CLEANER AIR 4 COMMUNITIES: ENGLAND

LSx London Sustainability Exchange
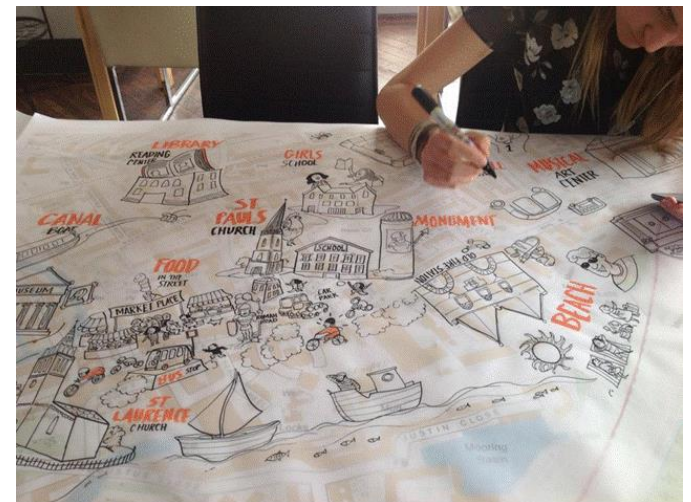
ef Esmée Fairbairn FOUNDATION

Last time (recap)

- Air pollution and health impacts
- Clean Air Zone and Derby
- Citizen Science
- Diffusion Tube training

This time

- Maps and results - discussion
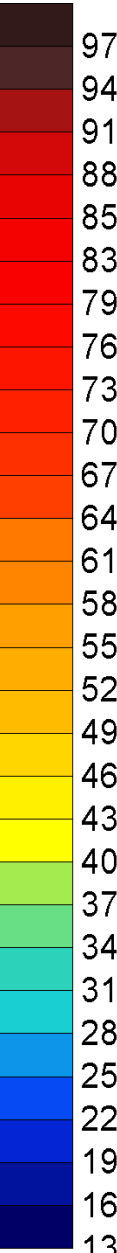- Create your action plan – using toolkit
- Choosing actions
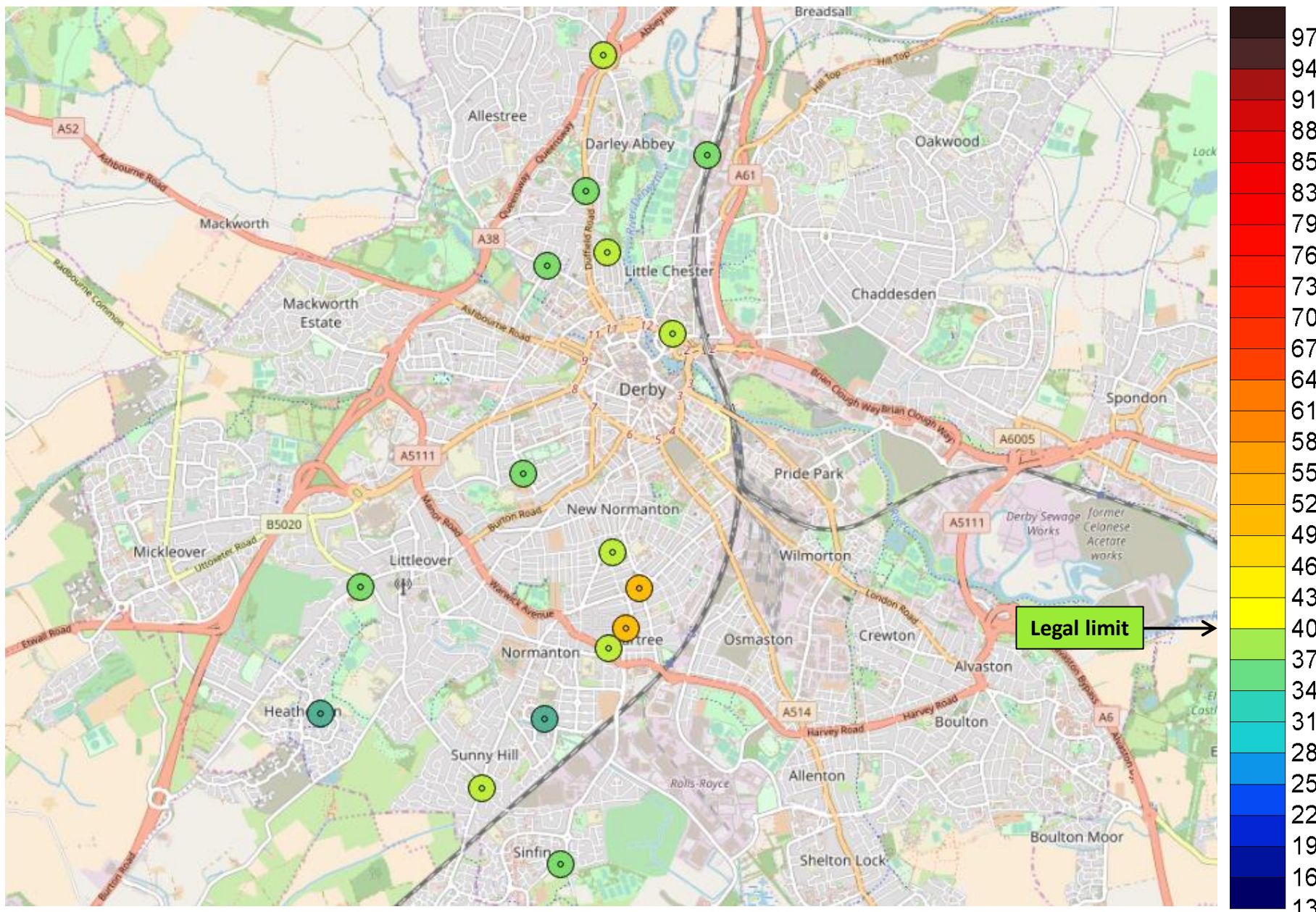- Next steps

Your Results

Recap and Results

- Why did you choose the locations?

- What results are you expecting?

- Which points do you expect to be high?

- Which do you expect to be low?

- Why?

Legal limit →

97
94
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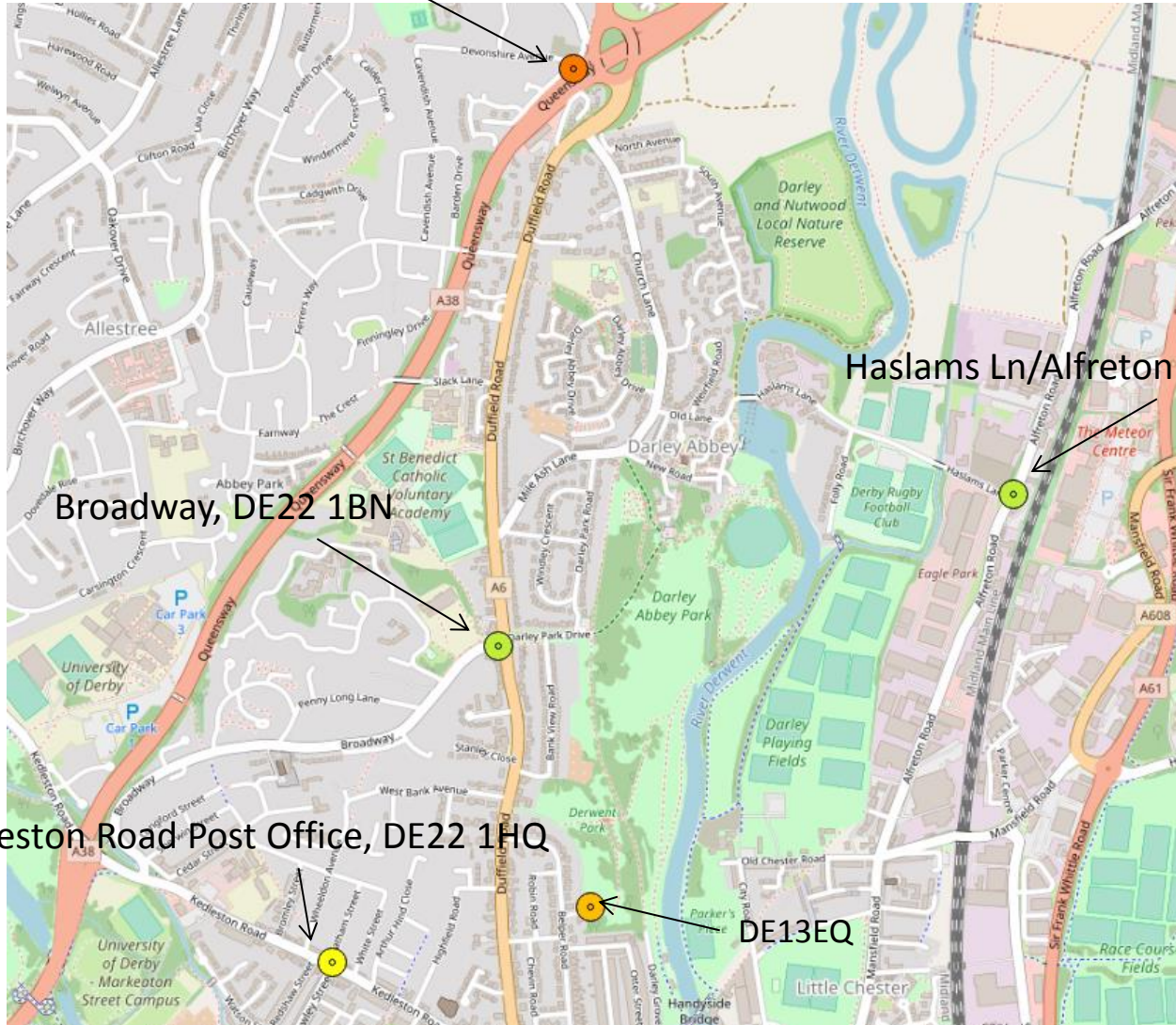40
37
34
31
28
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16
13

Results – raw data

Results – annualised data
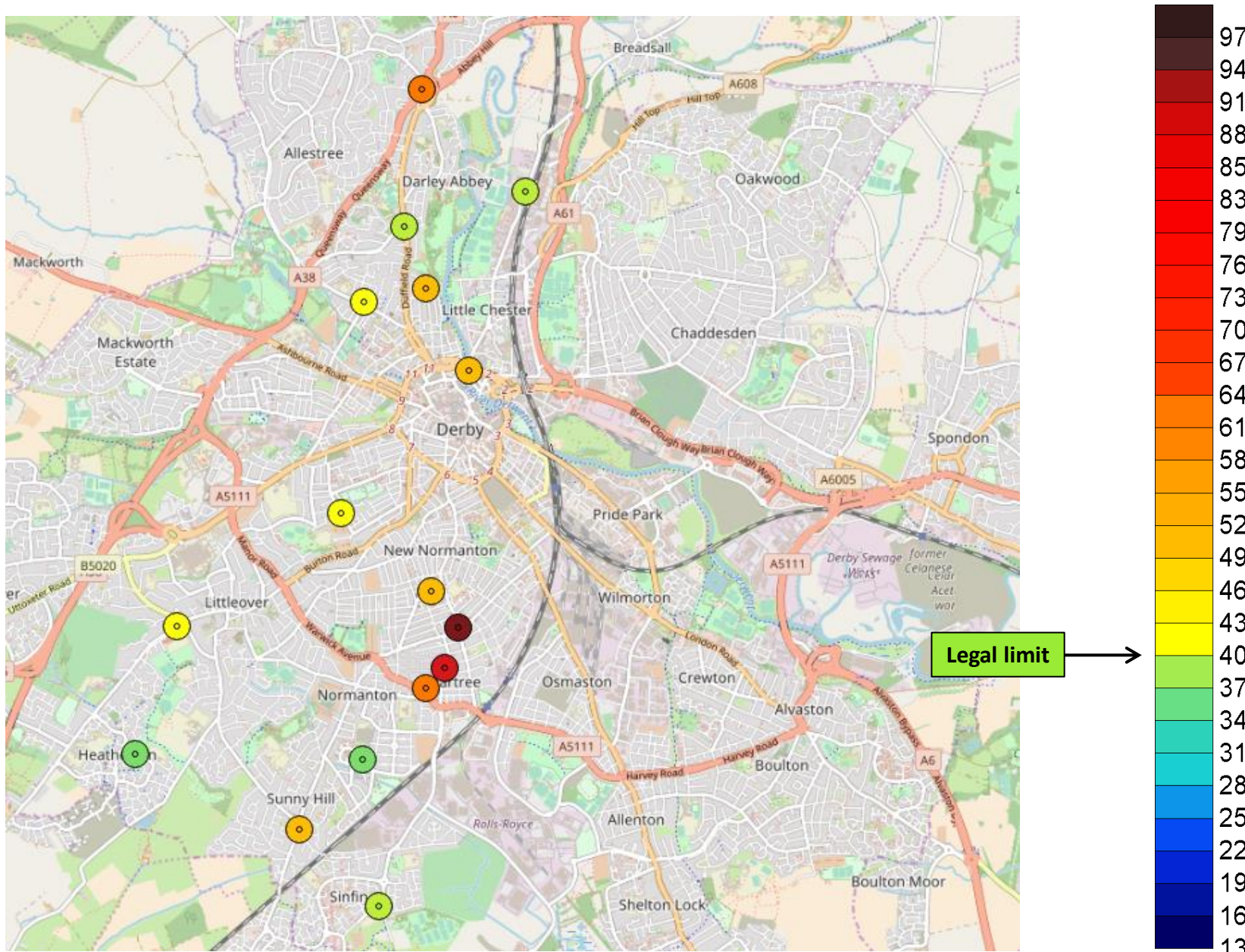
Results

Palm Court Island, DE22 1JN
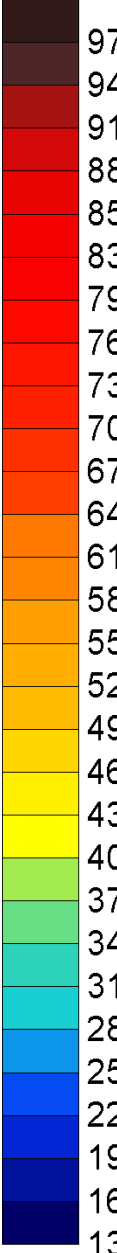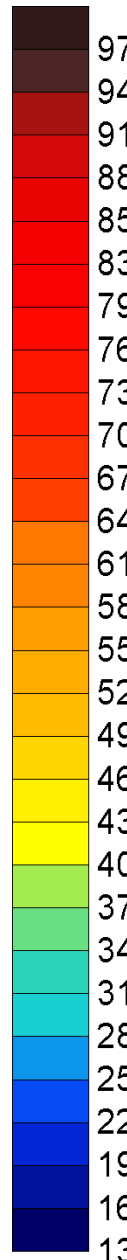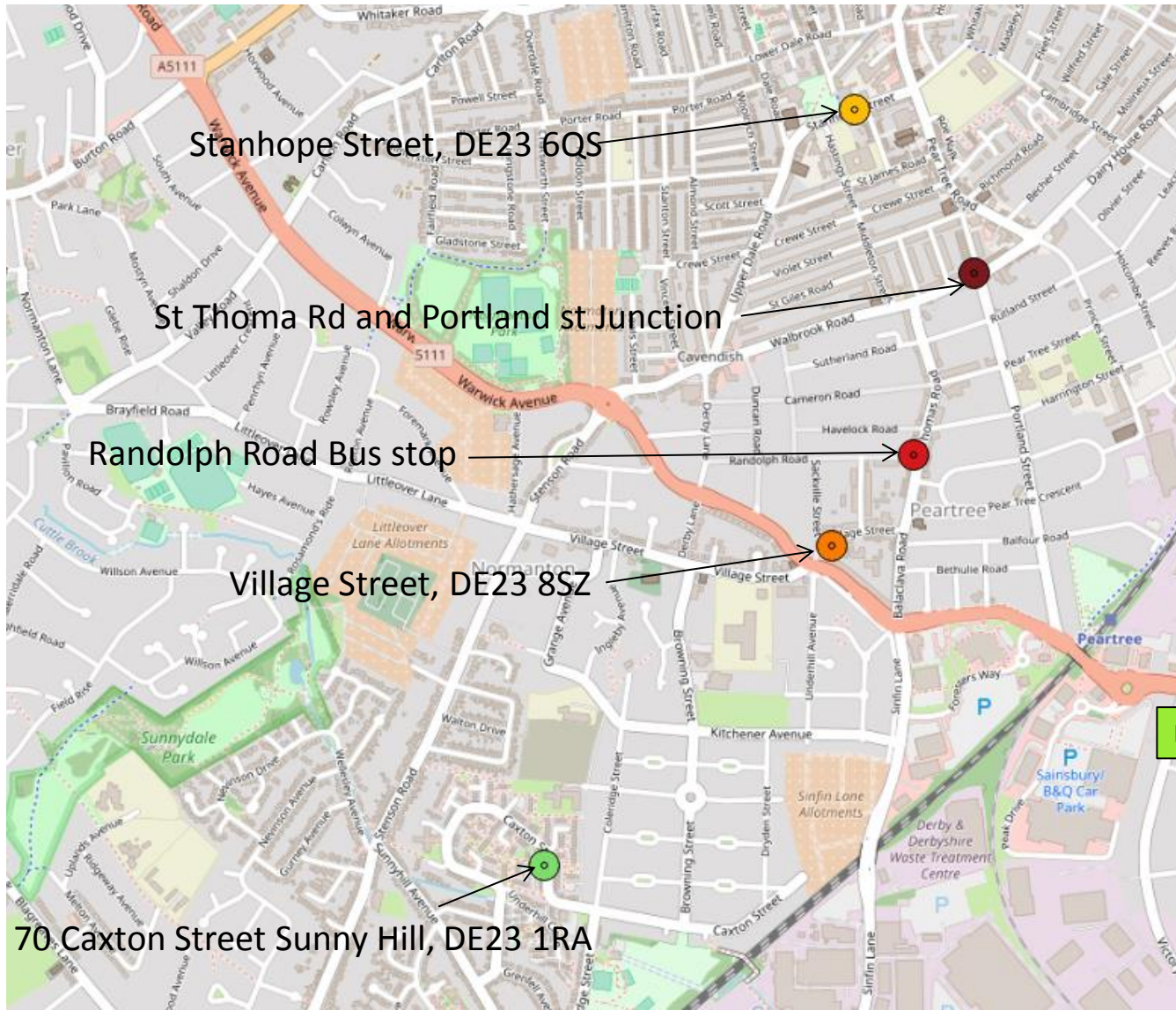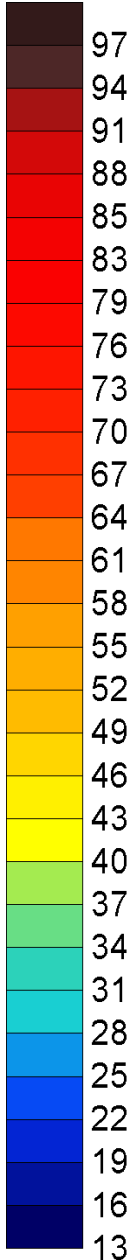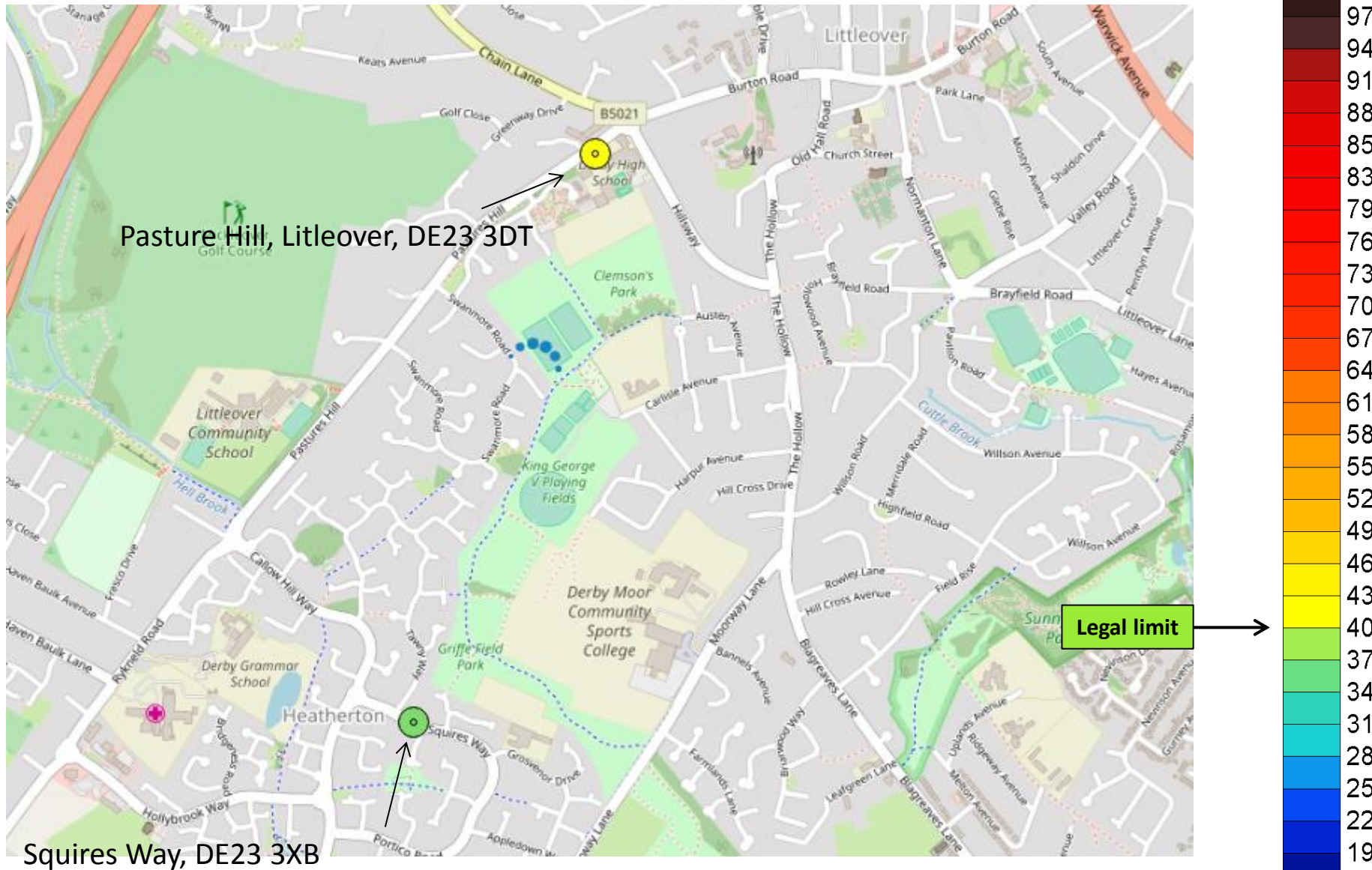
Haslams Ln/Alfreton Rd, DE21 4AF

Broadway, DE22 1BN

Kedleston Road Post Office, DE22 1HQ

DE13EQ

Legal limit

Results

Alice Street, DE1 2BY

88 Dean St, DE22 3PT

Legal limit

Results

Stanhope Street, DE23 6QS

St Thoma Rd and Portland st Junction

Randolph Road Bus stop

Village Street, DE23 8SZ

70 Caxton Street Sunny Hill, DE23 1RA

Legal limit

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Results

Pasture Hill, Litleover, DE23 3DT

Squires Way, DE23 3XB

Legal limit

Results
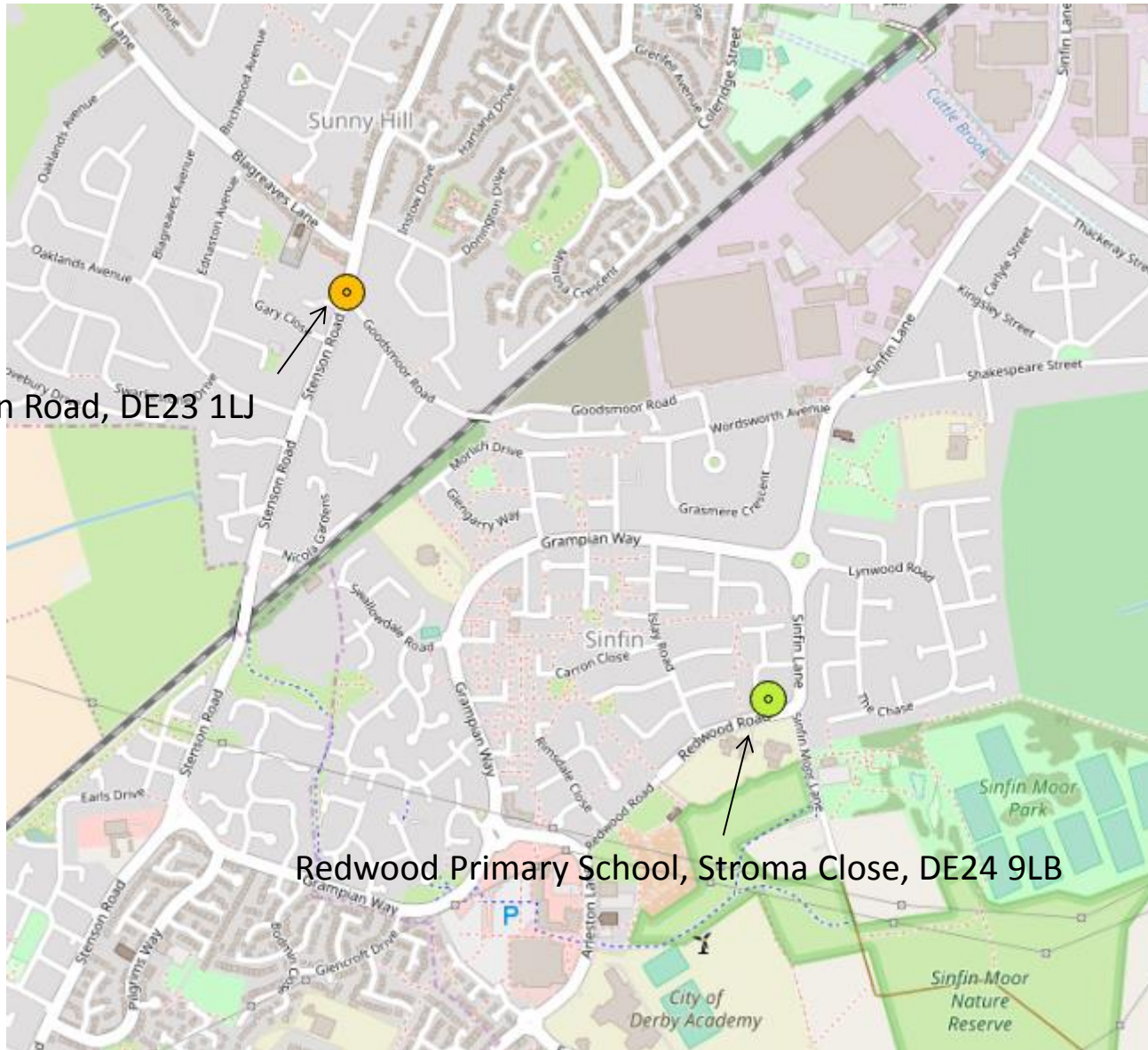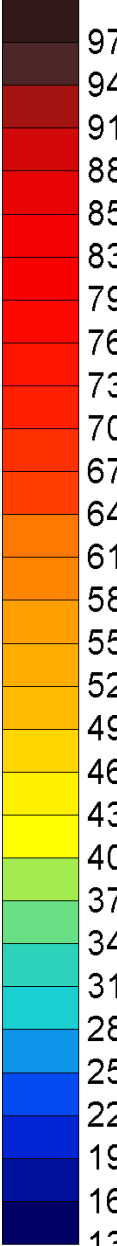
St Thomas Rd/ Portland St, DE23 8SW

Randolph Road (Bust stop), DE23 8SY

Palm Court Island, DE221JN

Village Street DE23 8SZ

DE13EQ

Alice St, DE1 2BY

Stenson Road, DE23 1LJ

Stanhope Street, DE23 3XB

Kedleston Road (Post Office), DE22 1HW

Pasture Hill, Littleover, DE23 3DT

88 Dean St, DE22 3PT

Haslams Ln/ Alfreton Rd, DE21 4AF

Broadway,DE22 1BN

Redwood Primary School Stroma Close,DE24 9LB

70 Caxton Street, Sunny Hill, DE23 1RA

Squires Way, DE23 3XB

Legal limit →

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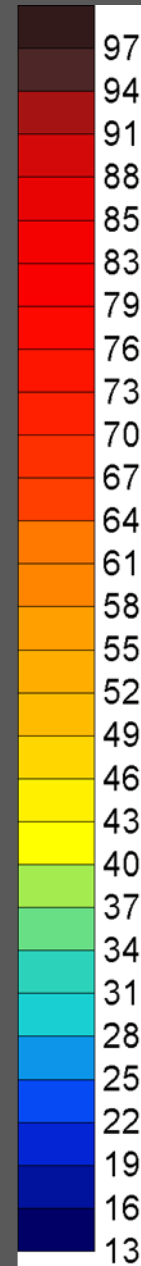
Tabled Results

Location	Data (µg/m³) (Annualised)	Data (µg/m³) (Non Annualised)
St Thomas Rd/ Portland St, DE23 8SW	97.4	59.9
Randolph Road (Bust stop), DE23 8SY	89.5	55.0
Palm Court Island, DE221JN	61.9	38.1
Village Street DE23 8SZ	60.8	37.4
DE13EQ	58.8	36.2
Alice St, DE1 2BY	57.4	35.3
Stenson Road, DE23 1LJ	56.3	34.6
Stanhope Street, DE23 3XB	54.7	33.6
Kedleston Road (Post Office), DE22 1HW	48.4	29.8
Pasture Hill, Littleover, DE23 3DT	45.1	27.7
88 Dean St, DE22 3PT	41.9	25.8
Haslams Ln/ Alfreton Rd, DE21 4AF	39.8	24.5
Broadway,DE22 1BN	35.0	21.5
Redwood Primary School Stroma Close,DE24 9LB	32.9	20.2
70 Caxton Street, Sunny Hill, DE23 1RA	26.9	16.6
Squires Way, DE23 3XB	24.6	15.2

Local Monitoring Data
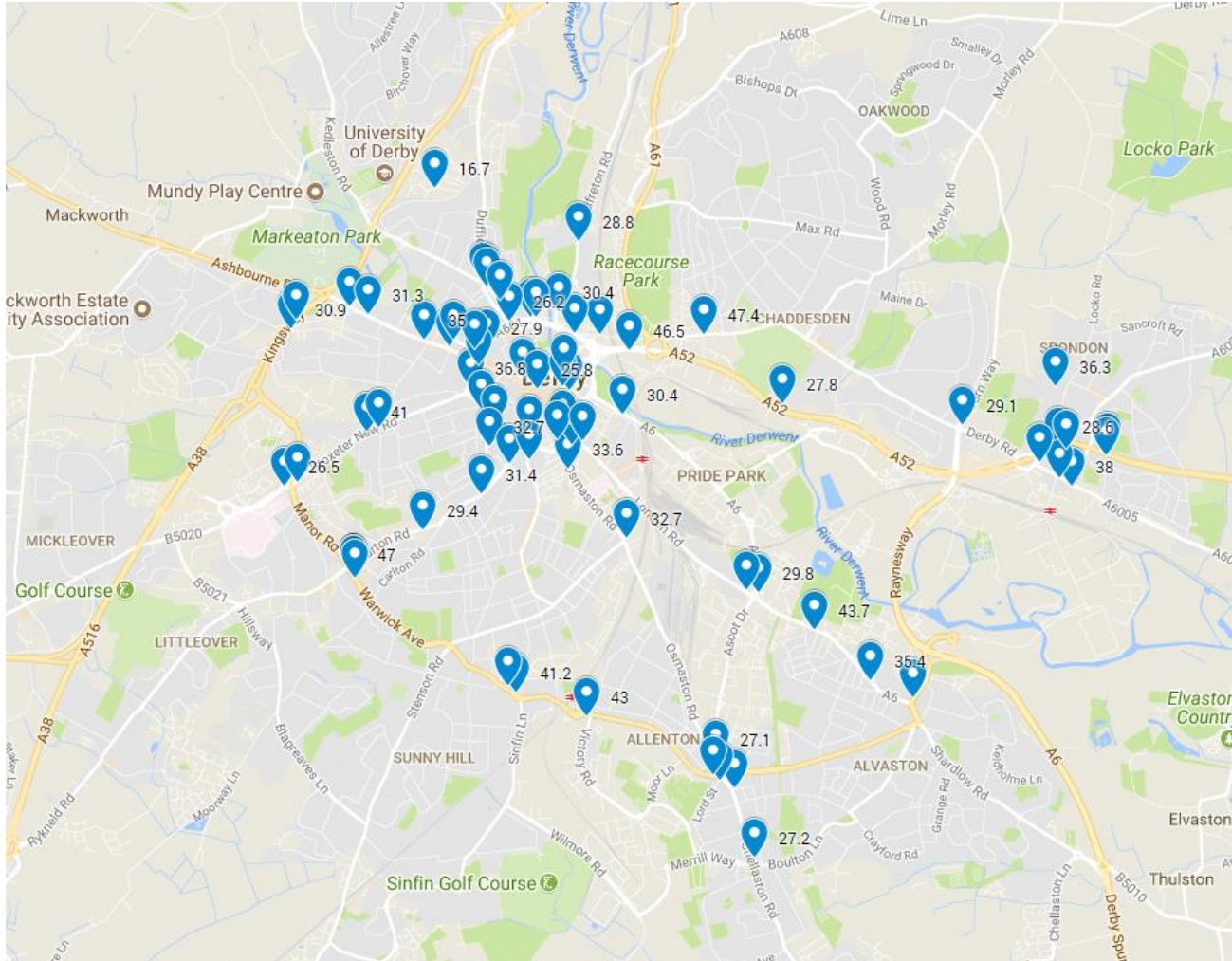
Automatic Monitoring Station

16th July 07:00

July 19th 07:00

Saturday 20th July 06:00

Derby St Alkmund's Way

Measured data from 09/07/2018 to 23/07/2018

NOXasNO2

Concentration µg/m³

250

200

150

100

50

0

9. Jul   10. Jul   11. Jul   12. Jul   13. Jul   14. Jul   15. Jul   16. Jul   17. Jul   18. Jul   19. Jul   20. Jul   21. Jul   22. Jul   23. Jul   24. Jul

Date and time

Highcharts.com

UK-Air, DEFRA

Monday 18th July 08:00
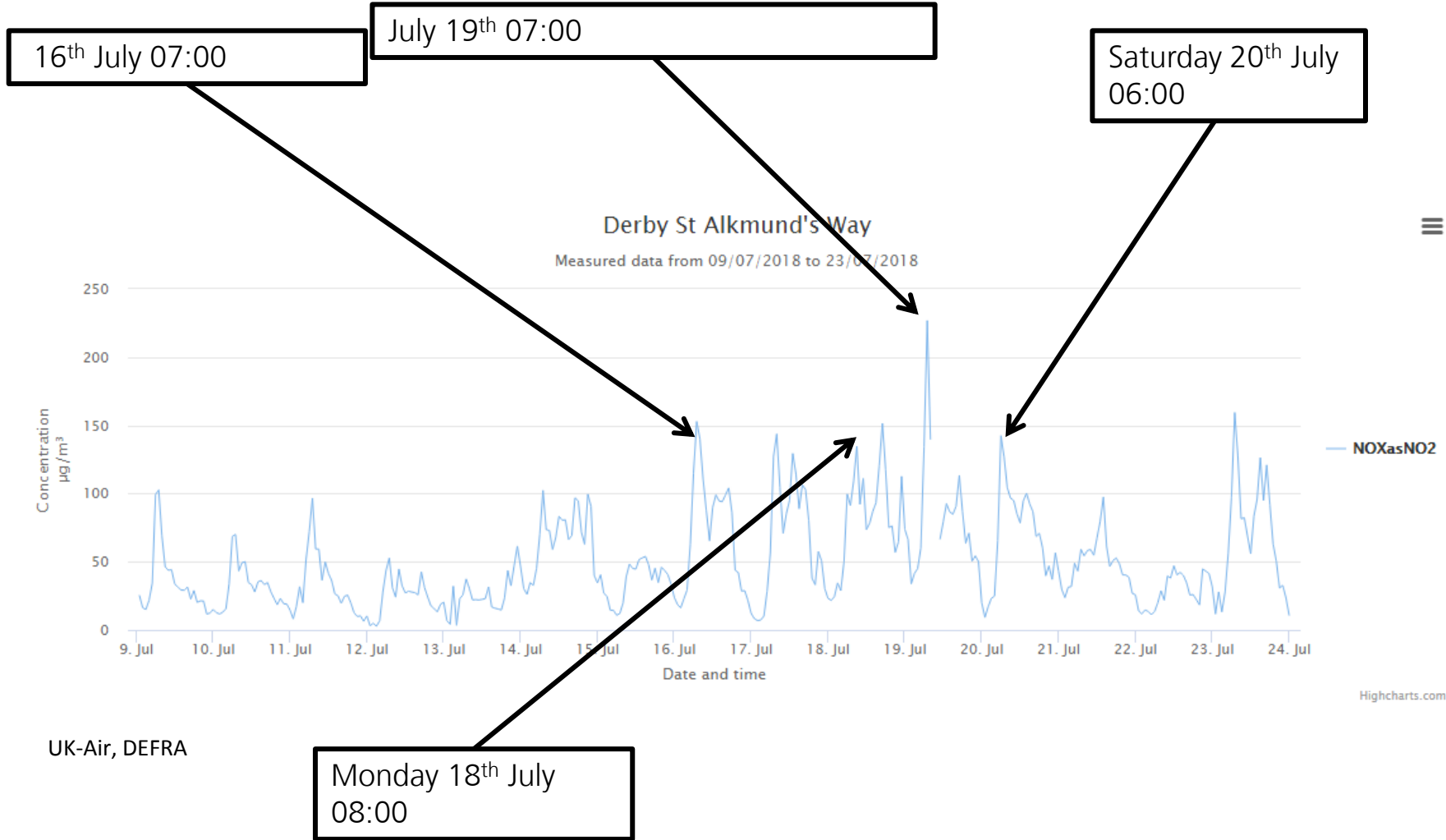
Data analysis

Think about why the results are the way they are.

- What causes pollution?
- Why are the results so different?
- Can you identify any patterns in the data? Are there any anomalies?
- What do the high pollution areas have in common?
- What do the low pollution areas have in common?
- Are you surprised by any of these results?

What can be done?

Health and Wellbeing Boards

APPENDIX 1 PLAN ON A PAGE

Vision

Our vision is to improve the health and wellbeing of the people of the city and to reduce inequalities

Objectives

Objective 1: Health and social care system transformation

Transforming how we think about, provide and access services locally. To do this we will need:
- To have a common purpose
- Strong and effective leadership
- Appropriate ownership and accountability.

Objective 2: To shift care closer to the individual

When care and support is needed, it:
- Is planned by working together and considerate of the individuals needs
- Enables individual choice and control
- Is delivered in a joined up way.

Objective 3: To reduce inequalities

Ending unjust inequalities in health and wellbeing, supporting everyone to live long, healthy lives:
- Tackling social inequalities
- Increasing opportunities for healthy lifestyle choices.

How

Prevention and early intervention
Giving children the best start; promoting healthy lifestyle choices; population immunisation; screening and early diagnosis.

Promoting control, independence and responsibility
Providing suitable and accessible information and appropriate support and education to enable this to happen.

Building strong and resilient individuals and communities
Supporting the development of close and meaningful relationships, strong networks and developing communities.

Making every contact count
Using every opportunity and contact we have with local people every day to make a difference to their health and wellbeing

Enablers

Effective use of our money | Community assets | A responsive and well-skilled workforce | High quality, joined up information

Principles
- To be person-centred
- To have parity of esteem of physical and mental health
- To deliver care which is integrated and seamless
- To deliver care which is safe and effective
- To deliver good quality care and services.

https://www.derby.gov.uk/media/derbycitycouncil/contentassets/documents/strategies/DerbyCityCouncil-Health-and-Wellbeing-Strategy-2014-19.pdf

Health and Wellbeing Boards

Prevention and early intervention
Giving children the best start; promoting healthy lifestyle choices; population immunisation; screening and early diagnosis.

Promoting control, independence and responsibility
Providing suitable and accessible information and appropriate support and education to enable this to happen.

Engaging the Community

- **Monitor** (e.g. additional monitoring)
- **Share** (e.g. present results to wider community)
- **Organise** (e.g. create no idling campaign, respond to Clean Air Zone consultation)

Monitor
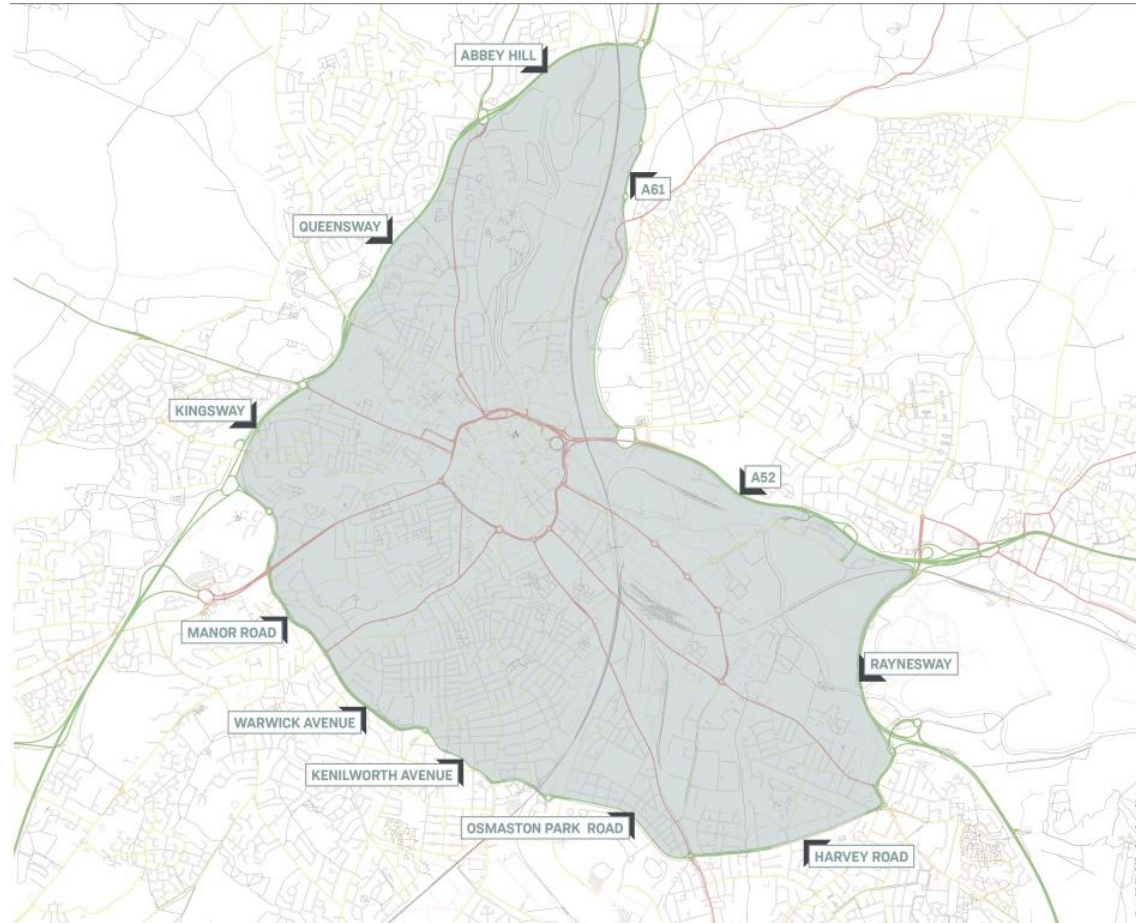
Share: Present results on stall
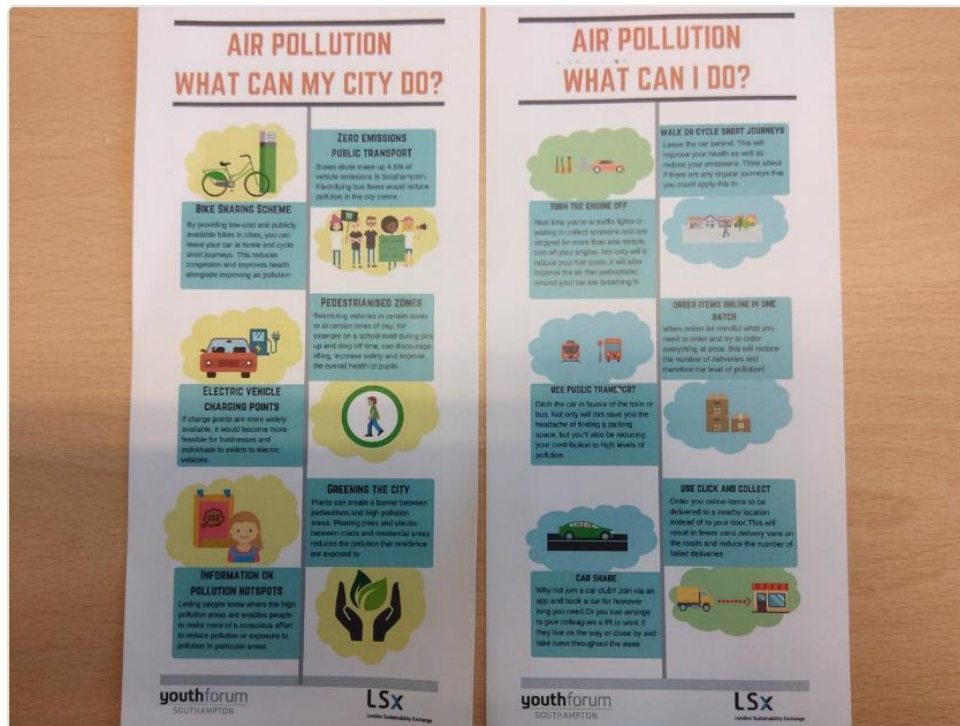
Influence the planning process

- Contact local councillor
- Contact cabinet member
- Respond to Clean Air Zone consultation
- Respond to Air Quality Strategy – LSx Webinar
- Request additional monitoring and research in the high pollution areas identified
- Attend LSx working session in Autumn

Organise: Contact cabinet member

- [Regeneration and Public Protection: Cllr Holmes](#)

- [Adults, Health and Housing: Cllr Webb](#)

- [Communities,Neighbourhoods and Streetpride: Cllr Smale](#)

Organise: Respond to the consultation

- Derby City Council has submitted three different strategies to deal with the air pollution problem.

- You can respond to the consultation and voice your opinion on the potential options on the city council website.

https://www.derby.gov.uk/transport-and-streets/air-quality-in-derby/tackling-poor-air-quality/public-consultation/#d.en.77630

Organise: Proposed Option 1

Preferred council option:

Focussed on traffic management and signal schemes along Stafford Street.

Encourages scrapping of vehicles that are non-compliant by providing money towards purchasing cleaner vehicles.

Organise: Proposed Option 2
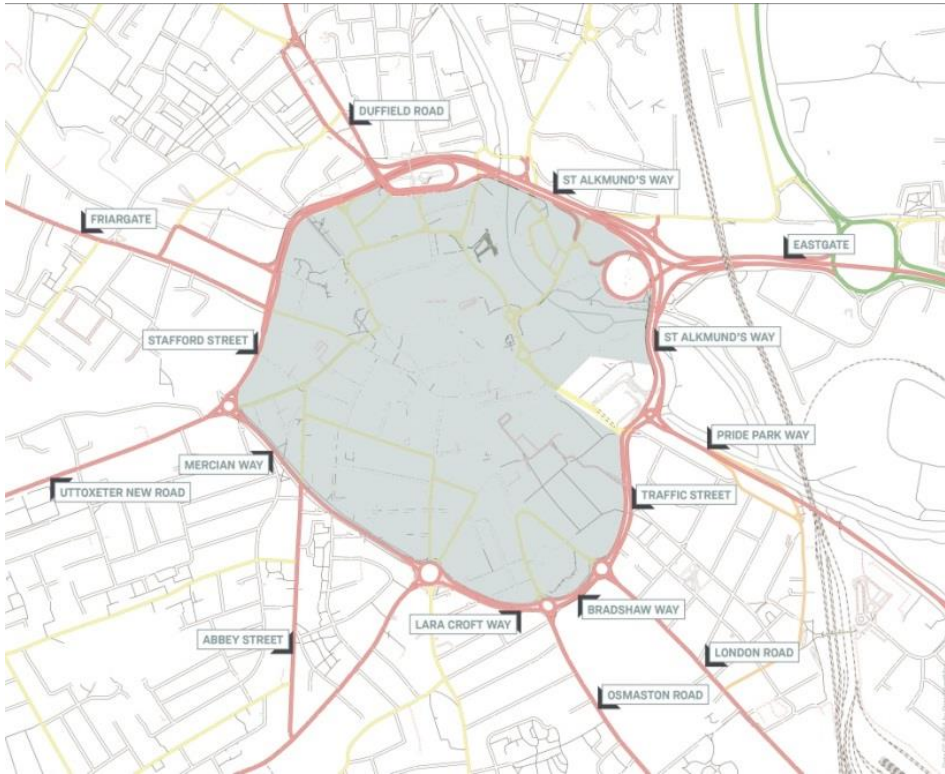
Clean Air Zone Class D : Charging buses, lorries, vans, cars and taxis.

Located around the inner ring road

Also includes traffic measurements along Stafford Street and 'stronger' scrappage schemes compared to Option 1.

Charging rates:
Cars & small vans : £6 - 12.50
Taxis and Private Hire: £12.50
Buses, Coaches and HGV's: up to £100

Organise: Proposed Option 3
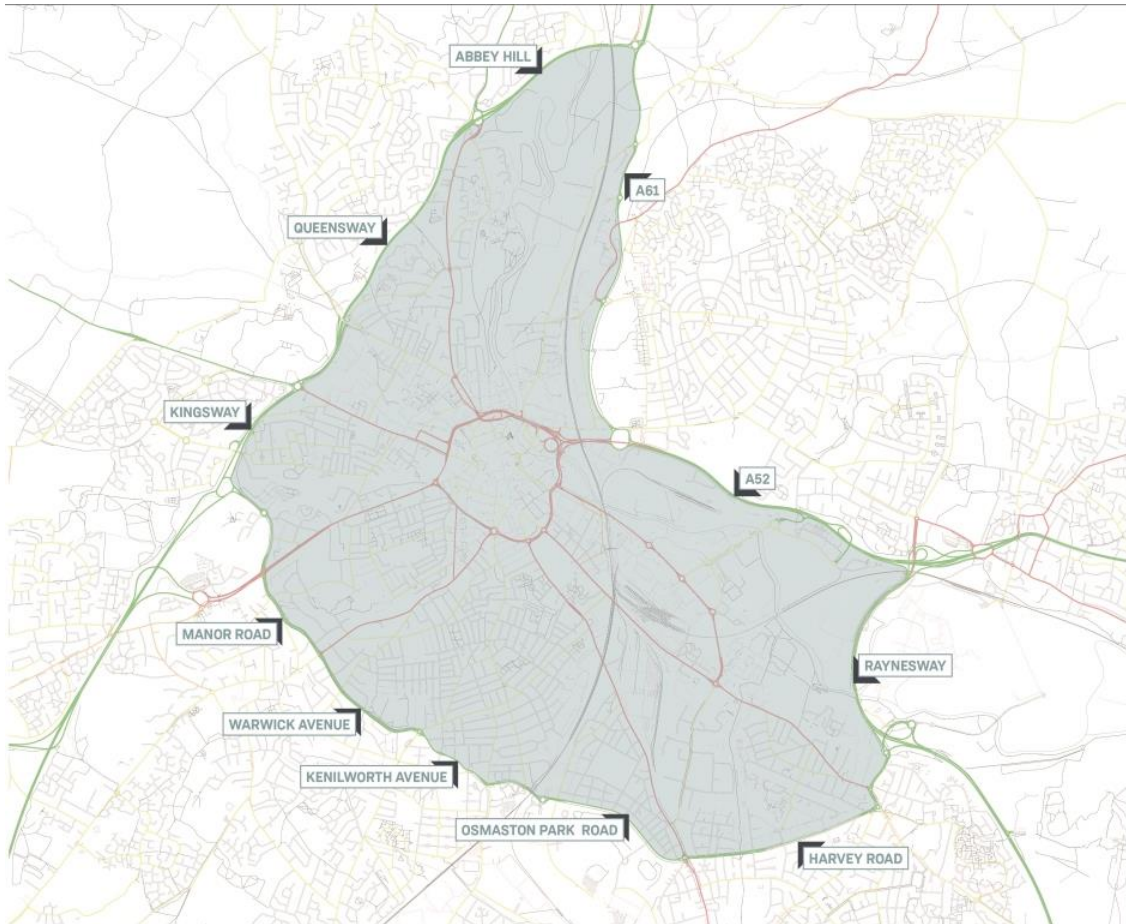
Clean Air Zone Class D : Charging buses, lorries, vans, cars and taxis.

Located within the outer ring road

Also includes traffic measurements along Stafford Street and 'stronger' scrappage schemes compared to Option 2.

Organise: Comparing the options
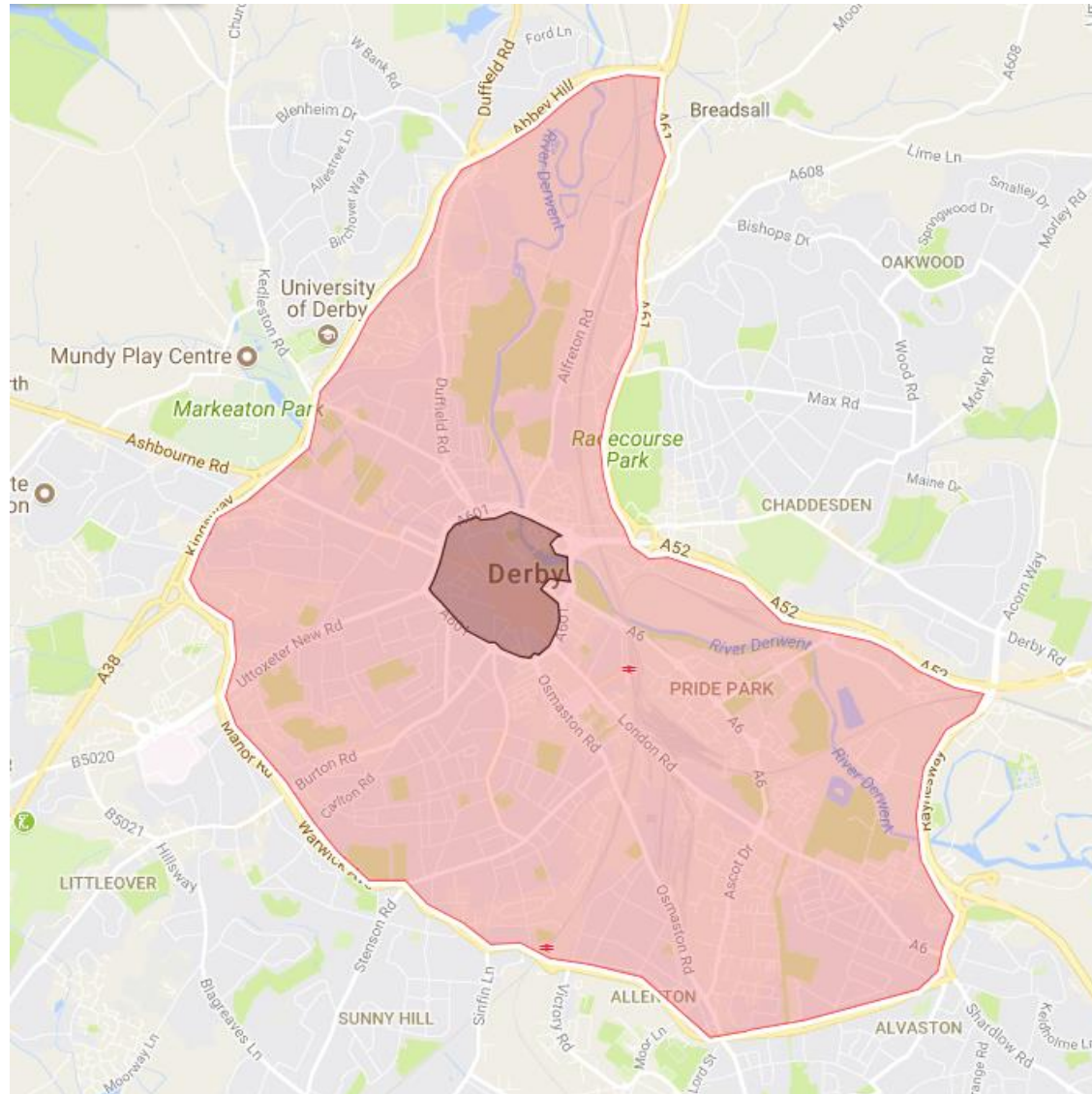
Organise: Comparing the options
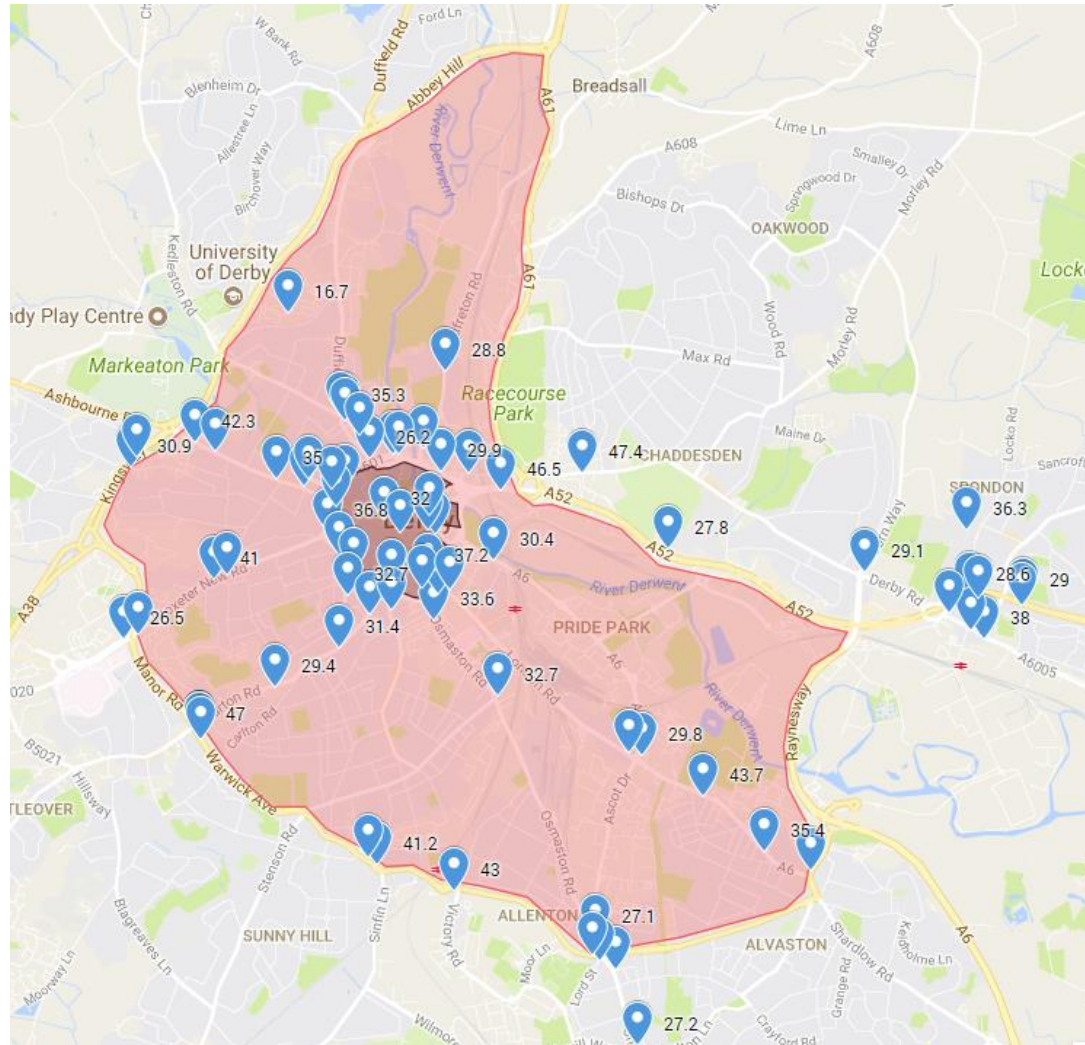
Organise: LSx results
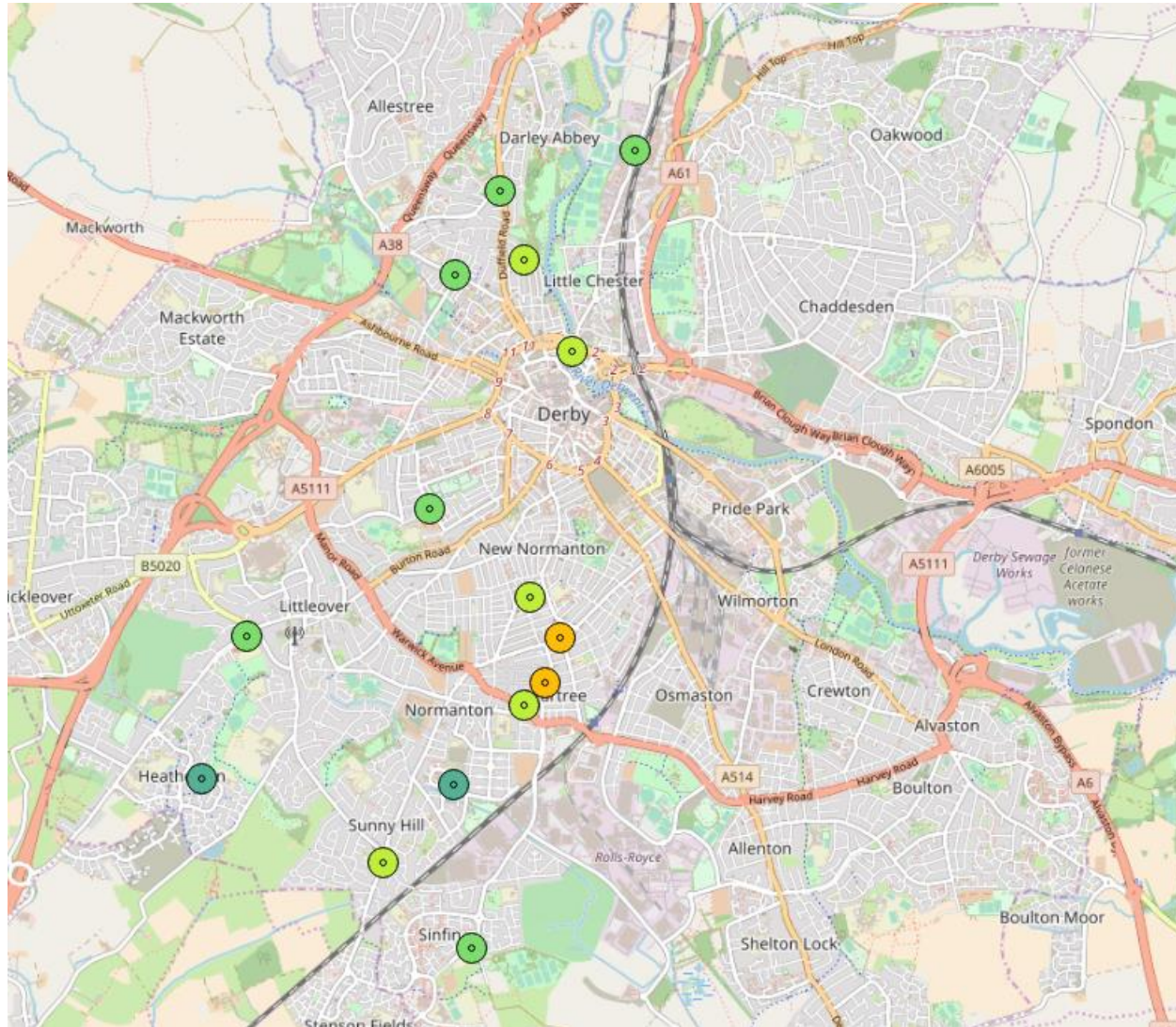
Other ideas...

- Raising Awareness

- Reducing Exposure

- Reducing Emissions

Raise awareness

- Social Media campaign
- Awareness-raising event
- Posters highlighting problem
- Present to another community group/wider community e.g. Oppose the Alfreton Road Incinerator
- Combine results with other data e.g. Friends of the Earth

Reducing Exposure

HAVE A HEALTHY LIFESTYLE

Maximise your resilience to the negative health impacts of air pollution by adopting a healthy diet and exercising regularly.

SIGN UP TO THE POLLUTION ALERT APP

CleanSpace™

Stay up to date with any pollution alerts in your city to be aware of days of higher pollution with CleanSpace app. By knowing which days are particularly high, you can make additional efforts to avoid polluted areas.

PUT POSTERS UP IN HIGH POLLUTION AREAS

CO2

Raise awareness by putting up posters or banners informing and reminding the community of high pollution areas and how they can help reduce the pollution.

VENTILATE YOUR HOME

Indoor smoke is a serious health risk for people, caused by fumes from cleaning products, heating and cooking. By ventilating your house you can avoid being exposed to indoor pollution.

TAKE A QUIETER ROUTE

Both pollutant gases and fine particulates irritate and inflame the lungs, leading to respiratory problems and more than 4 million premature deaths per year worldwide. Avoid being exposed to high levels of air pollution on your daily journey to school or work by using less polluted, smaller roads.

TREE PLANTING AND GREENING PROJECTS

Green screens, such as ivy walls, have proven to be a highly successful and cost effective method of reducing NO2 levels. A Kings College London University study demonstrated how this method can reduce NO2 pollution by 22% in the immediate area.

LSx

Reducing Exposure

- Walk down quieter routes

- Turn off your engine if stopped for more than one minute

- In-car recirculation when in congestion

Reducing exposure

- Use pollution monitoring apps/websites
  - ClearSpace
  - AQICN.org
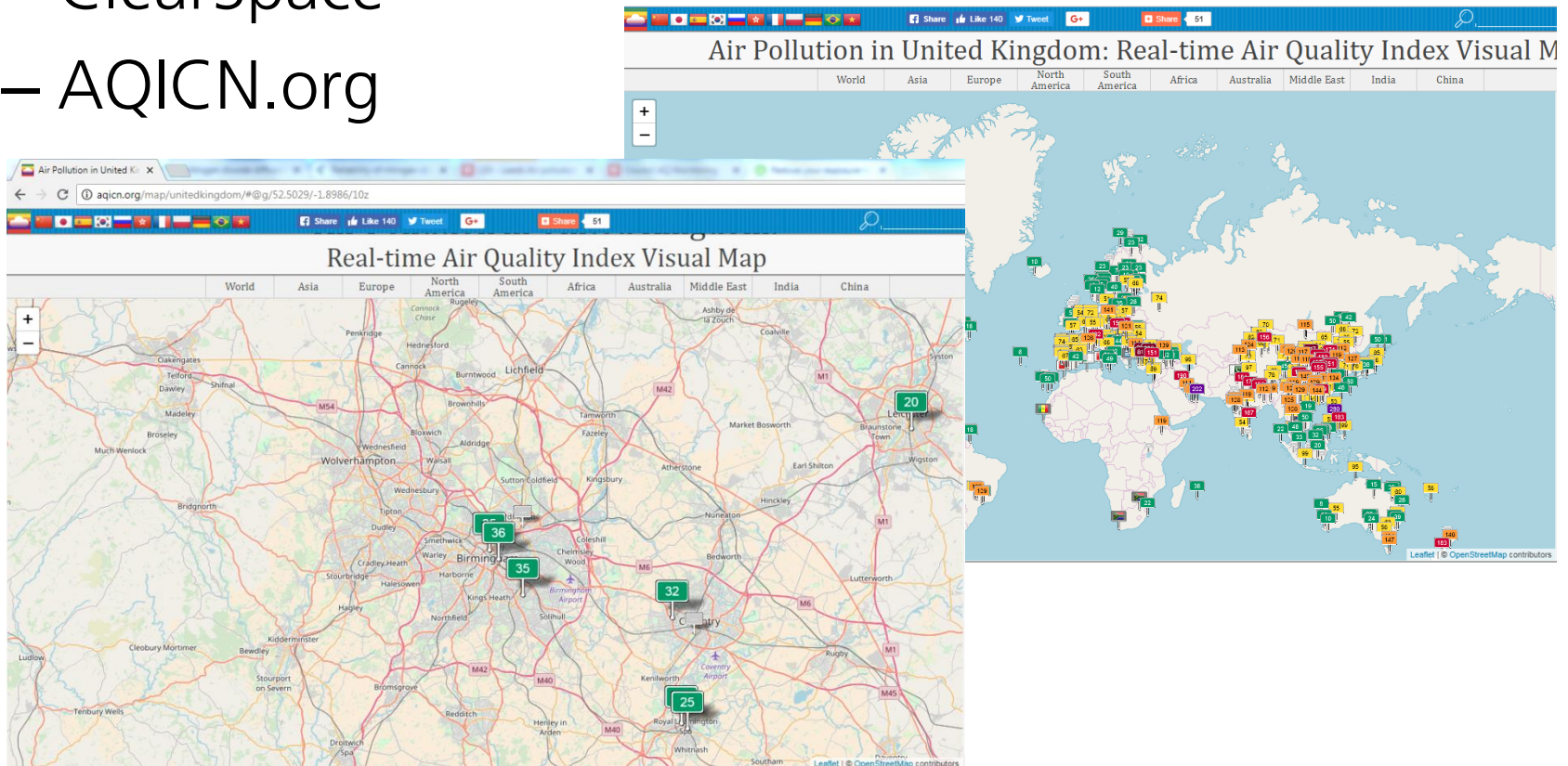
Reducing emissions

- No idling – turn engine off when stopped for more than one minute
- Walk or cycle short distances
- Join a car club
- Start car sharing with a colleague
- Walk or cycle to school

ORDER ONLINE ITEMS IN ONE BATCH

Ordering all items at once from the same company will help cut down on the number of trips needed for delivery. This will reduce the number of vans on the road and therefore help to reduce pollution.

LSx
London Sustainability Exchange

CAMPAIGN FOR ANTI-IDLING

NO IDLING
TURN ENGINE OFF

An idling car will waste over 2 litres of fuel per hour, wasting money and leading to unnecessary pollution. Campaigns for anti-idling with simple actions such as patrolling the streets and informing motorists.

LSx
London Sustainability Exchange

USE THE CORRECT FUEL IN A WOOD BURNING STOVE

Burning wood in the burning stove at home produces great amounts of air pollutants. You can avoid being exposed to pollutants by using Ecodesign ready and Defra exempt stoves and choosing the right fuel (Ready to Burn or dry wood).

LSx

DRIVE EFFICIENTLY & AVOID IDLING VEHICLES

Save on fuel and pollutant emissions with a few simple steps to drive more efficiently: press the accelerator and brakes pedals gently, and avoid spurts of acceleration. Turn off the engine if your car is stopped for longer than a minute to avoid unnecessary emissions.

LSx

AVOID DRIVING SHORT JOURNEYS

You can cut down on pollution by choosing to walk and cycle for short journeys, leaving your car at home. Aside from the health benefits, it has the potential to reduce your exposure to air pollution.

LSx

LOBBY FOR ELECTRIC VEHICLES CHARGING POINTS

Over 4,000 new electric cars are registered each month with drivers in the UK and are dependent on charging points to work effectively. To encourage the use of electric vehicles, lobby for the provision of charging points.

LSx

LOBBY FOR BETTER PUBLIC TRANSPORTATION

We want eco transport

Public transport should be attractive, affordable and easy to use, as well as utilise as many low-emission mechanisms as possible in order to encourage the public to switch from private vehicles to public transport. This will reduce the number of vehicles on the road and, in turn, reduce air pollution.

LSx

CAR SHARING & CAR CLUBS

Share your car with family, friends and colleagues to cut on multiple trips; save on the cost of owning a car by creating or joining a car club in your community. Both will help reduce air pollution as well as congestion on streets.

LSx

ENGAGE LOCAL BUSINESSES

100% SUSTAINABLE ECO FRIENDLY

Local businesses can be engaged in sustainability campaigns in imaginative and creative ways. For example, the council could implement a 'Green Certification' to recognise businesses that adhere to a code of sustainable practices, contributing to a culture of sustainability.

LSx

CHOOSE CLICK & COLLECT

Opting to click and collect your online orders from a convenient location instead of home delivery will reduce the number of vans on the road every day, the number of failed deliveries and help reduce pollution

LSx

TAKE PUBLIC TRANSPORTATION

Choose public transport instead of your own car for your daily journey to school or work to greatly cut on congestion on the streets and air pollution.

LSx

BUY CLEANER VEHICLES

Diesel car ownership has been encouraged by national policy, however, these vehicles generate significantly higher emissions and will produce 3.65 tonnes of CO2 than a patrol car during its life cycle. Consider switching to low carbon vehicles, which can be as much as £4,500 for a new car or £8,000 for a new van.

LSx

TRAFFIC RESTRICTIONS

No driving zone

'Traffic exclusion zones' can be implemented around schools to reduce emissions children are exposed to which can have long lasting effects on children's respiratory system.

LSx

LOBBY FOR BIKING

Bike Share

Public bike sharing schemes are popular low-emission initiatives, particularly amongst commuters. Cycling short journeys instead of driving can help to save, money and improve public health amongst users whilst reducing air pollution.

LSx

Reducing emissions? Children

- 1 in 5 cars on the road during rush hour are taking children to school

- Around 80% of children do not achieve daily recommended exercise

www.livingstreets.org.uk

Reducing emissions? Children

- Join or create a walking bus to school
  - E.g. http://crocodile.org.uk/
- Walk or cycle to school
  - Ask the school to join Living Streets' WOW campaign www.livingstreets.org.uk

Derby Clean Air Zone Consultation Survey

Options being considered

Option 1 – Preferred option - traffic management measures

Significant signal, network & traffic management initiates,
In the vicinity of the Stafford Street exceedance & wider affected area

- Specific / targeted signal & network management affecting site of NO₂ exceedance
- Signal and network management reviews to prioritise air quality agenda, queue relocation, manage traffic flows / vehicle types
- Effective deliverable (within in the "shortest possible" timeframe) measures

Targeted - Clean Air Incentive Scheme (CAIS)
- Targeted accelerated fleet renewal to vehicles with greatest adverse impact on areas on NO₂ exceedance
- Incentives to upgrade or switch to low emission
- Mobility credits for switching to low emission

Low Emission measures
- Electric vehicle infrastructure - further roll-out of charging infrastructure
- initiatives for businesses (delivery goods & services).

Option 2 – Chargeable CAZ within inner ring road

Chargeable Clean Air Zone - within the inner ring road
- Class D (HGV's, Buses / Coaches, Hackney Carriages / Private Hire Vehicles. LGV's & Cars),
- 24hours /7 days a week,
- Charge would apply only to vehicles which do not meet emissions standards (Euro 4 (petrol), Euro 6 (diesel), Euro VI (bus / HGV)). Two options:

Signal, network & traffic management initiates, in the vicinity of the Stafford Street exceedance
- Specific / targeted signal & network management affecting site of NO2 exceedance

More significant - Clean Air Incentive Scheme (CAIS)
- Accelerated fleet renewal aimed at vehicles with greatest adverse impact on areas on NO₂ exceedance
- Graduated incentives to upgrade or switch to low emission / sustainable modes
- Mobility credits for switching to low emission / sustainable modes

Low Emission measures
- Electric vehicle infrastructure - further roll-out of charging infrastructure
- initiatives for businesses (delivery goods & services).

Option 3 - Chargeable CAZ within outer ring road

Chargeable Clean Air Zone -within the outer ring road
- Class D (HGV's, Buses / Coaches, Hackney Carriages / Private Hire Vehicles. LGV's & Cars),
- 24hours /7 days a week,
- Charge would apply only to vehicles which do not meet emissions standards (Euro 4 (petrol), Euro 6 (diesel), Euro VI (bus / HGV)).

Signal, network & traffic management initiates, in the vicinity of the Stafford Street exceedance
- Specific / targeted signal & network management affecting site of NO2 exceedance

More significant - Clean Air Incentive Scheme (CAIS)
- Accelerated fleet renewal aimed at vehicles with greatest adverse impact on areas on NO₂ exceedance
- Graduated incentives to upgrade or switch to low emission / sustainable modes
- Mobility credits for switching to low emission / sustainable modes

Low Emission measures
- Electric vehicle infrastructure - further roll-out of charging infrastructure
- initiatives for businesses (delivery goods & services).

Supporting / existing and ongoing complementary measures
Including smarter choices such as eBike, significant cycle / walking infrastructure investment and other existing transport programmes/initiatives

NO₂ compliance

Derby Clean Air Zone Consultation Survey

Are there areas in Derby where you believe you have experienced poor air quality? *(Please select one)*

○ Yes
○ No
○ Don't know

How much do you think the following contribute to air quality issues in Derby? *(Please select one on each row)*

	A lot	A little	Not at all	Don't know
Heavy goods vehicles	○	○	○	○
Large vans	○	○	○	○
Buses	○	○	○	○
Coaches	○	○	○	○
Taxis/Private hire vehicles	○	○	○	○
Petrol cars	○	○	○	○
Diesel cars	○	○	○	○
Traffic congestion / engine idling	○	○	○	○
Business/industry	○	○	○	○
Other	○	○	○	○

Do you think air quality needs to be improved in Derby? *(Please select one)*

○ Yes
○ No
○ Don't know

What modes of transport do you currently use? *(Please select all that apply)*

- [ ] Walking
- [ ] Cycling
- [ ] Bus
- [ ] Train
- [ ] Park and ride
- [ ] Car (car share)
- [ ] Car (solo use)
- [ ] Electric vehicles

Would you consider any of the following measures to improve air quality in Derby? *(Please select all that apply)*

- [ ] Consider purchasing an electric vehicle
- [ ] Use public transport more
- [ ] Cycle more - particularly for journeys under 3 miles
- [ ] Walk more - particularly for journeys under 3 miles
- [ ] Switching off the car engine when in stationary traffic
- [ ] Car share
- [ ] Think about the type of transport you use for each journey to minimise air quality impacts

Are there any barriers to you using cleaner alternative modes of transport?

- [x] Yes
- [ ] No

You said that there were barriers to you using cleaner alternative modes of transport, what are those barriers? *(Please write in the space below)*

[   ]

As part of our work to create cleaner air solutions for Derby we have developed a draft Low Emissions Summary which we would like your views on.

The draft Low Emissions Summary identifies a series of measures that, if combined, could have a positive impact on air quality in Derby. We recognise that Derby City Council needs to lead by example so we have included key elements where improvements can be made in Planning, Licensing, regulation, procurement practices and through the implementation of an updated Derby City Council Travel Plan.

In addition, the summary identifies steps by which the Council could help businesses in the delivery of goods and services through facilitating the uptake of low emission vehicles, creating delivery service plans and debating the need for regional delivery and distribution centres.

This question relates to <u>accelerating the change to low emission vehicles</u> from the draft Low Emissions Summary document.

How strongly do you agree/disagree that Derby City Council should take the following actions forward? *(Please select one per row)*

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
Greater investment in electric vehicle charge points	○	○	○	○	○	○
Leading by example through Planning, Licensing and regulation	○	○	○	○	○	○
Reducing parking charges for electric vehicles	○	○	○	○	○	○
Working with businesses on the delivery of goods and services, for example central delivery centres	○	○	○	○	○	○

The low emissions summary outlines an integrated package of measures designed to reduce air pollutant emissions .

https://www.derby.gov.uk/media/derbycitycouncil/contentassets/images/transport/airquality/LES%20Summary%20V2%2020160718.pdf

Summary Table

Measure	Area			Mechanism			Timeframe	
	City Centre	Key Corridor	City wide	Lead	Regulate	Encourage	By 2020	Beyond 2020
Lead by example								
Low emission council fleet			✓	✓			✓	
Staff travel plan	✓		✓	✓			✓	✓
Managing demand								
Encourage active travel			✓			✓	✓	
Workplace parking levy			✓		✓			✓
Environmental corridors								
Bus priority		✓			✓		✓	
New Park & Ride		✓			✓			✓
Working with businesses		✓				✓	✓	
Low emission buses								
Retrofit programme			✓			✓	✓	
Update bus partnership			✓			✓	✓	
Low emission taxis								
Licencing			✓		✓		✓	
Priority ranks	✓				✓		✓	
Charging facilities	✓					✓	✓	
EV strategy								
Charging infrastructure			✓			✓	✓	
Promotion			✓			✓	✓	
Clean Air Incentive Scheme			✓			✓	✓	

This question relates to <u>managing road space</u> to address air quality issues from the draft Low Emissions Summary document.

How strongly do you agree/disagree that Derby City Council should take the following actions forward? *(Please select one per row)*

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
Changing signals/network management at air quality exceedance sites	○	○	○	○	○	○
Giving priority to buses, cycling and walking	○	○	○	○	○	○
Increasing areas of pedestrianisation	○	○	○	○	○	○

Do you have any comments, suggestions or amendments you would like to see made to the draft Low Emissions Summary document?
(Please select one)
○ Yes
○ No

Option 1

Traffic management measures

Significant signal, network and traffic management initiates in the vicinity of the Stafford Street exceedance and wider affected area

- Specific / targeted signal and network management affecting site of NO_2 exceedance
- Signal and network management reviews to prioritise air quality agenda, queue relocation, manage traffic flows / vehicle types.

Targeted - Clean Air Incentive Scheme (CAIS)

- Targeted accelerated fleet renewal to vehicles with greatest adverse impact on areas on NO_2 exceedance
- Incentives to upgrade or switch to low emission
- Mobility credits for switching to low emission / sustainable modes.

Low Emission Strategy measures

- Electric vehicle infrastructure - further roll-out of charging infrastructure
- Initiatives for businesses (delivery goods and services).

FRIARGATE
STAFFORD STREET
FRIARY STREET
CURZON STREET
NEWLAND STREET
ABBEY STREET
MERCIAN WAY

Overall, to what extent do you agree with the main measures in Option 1? *(Please select one)*

○ Strongly agree
○ Agree
○ Neither agree nor disagree
○ Disagree
○ Strongly disagree
○ Don't know

If there is anything about Option 1 that you would change, please say in the box below.

Option 2

Chargeable Clean Air Zone within the Inner Ring Road

Signal, network and traffic management initiates in the vicinity of the Stafford Street exceedance
- Specific / targeted signal and network management affecting site of NO_2 exceedance.

More significant - Clean Air Incentive Scheme (CAIS)
- Accelerated fleet renewal aimed at vehicles with greatest adverse impact on areas on NO_2 exceedance
- Graduated incentives to upgrade or switch to low emission / sustainable modes
- Mobility credits for switching to low emission / sustainable modes.

Low Emission Strategy measures
- Electric vehicle infrastructure - further roll-out of charging infrastructure
- Initiatives for businesses (delivery goods and services).

Class D Vehicles
Charge would apply only to vehicles which do not meet emissions standards (Euro 4 (petrol), Euro 6 (diesel), Euro VI (Bus / HGV).

HGV's / LGV's   Buses / Coaches   Cars

Hackney Carriages / Private Hire Vehicles   24 hours / 7 days a week

Overall, to what extent do you agree with the main measures in Option 2? *(Please select one)*

- ○ Strongly agree
- ○ Agree
- ○ Neither agree nor disagree
- ○ Disagree
- ○ Strongly disagree
- ○ Don't know

If there is anything about Option 2 that you would change, please say in the box below.

Option 3

Signal, network and traffic management initiates in the vicinity of the Stafford Street exceedance
- Specific / targeted signal and network management affecting site of NO_2 exceedance.

More significant - Clean Air Incentive Scheme (CAIS)
- Accelerated fleet renewal aimed at vehicles with greatest adverse impact on areas on NO_2 exceedance
- Graduated incentives to upgrade or switch to low emission / sustainable modes
- Mobility credits for switching to low emission / sustainable modes.

Low Emission Strategy measures
- Electric vehicle infrastructure - further roll-out of charging infrastructure
- Initiatives for businesses (delivery goods and services).

Class D Vehicles
Charge would apply only to vehicles which do not meet emissions standards (Euro 4 (petrol), Euro 6 (diesel), Euro VI (Bus / HGV).
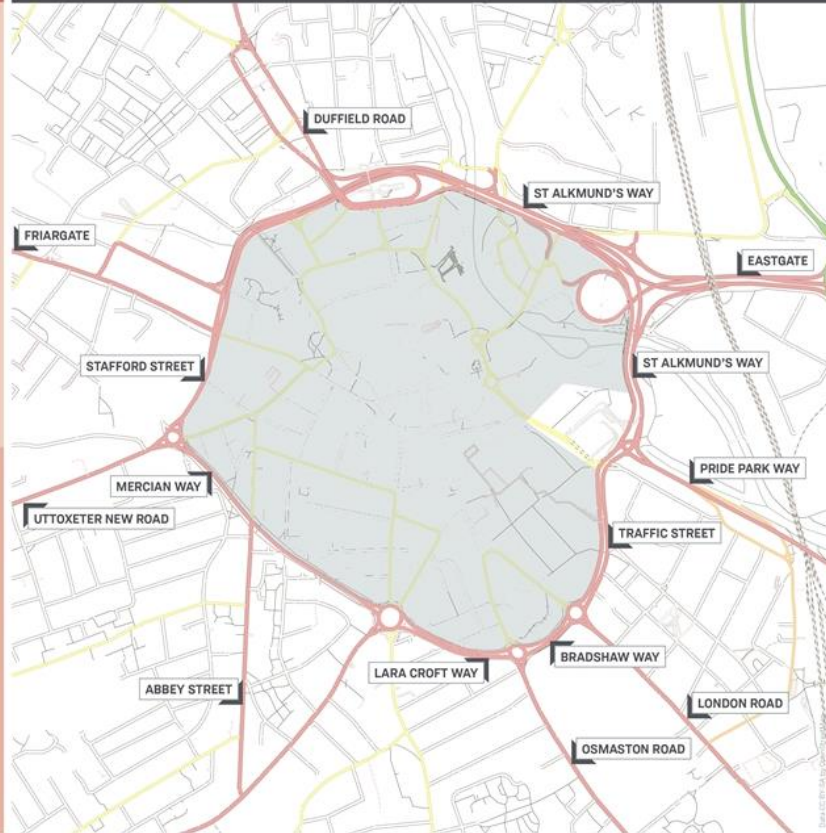
HGV's / LGV's   Buses / Coaches   Cars

Hackney Carriages / Private Hire Vehicles   24 hours / 7 days a week

Map labels: ABBEY HILL, A61, QUEENSWAY, KINGSWAY, A52, MANOR ROAD, RAYNESWAY, WARWICK AVENUE, KENILWORTH AVENUE, OSMASTON PARK ROAD, HARVEY ROAD

Overall, to what extent do you agree with the main measures in Option 3? *(Please select one)*
- ○ Strongly agree
- ○ Agree
- ○ Neither agree nor disagree
- ○ Disagree
- ○ Strongly disagree
- ○ Don't know

If there is anything about Option 3 that you would change, please say in the box below.

If either Option 2 or Option 3 were introduced, it is possible that a sunset period for certain vehicles that do not meet the emission compliant standard could be introduced. This would allow certain groups, such as residents, to be able to have a fixed period of time before having to comply with the restrictions.

If a 'sunset period' was introduced, how long do you think it should run? *(Please select one)*

○ 1 year
○ 2 years
○ 3 years

Do you have any concerns with the three options we are considering? *(Please say)*

Do you have any other suggestions to help improve air quality in Derby? *(Please say)*

Discussion

Connect with another city

- Birmingham
- London
- Southampton
- Nottingham
- Leeds

Behaviour change, Creating a campaign
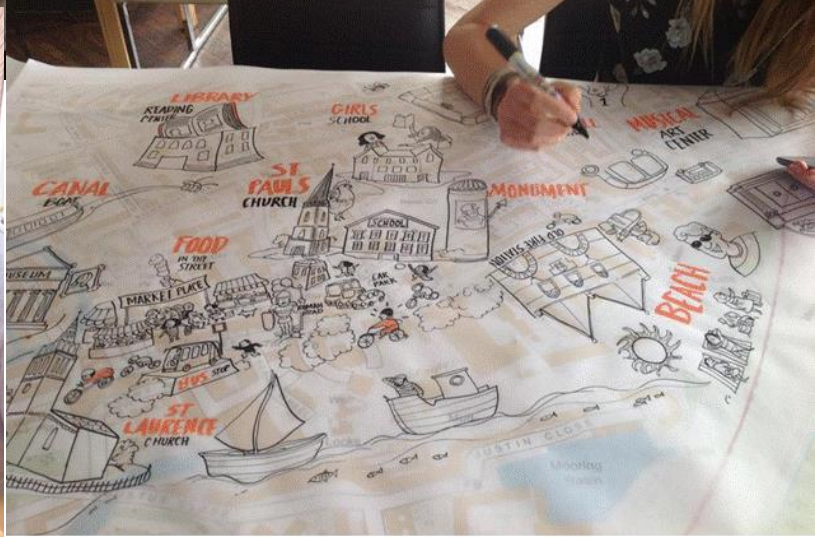
What motivates people?

What motivates people?

The power of competitive behaviours

Pressures of time

Expectations

Expected outcome

Intuitive action

Habit

Prejudice and bias

What others are doing

Likelihood of being caught out

Emotional reaction

Self & group identity

Social, economic, historical, cultural context

What motivates people?

1. People are affected by what others around them do

2. Habits are important

3. People are motivated to do the right thing

4. People's self expectations influence how they behave

5. People are loss averse

6. People are not always rational!

7. People need to feel involved and effective to make a change

Behavioural Economics,

7 principles for Policy-makers,

New Economics Foundation 2005

Creating a campaign (the basics)
What
Why
Who
Barriers
How
Measurement

Designing your campaign; WHAT?

- WHAT BEHAVIOUR are you targeting? For example;
- "We want LESS people to use BUSES for short journeys"
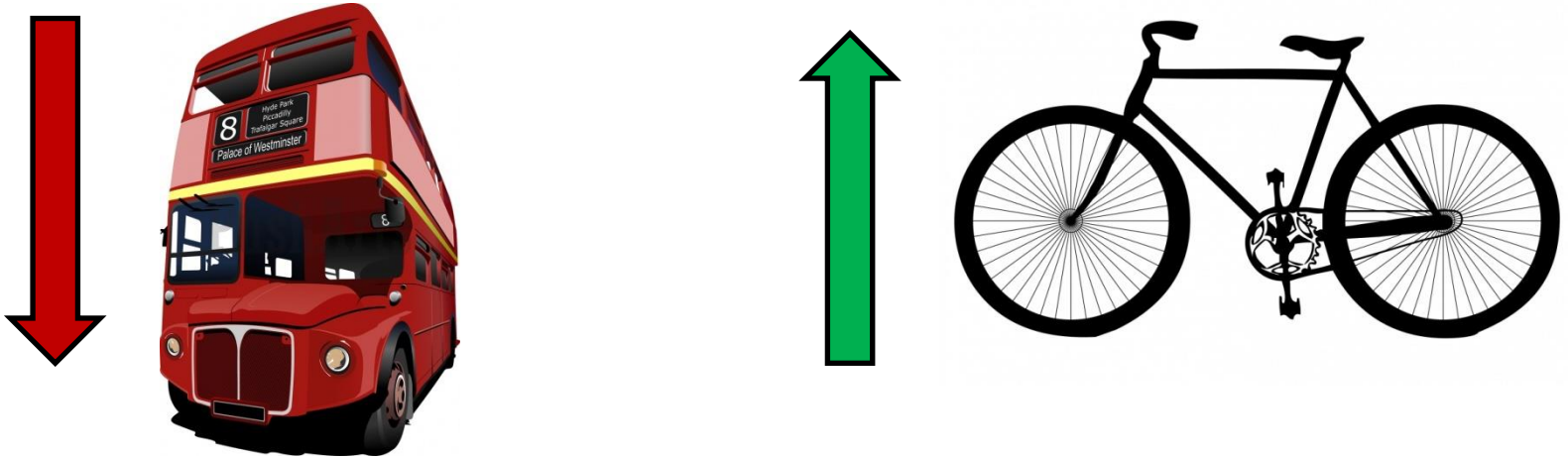
- "We want MORE people to ride a BICYCLE to work"
- "We want LESS London BUS ROUTES through our borough"

What?	Less people should idle their vehicles' engines

Designing your campaign; WHY?

- WHY are you targeting this behaviour? What is the MOTIVATION?

- Perhaps you chose to target a certain behaviour because of a pattern in the data.

- For example, maybe there is always more pollution on a certain road?

Why?	Map shows high NO2 readings near parking spaces

Designing your campaign; WHO?

- WHO are you targeting? For example;

- Local residents
- Students
- Family members
- Teachers
- Businesses

Who?	Taxi drivers who idle their engines whilst waiting

Designing your campaign; BARRIERS?

- You may face challenges in trying to deliver your campaign, which we will refer to as BARRIERS.

- For example, you might want to encourage pupils to walk 10 minutes down the road instead of getting the bus. But the BARRIER is that pupils have free bus travel and no motivation to change their journey to school. How will you OVERCOME this barrier?

Overcoming barriers?	Drivers do not know (or care) about the risks

Designing your campaign; HOW?

- HOW will you communicate your message? What METHOD will you use?

A song?

A leaflet?

A video?

An assembly?

How?	Drivers must be educated about pollution, and taught that they could save money on diesel by switching their engines off – will talk to them, put up posters and start a newspaper campaign

Designing your campaign; MEASUREMENT?

- You should **MEASURE** the effectiveness of your campaign
- Pick one **quantitative** monitoring method, e.g. Number of views on YouTube
- Pick one **qualitative** method, e.g. Surveys, Interviews

Measuring?	We will count the number of views our video has, and interview the year 7s that our project was aimed at

Designing your campaign; MEASUREMENT?

- How to Design a Survey:

1. Begin with the easier/shorter questions
2. Each question should only ask about one thing
3. You can create multiple choice questions, or open-ended questions
4. Avoid making biased or leading questions
5. Come up with no more than 5 questions for a single survey

You can create your own surveys and hand them out, or provide us with a list of questions and we will make an online survey for you using SurveyMonkey ®software!

Measuring?	We will count the number of views our video has, and interview the year 7s that our project is aimed at

Designing your campaign

Question	Example
What?	Less people should idle their vehicles' engines
Why?	Map shows high NO2 readings near parking spaces
Who?	Taxi drivers who idle their engines whilst waiting
Overcoming barriers?	Divers do not know (or care) about air pollution
How?	Drivers must be educated about pollution, and taught that they could save money on diesel by switching
Measurement?	No. Taxis idling, reduced number of taxis idling

- This is the table you will need to fill out in your teams. You must decide **what** your project aim is, **why** you are doing it, **who** you are aiming it at, what **barriers** you might face (and how to **overcome** them), **how** you are going to deliver your message, and how you might **measure** the success of the project!

London Sustainability Exchange

Discuss and Develop

High Impact

Unwilling

Willing

Low Impact

Goal	Relationships	Resources	Actions	Obstacles	Monitoring	Timeframe
No idling campaign outside polluted school	School, parents, pupils, council, local residents, business owners	Posters, letters home to parents, materials for presentation at school	Arrange meeting with school and/or parents group, speak at an assembly to talk to the pupils, design and put up posters outside schools to remind/inform parents, ask school to assign a no idling champion to remind parents	**Comfort** – e.g. heating car **Misconceptions** – e.g. drivers believe it's more efficient to keep car running **Time** and **money** for school to enforce	Survey parents before and after campaign	July

Next steps...

- When will you meet next?
- Who will do what?
- What do you need?

Thank you!