

Cumbria 2037: Decarbonising Mobility Futures

Journal in a day



Foreword

Transport is something we all use. Even in the digital age, we all need transport to connect with family, enjoy leisure, get to work, and to meet friends. Even if we never left the house we would still use transport indirectly, as we take deliveries from local shops or goods are transported from further afield.

While big-picture concepts like climate change and decarbonisation can feel remote or overwhelming, this journal shows how decarbonisation is possible and how we can all take action to make a difference.

We explore both the challenge and possibility of decarbonisation in Cumbria, examining:

- Where we are now
- What happens if we carry on as we are
- How we need to rethink our values if we are to address decarbonisation
- Potential decarbonised futures
- What we can do to shape desirable futures

This compact collection of ideas draws on evidence from over 80 researchers, policymakers, community organisations and local businesses who attended a Decarbon8 event in Cumbria on 22nd - 23rd November 2022. It was created during a 6 hour 'Instant Journal Design Sprint' facilitated by Nifty Fox Creative, to show what can be achieved when all the right people are in the right room at the right time.

We can act both together and individually to take on the challenge of decarbonisation and make a better future!



Where are we now?

We are in a mess. In Cumbria 47% of greenhouse gas emissions from Cumbria's residents and visitors relate to transport¹. We need key decision makers, organisations, and individuals to consider now how we might re-imagine the role transport plays in our lives, rather than leaving the problem for future generations, by which time it will be too late. In Cumbria we are still heavily reliant on motor vehicles which is leading to many issues including:

High carbon emissions per capita compared to other parts of the country

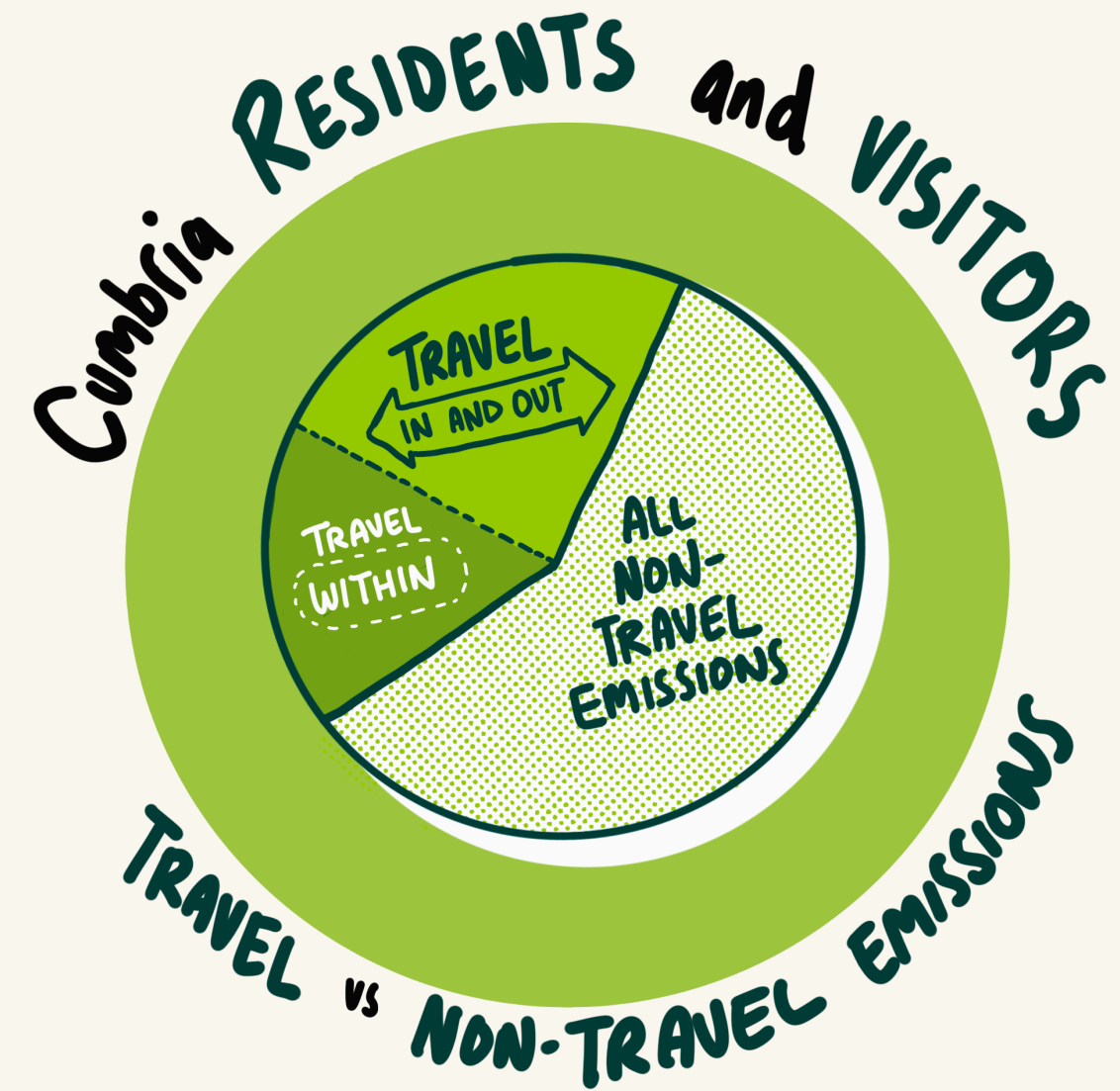
Limited options for people who do not drive (through choice, low income, disability or age)

Reduction in quality of life as villages, towns and valleys become more car-dependent

Cumbria comprises a diverse range of communities, from coastal villages to industrial towns and working landscapes. It is also a popular tourist destination, welcoming 47 million visitors per annum². At peak times cars dominate the landscape as visitor numbers increase at popular hotspots, impacting on the lives and livelihoods of those working and living in the area. This influx of vehicles damages the landscape and creates tensions between locals and visitors, which negatively affects the visitor economy. At the same time the lack of an integrated public transport network also deters those without cars from visiting the area.

We have pockets of good sustainable travel opportunities, including beautiful cycle and walking routes, bus services in some places, rail lines linking towns and villages and some excellent bus services. These pockets of potential excellence, however, remain fragmented and uncoordinated, forcing many to default to travelling by car if they are able. Although electric cars are becoming more widely adopted, this will not solve the congestion problem, and importantly will not do so in an equitable way. We cannot rely on technology alone to solve our problems.

Most people now acknowledge that we need to do something. But what?



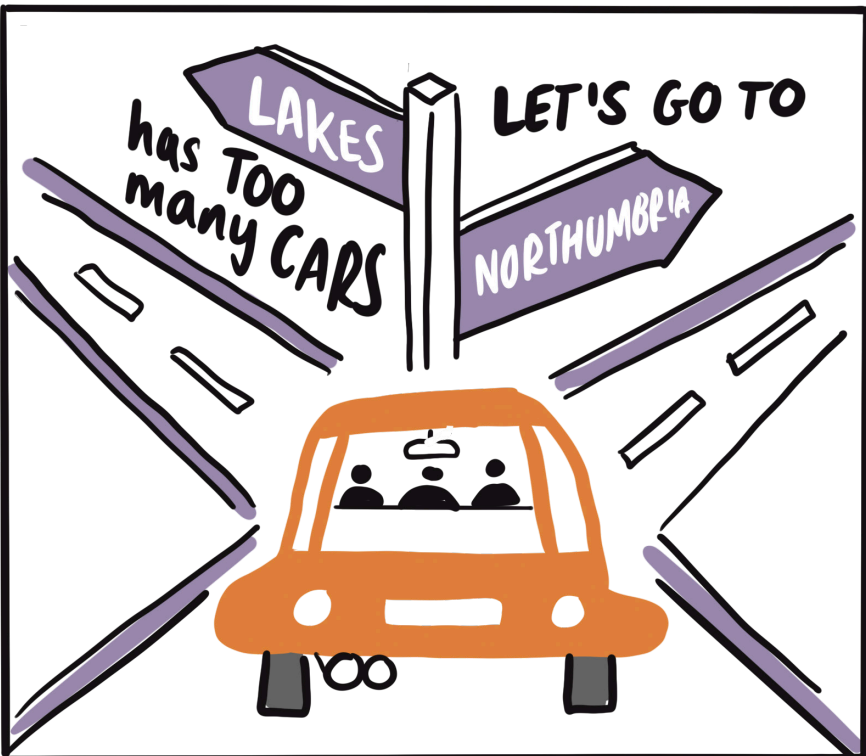
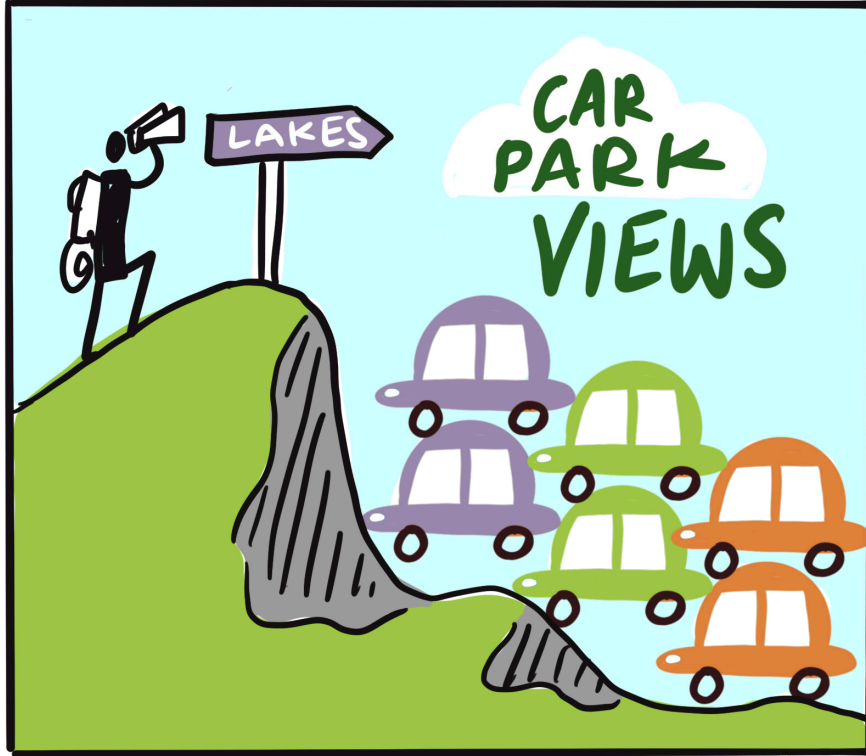
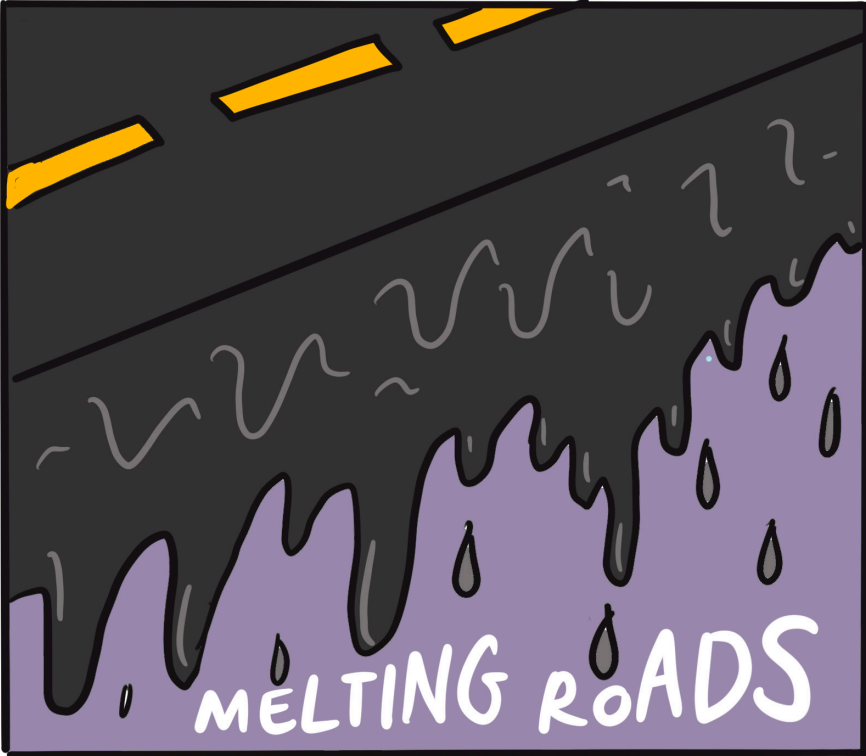
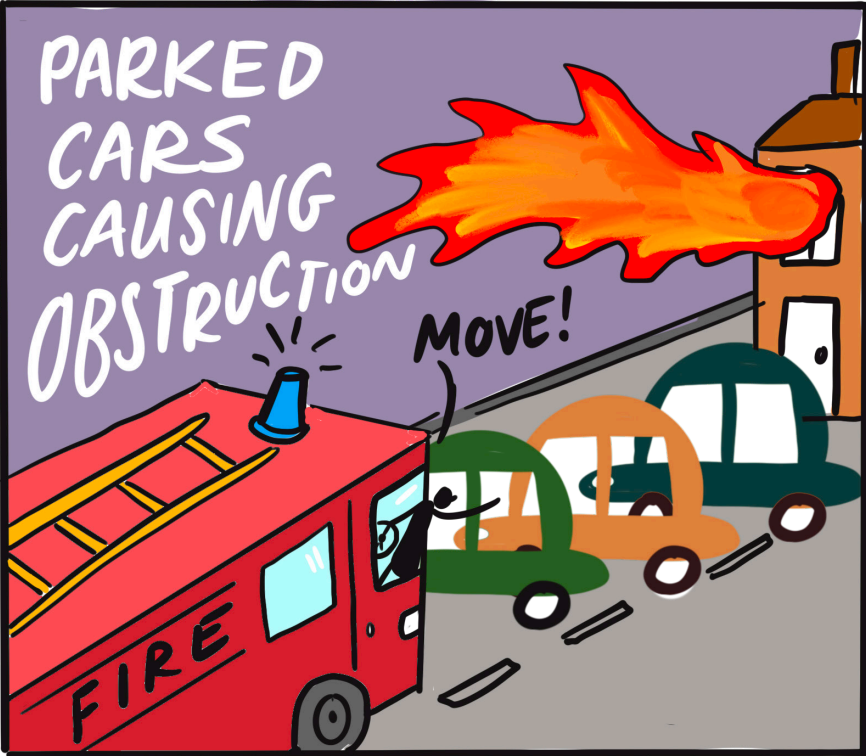
¹ Dmitry Yumashev 2022, Small World Consulting, Lancaster University
² <https://www.thecumbrialep.co.uk/resources/uploads/files/Cumbria-Local-Industrial-Strategy-Evidence-Base.pdf>

What happens if we do nothing?

Climate change is already causing problems in the Lake District. From the devastation of Storm Desmond to melting tarmac on public roads during the 2022 heatwave. Cumbria is car dependent and becoming more so during the cost of living crisis where fuel and car maintenance are becoming hard to afford for most households.

We are not investing sufficiently in things that will help us towards sustainable and cheaper travel like walking, cycling and buses. There are currently proposals to build new roads in the County, but the roads we already have are not being maintained. If we do nothing public transport will decline more – making life harder for some of the most deprived communities in the region (in West Cumbria around 25% of households don't have access to a car). A lack of public transport will make it harder for anyone to access the Lake District in anything other than a car.

If we do nothing, Cumbria will become less attractive to visitors, tourism businesses will become less viable and local businesses will experience staffing problems as staff can't get to jobs. The vibrancy and viability of communities will further decline as they become ever-more car dependent.



What happens if we keep doing the wrong things?

The big plan is to phase out petrol and diesel cars in favour of electric ones, but given the context of rising traffic and transport-related social exclusion, electric cars alone are not enough. Whether we do nothing or keep pressing ahead with the wrong policies, there are many plausible risks which will cause a range of problems:



*Landscape
damage and
biodiversity loss*

*Natural land taken
by urban land
development*

*Induced traffic
(more roads mean more
demand for car use)*

*Reduced quality of
life for Cumbrian
residents*

*Worsening
exclusion for those
without cars*

*Negative visitor
experience*

What do we value?

Our future, our choice

Problem

We are caught up in a spiral of focusing on short-term problems when thinking about solutions to current transport issues, rather than taking a step back to think about what's really important to people, to our communities, and to the places that are important in our lives.

What if we changed the way we do things? What if policies and priorities were driven by a core set of values, that lead to the prosperity of places beyond economic value, and instead prioritise people and places, focusing on values such as health and wellbeing, inclusivity, local action and diversity?

These things matter to people, but this reality is not being borne through. And yet there is another approach that puts people and communities back to the centre of policy decisions - returning what's important to them back to the centre of policy decisions.

Solution

Instead of focusing on short-term solutions, maybe we should consider the reasons why travel is important and how our journeys and destinations contribute to our personal wellbeing and prosperity. Thinking about the things that matter to a diverse range of people and to our community as a whole we can look to the long-term, and understand what's really important to us and to future generations.

Result

Policy that understands the role that mobilities play in bringing together future sustainable regions, re-connecting us to the places and people that are important to us.



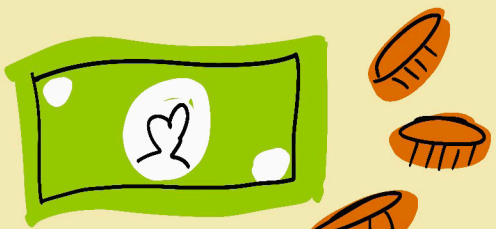
Possible Futures

In this section, we reflect on how the discussions of the previous day could translate into different futures that may be part of decarbonised sustainable transport in Cumbria. How might we achieve them, whilst also recognising their challenges?



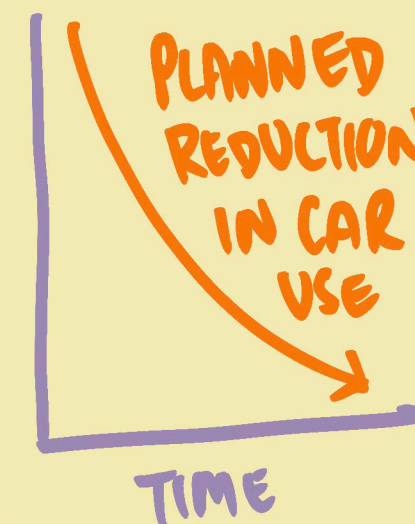
LESS RESOURCE INTENSIVE SOLUTION?

COMPARE TO THE COST OF DOING NOTHING

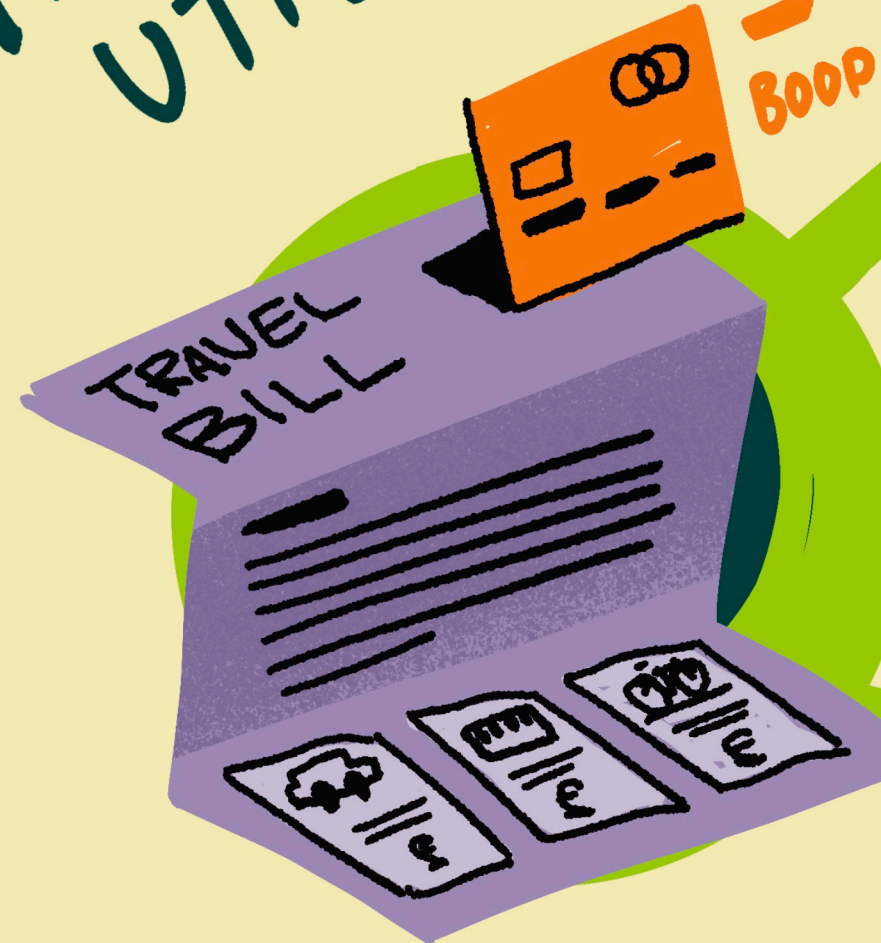


HOW DO WE GET MORE PEOPLE TO CHANGE THEIR POINT OF VIEW?

INTEGRATION OF ALL TYPES OF TRANSPORT



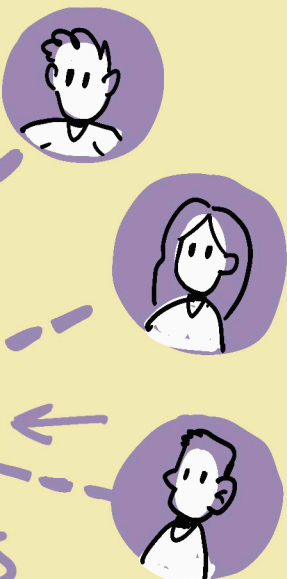
MOBILITY as UTILITY



BUILD CYCLING AND WALKING ROUTES



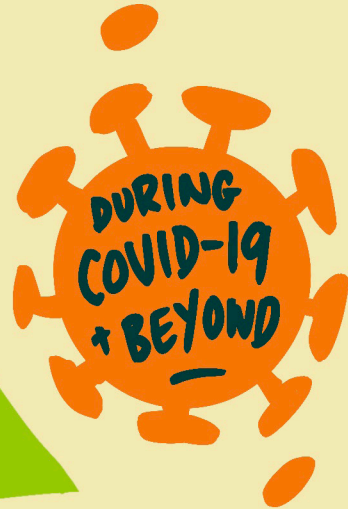
ELECTRIC VEHICLES SIZED TO DIFFERENT NEEDS



+ SHARED VEHICLES



MORE SHUTTLE BUSES x 3

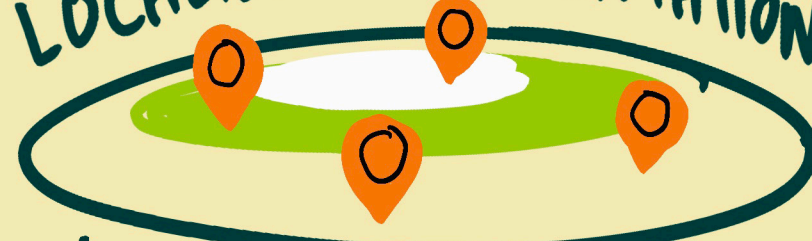


CO-DESIGN



SPEAK TO RESIDENTS (EXPERTS)

LOCALISE IMPLEMENTATION



WHERE POSSIBLE

KPIS FOR EACH VILLAGE

EMBRACE IMMERSNE TECH
3D VISUALISE IT FOR PEOPLE



Possibility 1:

Mobility as Utility

Every month you receive a bill for your combined energy, communications and mobility usage. Using transport works just like how we currently use our mobile devices, consume energy or water or how we access music and entertainment. Choose the mix of different modes in your mobility account like you choose talk time, data and SMS for your mobile phone.

Accessing a wide range of transport options could be easy, using a single account to make any journey. Walk to your village hub, switch to the e-shuttle you called online, have a coffee and check messages on your journey whilst taking in the view, then pick up an e-bike to get to work; simply swipe with a card or phone to access any mode of transport.

What sort of personalised package might work for you? Fast and highly individualised with a journey guarantee built in or, if you aren't in a hurry, a package geared to save you the most money? Maybe a contract with set mobility units might work for you, or pay-as-you-go to match your less structured mobility lifestyle? Do you like the social buzz on the express shuttle or is it a day to trade-in some credits for the solitude of your own space in a car-club electric vehicle? Do you have a family mobility plan? Or are you on a free or pre-paid plan?

Why not earn credits? Are you happy to share space in the car you just booked or lend someone your e-bike? Maybe trade in your credits or bank them for your holiday travel?

Cumbria Mobility is operated across a wide partnership of operators, overseen by the Councils with service quality, social justice and safety regulated via Ofmob.

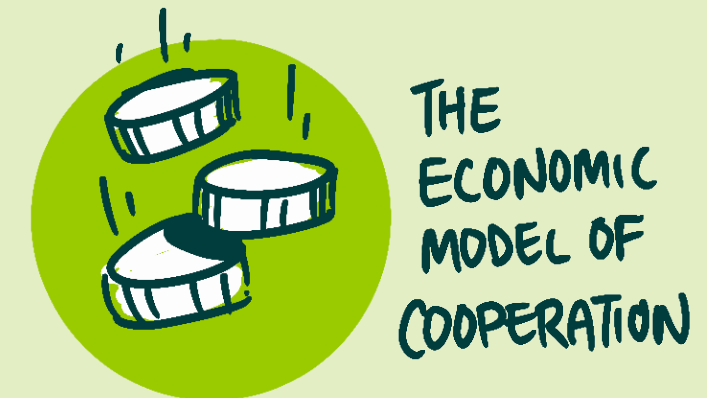
What would success look like?



How could we get here?



Challenges





CAN WE LEAVE OUR CARS?

WHAT ARE WE HANGING NETZERO IT ON?

REQUIRES ADJUSTMENT AND BUY-IN

ELECTRIC SUVs WORK FOR THE WEALTHY

OPPORTUNITY IN LEISURE TRAVEL



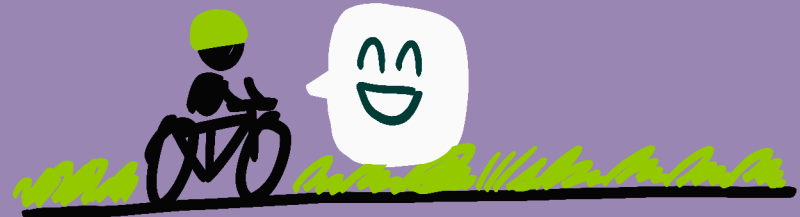
TO CHANGE COMMUTER TRAVEL BEHAVIOUR



TOO MANY BARRIERS

- MAPS
- WAYMARKING
- TRAVEL EXPERIENCE

EVERYTHING STOPS WHEN THE FUNDING DOES



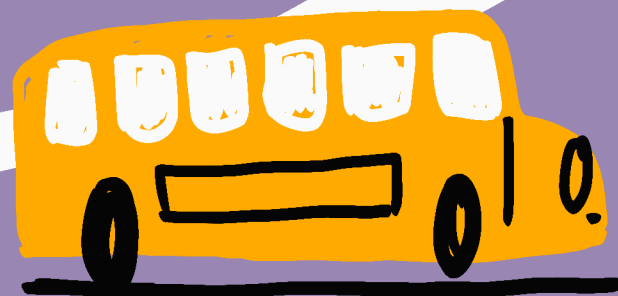
WE CAN MARKET THE JOY OF USING ACTIVE TRAVEL



UNLIMITED CAR USE WILL SPOIL THE NATURAL SPACES

17x CELLS IF YOU HAVE NO RE-FUELLING
CONSIDER INVESTMENT IN HYDROGEN

REDEFINING TRAVEL



CUMBRIA HAS VERY HIGH BUS FARES

Possibility 2:

Redefining Travel

What if we redefined our future travel expectations? We break up with our dependence on cars as we have the independence and freedom to move around using public, pooled and active transport.

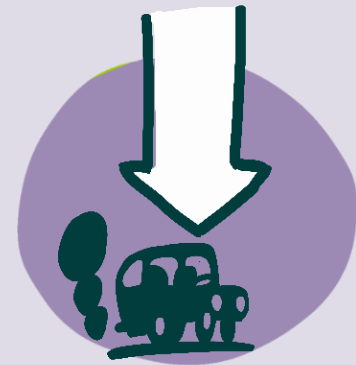
We value our environment and quality of life. We use more public transport: bus and railway services are integrated and rolling stock is high quality.

We help people to reduce the number of cars they own (and have to pay for), and we electrify and share the ones that we do have - with contracted hours of use and credit rewards for doing so.

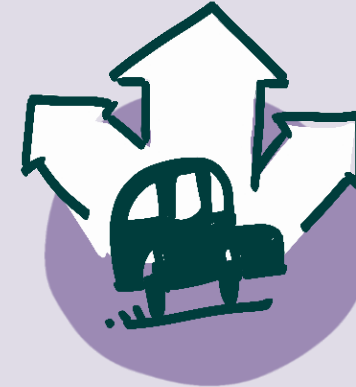
We invest in our local infrastructure including charging points, hydrogen generation and storage, and communication technologies to enable more stable remote working. As a result we have high quality well paid green jobs and a demand for skills development.

We are no longer energy sappers. We are energy zappers.

What would success look like?



A REDUCTION
IN CAR
OWNERSHIP

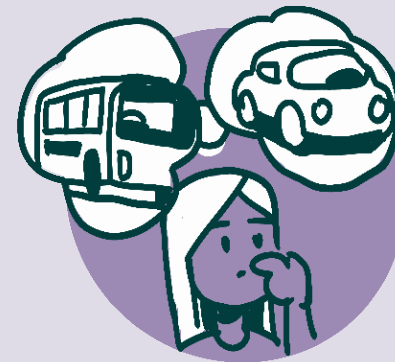


AN INCREASE
IN SHARED
OWNERSHIP



PUBLIC
UPTAKE IN
PUBLIC
TRANSPORT

How could we get here?



RE-EVALUATE
TRAVEL NEEDS
BEHAVIOURS +
HABITS



RE-ESTABLISH
OUR RELATIONSHIP
WITH THE
ENVIRONMENT
AND PLACES



FALLING
OUT OF
LOVE WITH
THE CAR

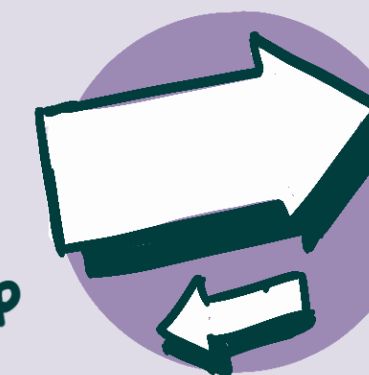
Challenges



GROUP
THINK

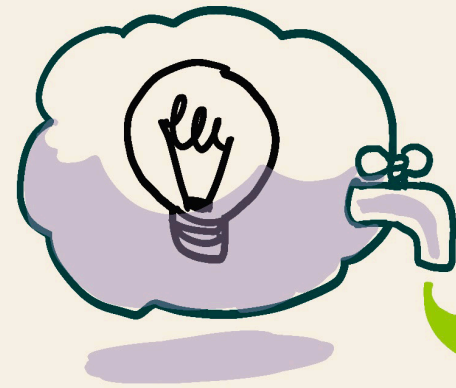


PERCIEVED
COSTS OF
PUBLIC
TRANSPORT VS
CAR OWNERSHIP



RELUCTANCE
TO
CHANGE

AUTOMATION IS ONLY 100 YEARS OLD



WE NEED TO TAP INTO DIVERSE EXPERTISE



WALLOW IN THE HONESTY OF HOW MESSY IT IS TO SOLVE



TRANSPORT K.P.I.s that work FOR 8 YEAR olds & 80 YEAR olds

CUMBRIA TRANSPORT PLAN



LET'S MAKE CUMBRIA:



THE BEST PLACE TO WALK + CYCLE

IMPROVED: -STATION-TRAIN -BUS offerings

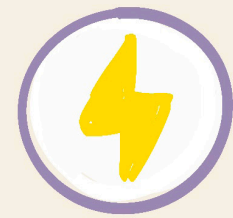
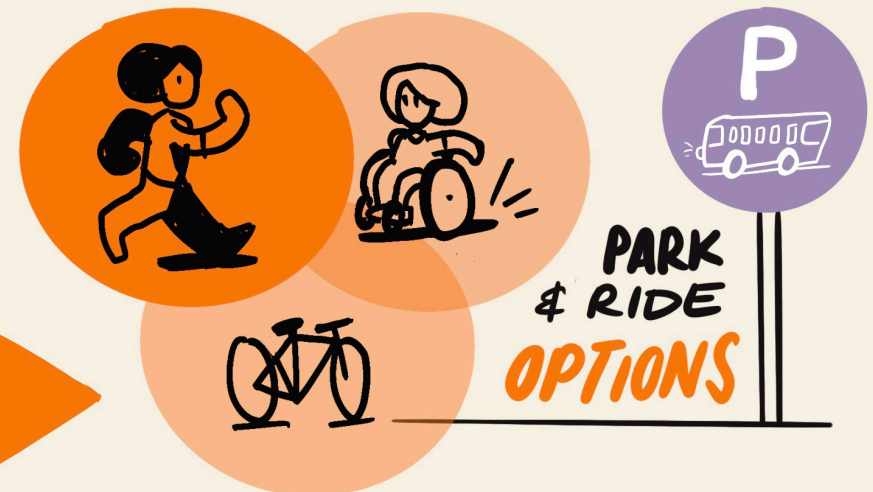


SHARED OR FOR-HIRE ELECTRIC VEHICLES (E-CARGO, E-SCOOTERS)

JOINED-UP, CONNECTED ROUTES



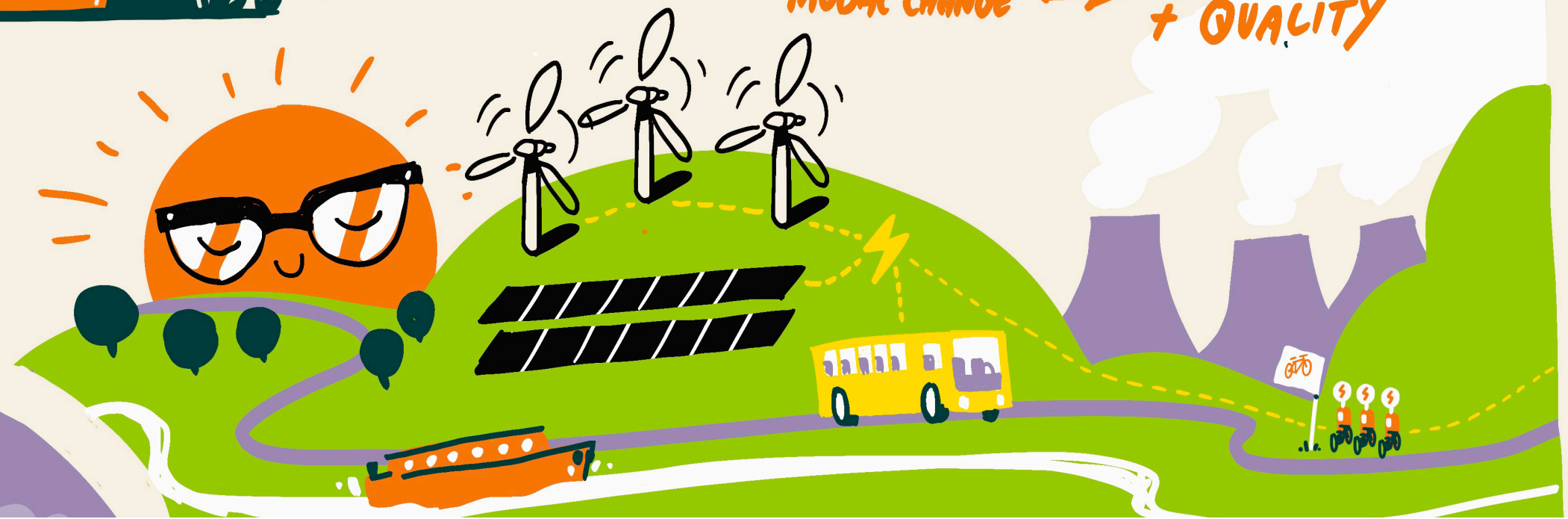
ACT IN PLACE-BASED WAYS



ELECTRIFICATION DOESN'T REDUCE CAR USE...

ENVIRONMENTALISM DOESN'T DRIVE MODAL CHANGE MORE CONVENIENCE + QUALITY

MULTI-MODAL MOBILITY



Possibility 3:

Multi-modal Mobility

Education, work, culture, leisure, pleasure and commerce could happen locally, in 20 minute neighbourhoods, and, where things are farther away, many different modes of transport could take us there: walking, cycling, buses, trains, cars, autonomous vehicles, drones, boats, horses, zooming in to an office meeting or half-way across the globe to see friends or grandchildren. We don't need to travel alone, and we do not need to own the modes of transport. On-demand, active and no- or low-carbon modes of transport could provide efficient, accessible, convenient ways of getting around.

In this potential future, transport would be clean, safe, quick, a joy to use for all. It is free at the point of use or Pay What you Can or Want, supported by local businesses and public funding. Mobility justice translates into a larger, more diverse and productive labour force and more enjoyable environments.

You can do all your journey planning online, go to a hub or call to book a journey. Your push chair, baby carrier, pet or shopping bags can be transported in a mobile modular trolley or cradle compatible with all modes of transport.

Existing infrastructure expands as funds become available, generated from increased productivity. This includes digital connectivity, high voltage cables, battery swapping stations.

Multi-modal mobility could become people's solution of choice, as car-free policies combine with opportunities to experiment with different mobility options. People realise the many benefits of travelling this way: safe, people-friendly streets, protected habitats and more predictable journeys.

What would success look like?



PEOPLE FRIENDLY STREETS



PEOPLE CARRYING CARGO, LOGGAGE PETS, CHILDREN COMFORTABLY



FREE AT POINT OF USE

How could we get here?



CAR-FREE POLICIES



MULTI-MODAL INFRASTRUCTURE AND ATTRACTIVE MOBILITY HUBS



EXPERIMENTAL IMPLEMENTATION

Challenges



HOW DO WE MAKE IT FREE?
WHO FUNDS IT?



THE ILLUSION OF ELECTRIFICATION AS THE ONLY SOLUTION



INTEGRATING LOTS OF DIFFERENT MODES OF TRANSPORT

How do we move forward?



Talk about decarbonising mobility at home, at school, at work, in the pub ...

Talk to elected politicians in your communities

Making positive changes to how we travel will take courage – find it by engaging with others



When arguing for sustainable transport some may say “yeah, but ...” in response . The contributions to day one of the DecarboN8 Cumbria are a door into good research which can help address some of these doubts. Here’s a selective summary:

“We want to change, but we don’t have the money.”

Proposals to make the A66 wider and other new road building schemes in Cumbria will cost billions of pounds. far more than it would cost to make local public transport free for everyone in Cumbria. Could this money be put to better use?

“But there are people who live where there’s no public transport and demand responsive transport.”

A quarter of people in Cumbria don’t have a car so it is not fair to only focus on cars.

Many assume that bus travel is only for poor people, and that cars equal choice.

But having a range of public transport options and a pleasant environment to walk and cycle in is a bigger better choice. And we have to reduce the number of cars to achieve legally binding decarbonisation targets.



Progress doesn’t require everyone to change their behaviour. Different types of change work for different people in different places at different times. We just need enough people to make the change they want to see.

Major change does not happen when we only have incentives to behave better. We need a disruption to the status quo to reduce the amount we use our cars.



Reallocation of funds from car-based provision to non-car-provision

Reallocation of road space (less space for cars and more space for people)

Making non-car options trustworthy and reliable

DRIVE LESS

LEAVE THE CARS!

How we made this journal

This compact collection of ideas draws on evidence from over 80 researchers, policymakers, community organisations and local businesses who attended a two-day hybrid event in Carlisle and online on 22nd November 2022.

It was created during a 6 hour 'Instant Journal Design Sprint' on the 23rd of November, facilitated by Nifty Fox Creative. A subgroup of participants (see next page) formed a production team to reflect on sketchnotes made by Nifty Fox during the discussions on the 22nd.

Packaging these notes and our reflections in 6 hours into this collection was a challenge! But we think we've captured what can be achieved when people with different knowledge and perspectives are creative together!

Our reflections here are just part of a big story about place-based mobility futures, definitely not a roadmap. We have tried to engage with as much as possible of the previous day's discussion, but we invite you to tell us your thoughts and ideas, and to move the conversation on.

We hope you enjoyed exploring this instant journal. Further content and recordings are available at: <https://decarbon8.org.uk/cumbria-2037/>

We'd love to hear what you think!

Please share on Twitter using the hashtag

#Cumbria2037 and tagging

@N8Decarbo and

@netzerocumbria

You can also email Tim Gale:

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