## Committee: Health and Wellbeing Board

## Date: 23rd January 2024

Wards: All

## Subject: For Information: Merton's 3 x GLA School Superzone's .

Lead member: Cllr Peter McCabe, Cabinet Member for Health and Social Care

Lead officer: Annalise Johns, Healthy Places Officer, Public Health

#### **Recommendations:**

Health and Wellbeing Board Members are asked:

A. To reflect on the power of investment in the built environment as a tool for epigenetics and building long term local health resilience.

#### 1 PURPOSE OF REPORT AND EXECUTIVE SUMMARY

- 1.1. The purpose of this report is an information sharing exercise, providing an introduction and overview of the work that has taken place as part of the three grants Public Health secured as part of the GLA School Superzone programme that began in May 2022.
- 1.2 No decisions are required.

#### 2 BACKGROUND

- 2.1 Originally the School Superzone concept was piloted by the GLA during 2018 and 2019 across 13 London Boroughs. Boroughs identified 400m radius zones around schools by reducing hazards and harms children were most exposed to. The programme was later expanded by providing 50 grants of up to £30K to boroughs between 2022 and 2023. London Borough of Merton is one of two London borough that successfully secured 3 grants.
- 2.2 This paper with provide an overview of the three.

#### 3. DETAILS

#### 3.1 GLA School Superzone programme

The programme has consisted of four rounds in which boroughs could apply commencing in January 2022 (Round one), Round two July 2022, Round three October 2022, Round 4 January 2023. Each Round required boroughs to apply using the online portal, to answers the detailed application which identified the level of need and the intention for the funding. Applications were only for schools which; 1) fell within the 30 per cent most deprived areas (as measured using the English indices of deprivation 2019), 2) had been engaged with in advance,3) aimed to address environmental improvements around the school and 4) could potentially implement a Healthy School Street Scheme. The Health Determinants that School Superzones must address fall in to the following categories;

- Active Travel: Improve the viability for students to walk and cycle to school (Follow the TFL Health Streets Approach)
- **Air Quality**: enforce anti-idling policies, create a School Street, pupil engagement in air quality measurement.
- **Food and Drink Environment**: promotion of the Healthier Catering Commitment, install water fountains, restrict the sale of unhealthy foods and advertising near schools.
- **Community Safety** : improved lighting, create a safe space / safe havens for young people to go after school.
- Access to green space: Installation of green infrastructure, create a food growing programmes. and Collaboration: (i.e. Community of practice, ensuring there is consistency in the council communication .
- **Planning and Licensing**: planning policy to restrict, unhealthy food sales, alcohol / gambling licences near the schools.
- **Tobacco and Alcohol**: smoke-free zones around the schools, enforcement / test underage sales of tobacco and alcohol products in retailers within the Superzone to restrict,

#### 3.2 Merton's GLA School Superzones

In Round one in May 2022, £30K was awarded to Public Health's project plan for Merton Abbey Primary School Superzone for a focus on improving Active Travel and Air Pollution. This pilot completed in June 2023. Attempts were made for Round 2, but schools were not receptive. In Round three, by February 2023 £30K was awarded to Public Health's project plan for Abbotsbury Primary to focus on both Active Travel and Community Safety. This pilot is underway and requires completion by the end of March(/April) 2024. In Round four in May 2023, £30K was awarded to Public Health's project plan for St Mark's Primary to address Community Safety and (Tobacco and) Alcohol. This project is underway and will be completed by the end of April 2024.

- A) **Merton Abbey Primary** The final report as provided to the GLA for this pilot which covers all actions, spending and outcomes forms part of the Appendix.
- B) Abbotsbury Primary Since the pandemic, students from the schools surrounding Morden Recreational Grounds, have developed agoraphobia and child obesity has increased. These issues were further exacerbated by the lapse in teaching students Kerb Craft (the national road safety programme for 5–7-Year-olds).

Additionally, vehicle usage has increased as has the lack of compliance of the 20mph speed limits on all roads surrounding the schools. This has led to a child being struck down in the spring of 2022, and pupils writing to the council to request improvements. This aim of this Superzone is to improve; active travel, air quality, community safety and access to green space. The

deliverable environmental improvements are the outcome of face-to-face engagement with 4 years 5 & 6 students from Abbotsbury whose submission of 50 physical designs and a recorded list of all students request to identify the priorities to be built. These include the crossing between the school entrance and the park to be raised and narrowed to establish pedestrian priority, better visibility and a shorter distance for children to cross the road. therefore, requiring the enforcement of parking around the crossing; the Central Road access gates to Morden Recreational Grounds to be refurbished to include a rainbow and a more accessible design for children to entre, and the refurbishment of the green space next to the school entrance to absorb air pollution. This work is set to be completed by June 2024.

- C) St Mark's Primary In November 2022, following conversations with St Mark's Primary School's Head Teacher, regarding her students and staff encounters with inebriated/anti-socail individuals across the 400m perimeter of their school in three hot spots; the car park next to the school, in the open space and playground immediately beside and behind the school. In addition, as of November 2022, the Metropolitan Police have recorded school aged victims of robbery. Due to successfully obtaining a third GLA grant, a task force and project plan was implemented by healthy place to address the priority of improving the safety and reduction of harm of pupils attending this school.
- D) In January 2023 a working group was established across a multidisciplinary group; Ania Kennedy Head Teacher for St Mark's Primary, the (Met Police) Safer Schools Officer at St Mark's Primary School, Community Safety Team, Anti-social Behaviour Team, Clarion Housing, Environment and Regeneration Team (Highways and Planning), Parks Team, Parking and CCTV colleagues, the land owner for the car park, Public Health's Substance Misuse Team, and Mitcham's DWP team. Since January this group has been able to 1) improve the CCTV, refurbishing the vegetation to create better visibility and perceptions of safety, improved lighting and a regular patrol system that is shared across the Anti-social behavior team and substance misuse team and the met police. This funding has paid for Public Space Protection Order signage to be formalized for the first time in Mitcham, as well as funding for outreach programmes for those who are regularly participating in routine anti-social behaviour. Work in this area has not finished but much progress has been made which was recently audited by the Met Police who have confirmed the improvements and welcome the continued progress.

#### 3.3 Health in All Policies (HiAP)

Health in All Policies (HiAP) was agreed by this Board in June 2022 as an approach which places consideration of health, equity and environmental sustainability at the centre of policy decisions. The GLA School Superzone work is an exemplar of the HIAP working as it seeks to embed equitable, resilient healthy communities at the heart of all its multi-disciplinary work.

#### 4. NEXT STEPS

None for the purpose of this report.

#### 5. ALTERNATIVE OPTIONS

None for the purpose of this report.

#### 6. CONSULTATIONS UNDERTAKEN OR PROPOSED

None for the purpose of this report

## 7. TIMETABLE

None for the purpose of this report.

#### 8 **FINANCIAL, RESOURCE AND PROPERTY IMPLICATIONS** None for the purpose of this report.

#### 9 **LEGAL AND STATUTORY IMPLICATIONS** None for the purpose of this report.

10 HUMAN RIGHTS, EQUALITIES AND COMMUNITY COHESION IMPLICATIONS

None for the purpose of this report.

## 11 CRIME AND DISORDER IMPLICATIONS

None for the purpose of this report.

#### 12 **RISK MANAGEMENT AND HEALTH AND SAFETY IMPLICATIONS** None for the purpose of this report.

13 APPENDICES -

## Appendix 1 – Merton Health and Wellbeing Board membership, purpose and principles of Health and Wellbeing Strategy 2019 -22

March 2023



- informing priorities
  Health and Wellbeing Strategy 2019 -2024: A Healthy Place for Healthy Live
- empowermentExperimenting and learning
- Think Family

Key Healthy Place attributes:	Key outcome of the Health and Wellbeing Strategy:	Indicator*	Timescale <sup>†</sup> for impact	Merton Previous	Merton Current	OHID Merton Trends (based on 5 most recent data points)*	London	England
Promoting mental health & wellbeing	Less self-harm Better relationships	Hospital admissions for self-harm aged 15- 19 yrs (per 100,000 population)	Medium	415.9 ( <i>2019/20</i> )	360.5 (2020/21)	No significant change (2016/17 - 2020/21)	330.9	652.6
Page	Less depression, anxiety and stress	Prevalence of depression (aged 18+)	Medium	8.9% (2020/21)	9.0% (2021/22)	Increasing (2017/18 - 2021/22)	**9.0%	12.7%
92	Less loneliness Better social connectedness	% adult carers reporting as much social contact as they would like (aged 18+)	Short	24.9% (2019/20)	21.7% (2021/22)	Not enough data points to calculate trend	27.5%	28.0%
Making healthy choice easy	More breastfeeding	Breastfeeding prevalence at the 6-8 week review, partially or totally	Short	81.6% (2021/22)	74.3% (2022)	N/A	-	-
	Less childhood obesity	Overweight (including Obesity) in Year 6	Medium	35.1% (2019/20)	34.8% (2021/2022)	No significant change (2017/18 - 2021/22)	40.5%	37.8%

### Appendix 3 – Health and Wellbeing Strategy baseline indicators (February 2023)

	Less diabetes	Diabetes QOF prevalence (17+)	Long	6.3% (2020/21)	6.5% (2021/22)	Increasing (2017/18 - 2021/22)	**6.8%	7.3%
	More active travel	% adults cycling for travel at least three days per week	Short	3.4% (2019/20)	3.3% (2020/2021)	No trend available	3.3%	2.0%
	More people eating healthy food	<pre>++Proportion of the population meeting the recommended '5- a-day' on a 'usual day' (adults)</pre>	Medium	53.3% (2019/20)	53.3% (2019/20)	Not enough data points with valid values to calculate recent trend	55.8%	55.4%
Page 93	More active older people	Percentage of adults aged 65-74 who are physically active for at least 150 minutes a week	Short	64.4% (May 2020/21)	55.7% (Nov 2020/21)	N/A	60.1%	60.1%
Protecting from harm	Less people breathing toxic air	<pre>¶Deaths attributable to particulate matter (PM2.5) (aged 30+)</pre>	Short	8.6% (2019)	7.2% (2020)	Significance is not calculated for this indicator	7.1%	5.6%
	Less violence	Violence against the person (offences per 1,000 population)	Medium	20.4 (2020/21)	20.7 (2021/22)	Increasing (2017/18 - 2021/22)	**27.0	**34.9

\*Dates vary based on most recent data points available.

\*\*Aggregated from all known lower geographical values

## Merton's GLA School Superzone Pilot 1: Merton Abbey Primary School 2022-2023

#### JULY 21

London Borough of Merton Authored by: Annalise Johns Healthy Places Officer, Public Health.

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A child's-eye view of the Southwark Superzone

## What is a School Superzone?

The school Superzone programme is based on accumulative best practice the GLA retrieved over a course of a year, between 2018 and 2019 with 13 schools across London, before launching a formalized four stage grant process in 2022. Each School Superzone consists of a 400m radius area-based initiatives to address hazards specific to the local primary school community such as; air quality, safety, tobacco and alcohol sales, advertising, active travel. Each Superzone seeks to reduce exposure to harmful elements in the urban environment and increase health promotion for children and young people and where possible draw out replicability. The London Borough of Merton currently has three school superzones from phases one, three and four, Merton Abbey Primary is the first which began in May 2022, completing in July 2023.

THE PURPOSE OF THE PILOT IS TO DEVELOP A SCHOOL WIDE APPROACH TO BECOME "HAZARD-FREE SCHOOL ZONE", WHEREBY ALL JOURNEYS TO AND FROM SCHOOL WILL OCCUR BY WALKING, CYCLING OR PUBLIC TRANSPORT. THIS IS MOTIVATED BY, THE RISE OF CHILD OBESITY SINCE THE PANDEMIC, THE GROWING THREAT TO INJURY BY THE PERSISTENT NUMBER OF PARENTS DRIVING STUDENTS TO SCHOOL AND DROPPING THEM OFF IN THE ROAD, AND THE RISE IN IDLING VEHICLES EXACERBATING AIR POLLUTION SURROUNDING THE SCHOOL. THE OBJECTIVE IS TO CREATE A SYSTEM APPROACH TO ENABLE A BEHAVIOUR CHANGE BY ALL STUDENTS, STAFF AND PARENTS TO REPLACE ALL CAR JOURNEYS TO THE SCHOOL TO BE DONE BY EITHER WALKING, CYCLING OR BY PUBLIC TRANSPORT.

#### **School Population:**

Geographically, the London borough of Merton has an east-west divide where the eastern residents experience higher levels of income deprivation. The Abbey Ward contains 18% of children living in income deprived households, and 17% of year 6 students are clinically obese. Merton Abbey Primary School falls within decile 3 within the 30% more deprived, in East Merton. Proportionately, Merton Abbey Primary has one of the borough's highest numbers of SEND students, and students of newly migrated refugee families.

#### Context:

Directly opposite the school is the High Path (housing) Estate, home to a significant percentage of Merton Abbey students, where a high proportion of residents are facing income deprivation. Of the students who must travel to school, 24% are being driven avoidable car journeys to school that could otherwise be carried out on foot, bike, or public transport. Merton Abbey's Head teacher Michael Bradley and staff have worked tirelessly to discourage parents from dropping children off by car, as staff are concerned about the real threat of injury posed by the vehicular conflicts with children at the school's only entrance. The school is heavily understaffed, and the staff have become essential for managing traffic to no avail. The redevelopment of the High Path estate opposite Merton Abbey Primary, will increase vehicular pressures, due to the 422 new parking bays to be accommodated within the redevelopment which will increase vehicular movements by an additional 486 car trips a day or 177,390 per annum. Therefore, in advance of this, Merton Abbey's schoolwide behaviour change is needed to actively reduce hazards facing students via conflicts drop-offs taking place in the High Path. It is for this reason this work is addressing a holistic approach to educating everyone connected with school to be capable and motivated to use alternative transportation.

It should be noted the location of both Merton Abbey Primary and Harris Academy are according to TFLs Journey Planner; a five-minute walk to the South Wimbledon Underground Station, six bus stops, three cycle hire stations, a ten-minute walk to the Morden Road Tram Stop and cycle infrastructure was recently installed by the local council immediately outside the school the length of the High Path and beyond.

Merton Abbey is located between three major regional transport links; the A24 south of the school, the A219 west of the school and Kingston Road to the north of the school, not surprisingly Merton Abbey Primary, and its immediate neighboring school Harris Academy, are located at the heart of a pocket of air pollution with levels exceeding the limit value for NO2. Merton Council's Air Quality Management Assessment encompassing the entire borough has been declared exceedances of the annual mean NO2 objectives and 24-hour PM10 objective. Efforts to reduce vehicles as part of the school drop off, will definitively contribute to the immediate levels of air pollution which disproportionately impact the residents of the High Path estate and all pupils being educated on the High Path.



#### School Superzone Pilot details.

#### Funding:

£30K in grant funding was secured by the GLA in April 2022. £21K (plus £9K match funded by public health) was allocated to the salary of a full-time active travel coordinator to work from within the school to support the staff and students over a seven-month period. In addition to establishing a working partnership with the student body and staff, regular meetings with Merton Abbey's Headteacher were maintained to; identify and seize opportunities, 1) address issues when/if they arose promptly, 2) discuss scope for students to own and manage their progress and development, and 3) how best the local authority can serve and support the school. The key to the delivery of this pilot was the link made through the management of the active travel carried out by the council as this enabled a fluid transference of services available to the school as well as serving the council with the direct awareness of the issues and challenges being faced by schools and their staff, which helped to inform service delivery with better accuracy.

The remaining £9K of the grant has been used on a combination of mechanism to support behaviour change, including a wearable pedometer for every student in the school, equipment for the school to offer cycle



training for students (including the purchase of seven bikes, helmets, bike locks, and one bike pump for permanently use on school grounds.), and various awards for stages of the school's progress.

#### PROGRAMMS:

#### Cycling:

The active travel coordinator came in to post in November 2022. By mid-January 2023 pedometers had been distributed across the school and each classroom had received a pedometer scanner for students to log movement daily. By the week of February 20<sup>th,</sup> the first round of cycle training began at Merton Abbey for the First time since pre-pandemic times.

The cycle training (council funded programme) took place on various weeks between February and June to train students across Years 6 to 3. These courses were very well attended and due to the provision of a fleet of the school's own newly purchased bicycles, made the programme entirely inclusive. Though cycle training was offered to the staff all of whom drive (bar the Headteacher) none took up the training. The students, however, were very enthusiastic, and with the majority of whom could not ride a bike at the start, all students were able to complete the training with the skills to ride their bikes competently. The active travel coordinator was instrumental in orchestrating the scheduling of training sessions, which removed any reliance on the school's staff.

In addition to the cycle training, the active travel coordinator orchestrated the attendance of Dr. Bike (a council funded programme) to visit the school on two occasions to allow students and staff to have their bikes to be fixed, safe and road ready free of charge. These events were very well attended and proved very popular for students, particularly those who had taken the cycle training or had new bikes that needed to be set up. Many students who had training wheels originally used the opportunity with Dr Bike to have those removed as they now possessed the skills to ride proficiently without.

#### Walking:

The active travel coordinator carried out (with the support of all the teachers) "hands-up" surveys in December 2022, March 2023, and June 2023, to record the modes of transport students of each class used to arrive to and from school. This information was then mapped to analyze specifically the number of students who were driven and the distance in which they were driven. Two groups of students were created based on their post codes to create the school's first walking group or walking buses. These groups consisted of pupils who lived a 5-minute walking distance from the school, with the purpose to demonstrate the safest route to walk to school as a group, by rehearsing with the group during school hours, the exact journey to and from their homes on two separate occasions. The intent was, by grouping them, they would no longer need to rely on parents who were driving them, and they could travel together – "safety in numbers". The active travel coordinator organised the groups to be walked to and from the school during school hours on more than one occasion. An invitation was circulated to parents and carers of the students to participate in the hopes they would refrain from driving such

short distances. Sadly, none of the guardians took up the opportunity to participate and none of the walking buses progressed.

In January, with the launch of the pedometers, the students were introduced to an activity challenge where all classes were in competition until the week of March 16<sup>th</sup> to accrue the most movement via walking or cycling to win; 1) a class prize of a day spent at Wimbledon Tennis Courts, 2) the first prize of tennis lessons awarded to the student with the most steps. (Prizes were also awarded to the teacher who did the most activity with an award of a tennis course.) Second prizes for students and teachers were tennis racquets. The first Challenge finished on March 17<sup>th</sup>.

In May, a second challenge was launched. The population of the school had been broken down into groups of four based on post codes to create a school wide walking bus programme fueled by; 1) measurements taken with the pedometers, and 2) the first prize to win one of four bikes (with helmets and locks). By the 9<sup>th</sup> of May pedometers had been programmed to sit within each group of four to monitor the which walking bus and specifically which distances were being covered and were they including the children who were typically driven. It was in May when pedometers began to malfunction causing a widespread unreliability. An attempt to correct this was made over the following month by 1) ordering 60% new batteries and replacing them, as well as 2) providing 1/3 new pedometers. By June, the contract for the active travel coordinator ended and it was decided the May challenge needed to be adapted to measure individuals rather than groups of walking buses. The final challenge was re-launched, resulting in a short extension to the pilot, with the help of a public health colleague on June 5<sup>th</sup>. An assembly took place where the new active travel coordinator was introduced, as well as the chance to show students the bikes that were on offer for those who participate. This resulted in a surge of students over the week trying to ensure their pedometer was working followed by almost all of the pedometers being given a new battery. Despite the lack of reliability of the pedometers, participation was very good and remarkable spikes in movement were recorded. The final challenge completed on Friday June 30<sup>th</sup> and bikes were awarded to students at assembly on Monday July 3<sup>rd</sup>. The appendix contains screen shots of the pedometers tracking, demonstrating the extent of steps students who won undertook, which was a remarkable accomplishment, not only by the winning students but by all those who participated.

#### Air pollution awareness.

Due to the affiliation with the GLA School Superzone programme, Merton Abbey Primary was offered support to the Asthma and Lung UK charity. In January 2023, the Charity provided air pollution monitors at no cost which enabled the school to gain further measurement of existing air quality surrounding the school (Results can be found in the appendix). Though Merton Council's air quality management team have had monitors in place along the High Path and surrounding area for years, the additional monitors provided an external measure to strengthen the existing awareness of the air pollution levels the students at the primary school are faced with.

Following the students return from Easter Break on April 16<sup>th</sup> a spokesperson from Asthma and Lung UK discussed air pollution and the solutions for students to explore. The remaining school assemblies held in

April, continued the conversation and awareness surrounding air pollution and the positive impacts that everyone will benefit from, when students use their newly acquired active travel skills attained over the length of the pilot.

#### **Findings/ observations**

The priority of this pilot, above reduction in child obesity and improving the air quality, was to eliminate the use of cars to and from the school, which sadly remains a very real hazard for students.

The pedometers evidenced a universal increase in students' movement over a period of 6 months. (Screen shots of sample students' pedometers measures can be found in the appendix.) Despite the alarming depreciation of the pedometer's reliability from May onwards, measurements were recorded, and an evaluation of movement was recorded sufficiently enough to see students universally moving more. These movements are also recorded in the three surveys, (that form part of the appendix) and the attendance of the cycle training.

In all cases, incentives, training, and information was tailored to the staff to enable them to participate in the behaviour change, 95% of staff's behaviour remained unchanged and apart from one staff member all (excluding the Headteacher) continued to drive. One teacher drove their two bikes (a 2-mile distance) to the school to take advantage of the Dr. Bike but not one staff member took up cycling or the training on offer despite surveying the appetite and being present for all of the school's assemblies.

The dominating reluctance from parents and 95% of teaching staff to participate in the behaviour change made headway difficult and any possible gains made by children mute.

Students were very enthusiastic and demonstrated unwavering momentum over the 6 months. Gains were made possible by the support from a combination of the Headteacher, the active travel coordinator, a select number of teachers and the presence of the pedometers. While the motivation to win a prize did indeed motivate, it is clear from the active travel coordinator's weekly updates that students were amply motivated by the ability to record their achievements recorded by their pedometers, which they wanted to share with the active travel coordinator regularly.

The threats of children being struck by a car remain high and will increase with the estate redevelopment, and the air pollution will continue to be a hazard to the school's community and that of the residents of the High Path Estate.

The south side of the High Path land use consists of two schools and a church, and the location is one of high public transport access.

To eliminate the threats posed to children and future local residents, the High Path should be closed to formalise the creation of a walking and cycling corridor up to the school's front door, to adequately support students at both schools. While a school street is a step, the life cost value of the road closure in terms of lifetime health impacts and accumulative maintenance costs to the road is more effective and efficient. It is clear the adult population will not make any positive changes unless they are enforced. It is the recommendation of the author of this pilot that 1) High Path be closed and transformed into public realm that can be an extended and much needed play space for the schools and the neighboring children of the High Path estate. It also recommended



that the staff car park be converted to accommodate 3 parking bays into covered cycle parking next to the staff entrance and a fleet of electric bikes be made available to all staff without charge to offset any concerns of discouraging future staff from joining this remarkable school to work.

# *"We are tying this into broader questions of street safety and confidence for children." (Headteacher Michael Bradley)*

#### LEGACY:

REPLICABILITY OF THE PILOT IN OTHER SCHOOLS WOULD BE DEPENDENT ON FUNDING FOR THE POST OF THE ACTIVE TRAVEL COORDINATOR AND THE PEDOMETERS, WHICH CLEARLY HAVE BENEFIT.

In September 2023 cycle training has already been scheduled to commence to capture those returning student who participated in the training that completed in June 2023.

Kerb Craft a Department for Transport programme of training primary school student road safety will have been updated, published, and circulated to all primary schools across Merton. The Council's Road Safety lead will join Merton Abbey Primary to support the scheduling of training in September when the new student arrives.

Finally, an Asthma, Air Pollution & Environment pilot has been granted to Merton Council by the Southwest London NHS. This innovative study is partnered with Cambridge University's child asthmas researchers to look at asthmatic students of four primary school (including Merton Abbey Primary), to analyze their existing pathways to care and with the use of wearable monitors track the exact location of environmental triggers. This work will be able to build on all the groundwork established by the pilot described in this report, to shape the future care pathway for asthmatic Children across the UK.

#### Appendix:



A photo of in school communication for students and the Active Travel Coordinator.

#### MOKI snap shots of students' movement between December 2022 and July 2023









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#### **Excerpt from an Active Travel Coordinator Assembly Presentation April 2023**



Today it will be this group: Muhammad Chaudry (YR1) Louis-Aziz Webb (YR2) Reza Ali (YR1) Pal Proska (YR1)



It will be a 30-minute walk starting just before lunch time.



On Thursday it will be this group: Tymon Wisniewski (YR6); Alvin Kaplliani (YR2); Veronika Muhovska (YR3) Quick reminder that there will be some student walks today and tomorrow.

#### Findings from Asthma and Lung UK measurements of Merton Abbey Primary's Air Quality.

Thank you for helping us fight for clean air by taking part in our monitoring project at Merton Abbey Primary School.

Here are the results from your experiment:

	Location	NO2 reading	
Site 1	Tree next to football goals	39.2	µg/m3
Site 2	Plain Street pole in front of Merton Abbey	37.5	µg/m3
Site 3	Street sign with blue arrow in front of Merton Abbey	37.2	µg/m3
Site 4	Tree along blue walking track, closer to A24	30.9	µg/m3
Site 5	Tree next to football goals	38.1	µg/m3
Site 6	Street sign in front of St John's Church Hall	33.9	µg/m3

#### What do your results mean?

These data give you a snapshot of nitrogen dioxide pollution in the sites you measured. The legal annual average target for this pollutant is 40 micrograms per cubic metres of air ( $\mu$ g/m3). So, your results suggest pollution in 0 % of your sites is breaching this limit.

A map created from the student in class survey of students who were driven to school and the distances they are driven.



A map created from the student in class survey of students who walk to school and the distances.



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Excerpt from table of alternative transport routes for groups of students based on groupings (each colour represents a post code cluster) of post code clusters to form the first phase of Walking Buses, based on survey data.

SW19 2PQ	N/A		Fast route - 2 minutes, Moderate route - 3 minutes, easy route - 4 minutes.	0.9km 3min	12 minute 0.8 km
CR7 7PR	16 min walk to Thornton Heath Station, 11 minutes to Balham Station Northern Line to South Wimbeldon Station 7 min, exit station was to school - 9 min.	52 min £2.60 per journey	fast route - 27 mins, Moderate route - 31 mins, easy route - 46 mins	8.3km 31 min	6.7km 1h 40min
SW19 2UR	walk to Runnymede 6min, Bus 200 to Haydons Rd 7min, walk to school 7min.	20 min	Fast route - 2 min, Moderate route - 3 mins, easy route - 4 min.	0.9km 3min	0.9km 13min
CR4 3AW	Haslemere Avenue - Boarding at Stop E Bus 200 to Runnymede - 4 mins - walk to School - 13 mins.	17min	Fast Route - 6min, moderate route - 10min, easy route - 11 min.	2.7km 10min	2.2km 33min
SW19 2TA	n/a		Fast route - 3 minutes , Moderate route - 4 minutes, easy route - 5 minutes	1.2km 4min	1.1km 16min
CR4 3BA	Walk to Haslemere Avenue - 2 mins, take Bus 200 to Runnymede (4mins), walk to school 13 min	19min	Fast route - 5 minutes, moderate route - 5 minutes, easy route - 7 min.	1.5km 5min	1.3km 20 min
CR4 3AY	Haslemere Avenue - Boarding at Stop E Bus 200 to Runnymede - 4 mins - walk to School - 13 mins.	17min	Fast Route - 6min, moderate route - 10min, easy route - 11 min.	2.7km 10min	2.2km 33min
CR4 3PS	Walk to Phipps Bridge Tram Stop ( 8min), Tram to Morden Road Tram Stop (2min) , walk to school (12min)	22min	fast route - 6min, moderate route - 8min, easy route - 10 min.	2.2km 8min	2.0km 29min

CR4 3QH	Walk to Belgrave Walk Tram Stop (6min), Tram to Morden Road Tram Stop (3min), exit walk to school )12 min.	21min	Fast route - 6min, moderate route - 8min, easy route - 11 min.	2.3km 8min	2.1km 32min
CR4 4BY	Walk to Belgrave Walk Tram Stop (6min), Tram to Morden Road Tram Stop (3min), exit walk to school (12 min).	21min	Fast route - 6min, moderate route - 8min, easy route - 11 min.	2.3km 8min	2.1km 31min
CR4 4BZ	Walk to Mitcham Tram Stop (8min), Tram to Morden road Tram Stop (5min), exit walk to School	25min	fast route - 10min, moderate route - 14min, easy route - 19min	3.6 km 14min*	3.1km 46min
SW19 2SY	Walk to Phipps Bridge Tram Stop (7min), Tram to Morden Road Tram Stop (2min), walk to school (12min)	21min	fast route - 5min, moderate route - 7min, easy route - 9min.	1.7km 5min	1.7km 25min
CR4 4DY	Walk to Belgrave Walk Tram Stop ( 6min), Tram to Morden Rd Tram Stop (3min), exit walk to school (12min).	21min £1.65 per journey	fast route - 8min, moderate route - 10min, easy route - 13 min.	2.5km 10min	2.4km 35min
CR4 4DB	Walk to Belgrave Walk Tram Stop (5min), Tram to Morden Rd Tram Stop (3min), exit walk to school (12min).	20min £1.65 per journey	fast route - 7 min, moderate route - 10 min, easy route - 13 min.		2.3km 34min
SM4 6AF	Walk to The Drive, Morden (2min), Bus 118 to Morden Station, (4min), Northern Line to South Wimbeldon (2min), exit walk to school (9min).	21min	fast route - 9min, Moderate route - 12 min. easy route - 17min	3.0km 12min	2.5 km 37min
SM4 5RZ	Walk to Connaught Gardens (4min), Bus 157 to Morden Station (4min), Northern Line to South Wimbeldon (2min) exit to walk to school (9min).		fast route - 8min, moderate route - 13min, easy route - 17 min.	3.2km 13min	2.3km 34min

SM1 4DA	Walk to Lenham Road (1min) Bus 154 to Morden Station (20min), Northern Line to South Wimbeldon (2min), exit walk to school (9min).	37min	fast route - 23min, Moderate Route - 29min, Easy route- 37min	7.4km 29min	5.8km 1hr 27min
SM4 5PA	Walk to South Thames College (7min), Bus 93 to South Wimbeldon Station (11min), walk to school (6min)	23min	fast route - 13min, moderate route - 15min, easy route - 20min	3.9km 15min	3.3km 49min