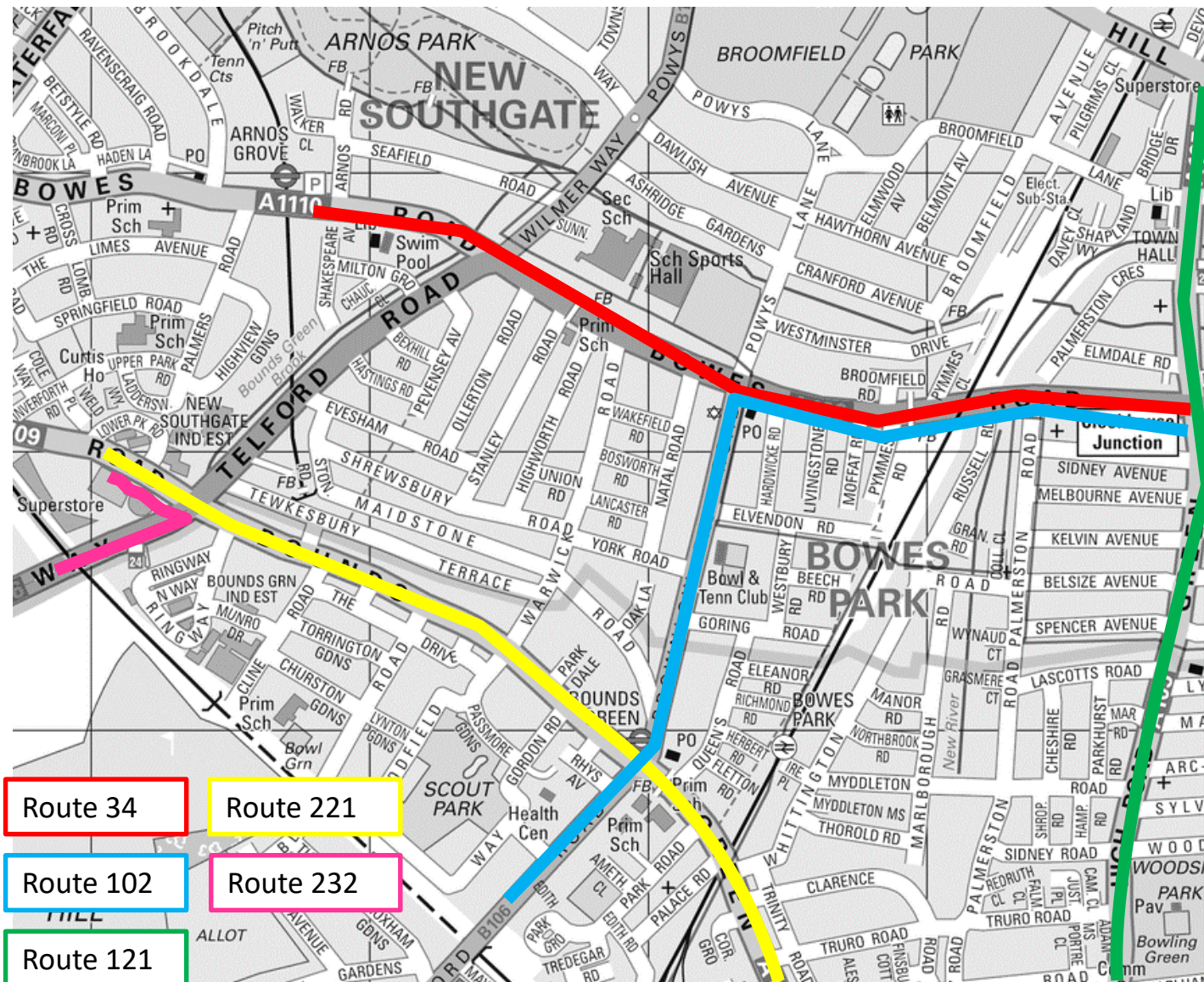
Bus journey times

TfL monitor bus journey times via regular data capture on board buses. There are bus routes on the following roads within the Bowes Primary Area Quieter Neighbourhood:

- Brownlow Road
- Bowes Road
- Bounds Green Road
- Green Lanes
- Telford Road south of Bounds Green Road

Enfield Council and Transport for London continue to work together to monitor any impacts on bus journey times. The routes are shown on the following page.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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Bus routes in Bowes Primary Area

Route 34
Route 221
Route 102
Route 232
Route 121

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

Emergency Services

The Warwick Road closure has been designed to maintain a key access route to the area for emergency services, via an enforcement camera which allows emergency vehicles through unhindered. This was introduced following ongoing dialogue with the emergency services and improves the position from their perspective from the previous barrier width restriction.

Enfield Council and the London Fire Brigade, Metropolitan Police, and the London Ambulance Service work together to seek feedback on the scheme and monitor response times throughout the trial period. The formal report on the scheme will include detail on issues that may have been raised throughout the trial period.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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Residents' & local business views

The Communication, Engagement and Consultation Plan outlines in detail how we communicate, engage and consult with residents, businesses and stakeholders.

Through the consultation respondents can identify them as residents or businesses either within or outside the area. Feedback can then be reviewed by these groupings to help identify key issues that are raised.

We review comments raised by residents, businesses and stakeholders as feedback is received on the scheme. This is an important part of our monitoring and evaluation plan to help to inform us how the scheme is working for everyone. Detailed analysis of comments received as part of the consultation is currently ongoing.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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Equality considerations

The Equalities Approach document, and Equalities Impact Assessment, outline in more detail our approach to equality considerations.

On an ongoing basis, we review feedback received from an equality perspective. This includes issues raised on the implementation of the scheme, but also monitoring who we are hearing from through consultation and engagement.

Our engagement activities typically ask participants to provide information on demographics and protected characteristics. Providing this information is always optional. This information helps to inform us about who we are hearing from.

Specific groups who have been underrepresented in the engagement can be reached through other specific methods.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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Crime and anti-social behaviour

We continue to regularly meet with the Metropolitan Police to seek feedback on the scheme. In addition to emergency response times, this includes the consideration of preventing crime through design.

We will review crime and antisocial behaviour data from the Metropolitan Police in the area before and after scheme implementation.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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Noise Quality

The ambient road traffic noise levels are compared with and without the scheme in place. Daytime and night-time levels are assessed in accordance with local and national guidance and regulations.

The noise model, carried out by external consultants, takes into account measured traffic data, including the types of vehicles and their speeds, and estimates the size of the difference between noise levels before and after the scheme.

Refer to pages 7-9 for details on the traffic data and the impact of Covid-19.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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Air Quality - Pollutants

The pollutants we monitor are:

- Nitrogen dioxide (NO_2) – emitted from car exhausts and chimneys when fuel is burned

- Particulate matter (PM_{10}) – small particles which are emitted when fuel is burned, for example from car exhausts and chimneys. Particulate matter is also formed from road transport from tyre wear and during braking, as well as natural sources, such as sand and pollen grains.

How we monitor this is set out on the following pages.

More information on these pollutants is available here:

https://www.gov.uk/government/statistics/air-quality-statistics/ntrogen-dioxide

https://www.gov.uk/government/statistics/air-quality-statistics/concentrations-of-particulate-matter-pm10-and-pm25

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Air quality and weather

Air quality is variable by nature and is affected day to day, and month to month, by weather and atmospheric conditions.

Weather conditions such as wind, sunlight, and the temperature of the ground all affect levels of nitrogen dioxide and particulate mater in the air. A proportion of particulate matter comes from outside the immediate area, and even outside London and beyond, as it can be carried long distances in the air due to its very small size.

Whilst road traffic is a large source of pollutants in the air, the behaviour of the pollutants in different weather conditions means that it is necessary to monitor air quality over a long period of time to establish trends so that the effect of weather conditions can be considered.

On the next page we explain more about how we use air quality monitoring.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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Air Quality Modelling

Air quality modelling is an industry recognised method of monitoring air quality. We have appointed external consultants to carry out air quality modelling for the Bowes Primary QN.

An initial air quality model is created using a years' worth of data prior to Covid-19. The outputs of the model are checked against roadside measurements. This is a standard step of all modelling. The roadside measurements are described on pages 20-21.

Traffic data is then input to the model to assess the impact of the change in air quality before and after scheme implementation.

Refer to pages 7-9 for details on the traffic data and the impact of Covid-19.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

Air Quality measurements as inputs to modelling

Air quality measurements are required over a long period of time. Roadside measurements are used to check model outputs. For this project, data is collected via diffusion tubes and a real-time monitoring station.

Diffusion tubes are widely used for indicative monitoring. These are provided by an external company and are changed monthly. They are sent to a laboratory for chemical analysis and a single measurement is provided over the month for nitrogen dioxide (NO_2). Diffusion tubes are a type of "non-automatic" monitoring.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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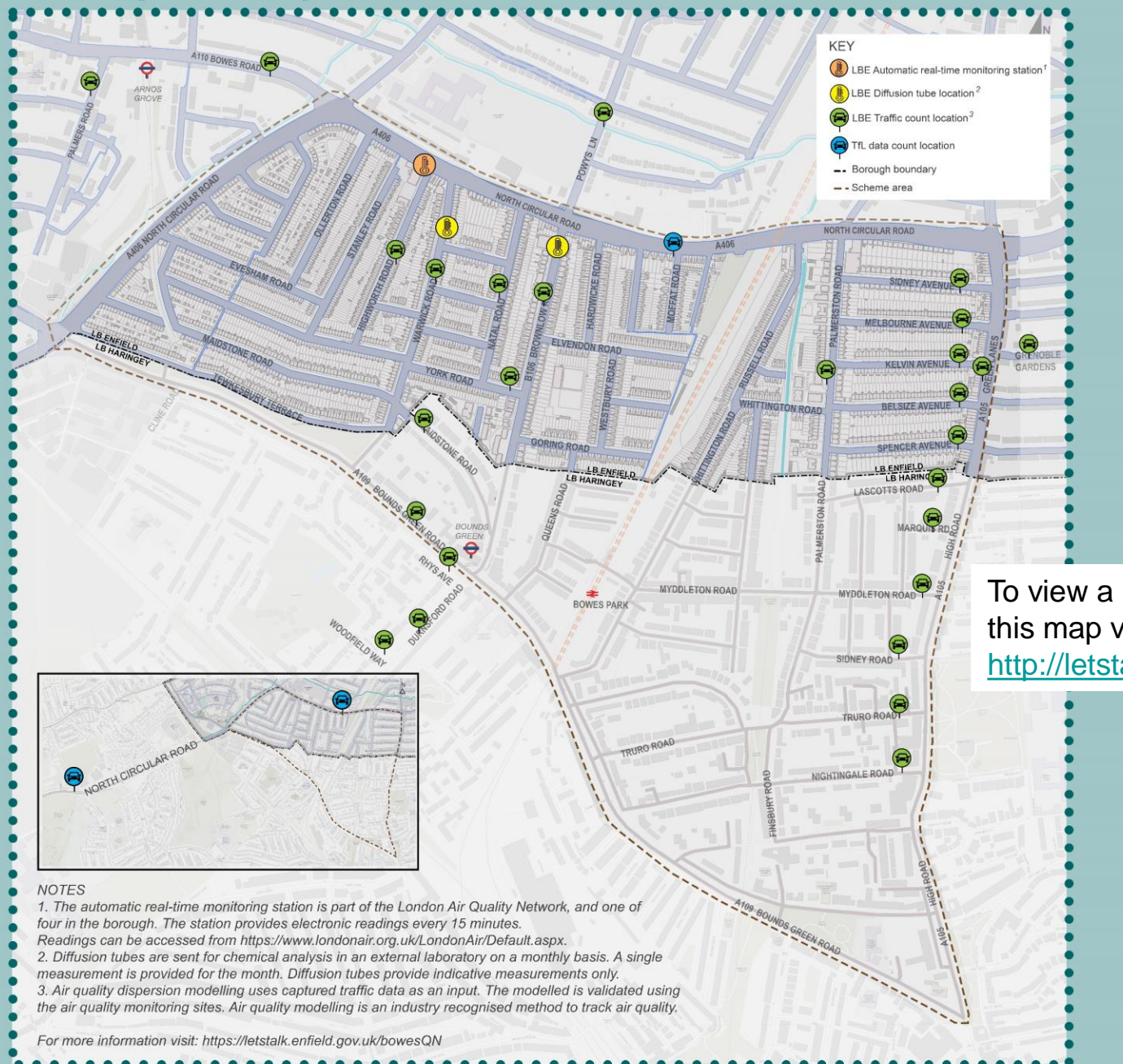
Air Quality measurements as inputs to modelling

The borough of Enfield has four real-time "automatic" monitoring stations. These are large, complex, fixed stations which contribute to London-wide monitoring and the London Air Quality Network's activities.

The locations are strategically selected across London by the boroughs. These provide an electronic reading every 15 minutes which is downloaded to Imperial College London and then made publicly available. Readings can be accessed via https://www.londonair.org.uk/LondonAir/Default.aspx.

One of our four automatic stations is located at Bowes Primary School on Bowes Road, within the Bowes Primary Area QN. The station collects data for nitrogen dioxide (NO_2), and particulate matter (PM_{10}).

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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To view a high resolution version of this map visit
http://letstalk.enfield.gov.uk/BowesQN

Healthy Streets indicators

The 10 Healthy Streets indicators are set out below, with more detail available to read in the document Healthy Streets for London. On the next page we explain more about how we will consider these in the monitoring.

Source: Lucy Saunders

Healthy Streets Indicators

The Healthy Streets approach and indicators underlies the objectives of the project. The impact of the scheme on each of the Healthy Streets indicators will be assessed to check the alignment of the trial against the indicators.

Some of the indicators may not change based on this project alone. It is important to note this scheme is not delivered in isolation but is part of a wider Healthy Streets programme of activities. Other measures delivered by Enfield Council outside of this project, such as cycle and electric vehicle parking, are intended to complement the scheme and its objectives.

It is recognised that the Healthy Streets programme has long-term objectives, linked to the Mayors Transport Strategy horizon of 2041. The intention is that this project, when coupled with the other i

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

Road collisions

Road collision data for previous years will reviewed against accident data recorded post implementation of the project.

For more information on this project visit http://letstalk.enfield.gov.uk/BowesQN

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