

# Gloucestershire Local Transport Plan

*Carbon Evidence Base*



# Introduction

This report sets out the carbon evidence base underpinning the development of Gloucestershire's updated Local Transport Plan (LTP). This includes evidence on the sources of transport-related carbon emissions in the county and scenario analysis that has informed the selection of a local transport decarbonisation pathway.

The analysis documented in these slides aligns with Chapters 3 and 4 of the Department for Transport (DfT)'s Quantifiable Carbon Guidance (QCG). The estimates and scenario testing of current and future emissions reported here are based on the best-practice 'area-wide disaggregated traffic modelling analysis' referenced in QCG and sourced from Western Gateway Sub-National Transport Body.

Analysis presented here should be reviewed alongside the '[Journey to Net Zero](#)' routemap published in 2024. This analysis builds upon the principles and evidence in this work but uses the most up to date evidence and applies this specifically for use in the LTP update, aligning to DfT's QCG as published in October 2025.

This slidedeck only summarises the evidence prepared to inform the development of the LTP. For adopted policies and GCC's approach to transport decarbonisation the LTP Strategy, GCC's Climate Change Strategy and associated documents should be referred to.

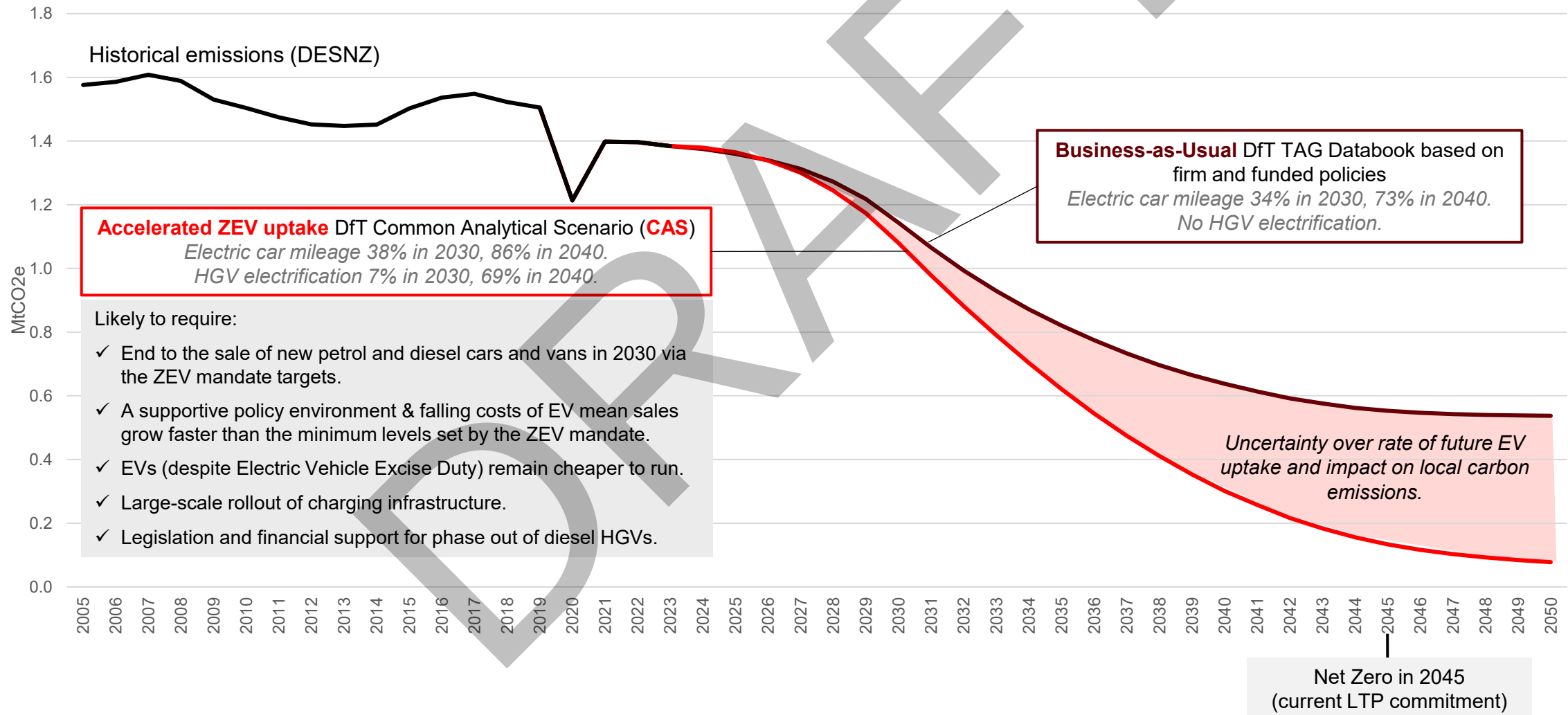


# Understanding Gloucestershire's transport emissions

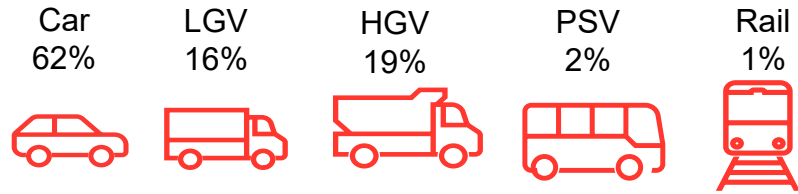


# Future emission forecasts

This chart shows historical transport emissions (Department for Energy Security and Net Zero – DESNZ, 2005–2023) with future projections under different scenarios of Zero Emission Vehicle (ZEV) uptake, illustrating the uncertainty in the pace of electrification and its impact on carbon emissions from transport use in the county.



# Current (2023) user emission sources in Gloucestershire



Cars are responsible for most, but **HGVs and LGVs account for a significant 35% of transport emissions in Gloucestershire**. **51%** of these HGV/LGV emissions are from journeys of **25 miles and over**.

Only **14%** of emissions\* are from journeys **up to 5 miles**.

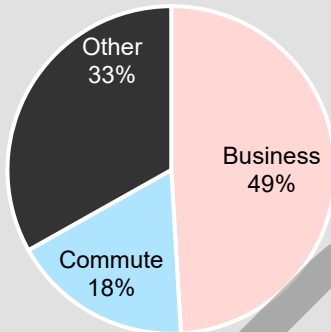


**40%** of emissions\* are from journeys **25 miles and over**.

**HGV trips account for 23%** of emissions\* from journeys of **25 miles and over**.

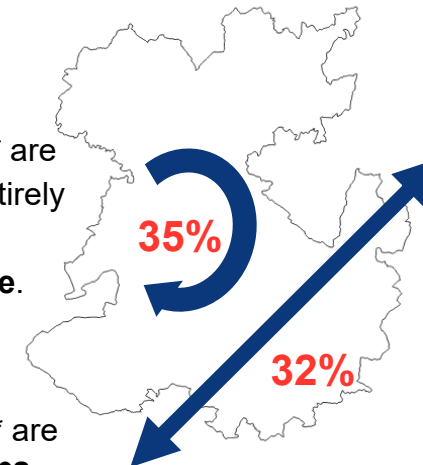


Emissions\* split by **journey purpose**:



**67%** of emissions\* are from **business and commuting trips**. Within this, a substantial proportion is linked to longer journeys—with **53% of business** travel emissions and **34% of commuting** emissions arising from trips **over 25 miles**.

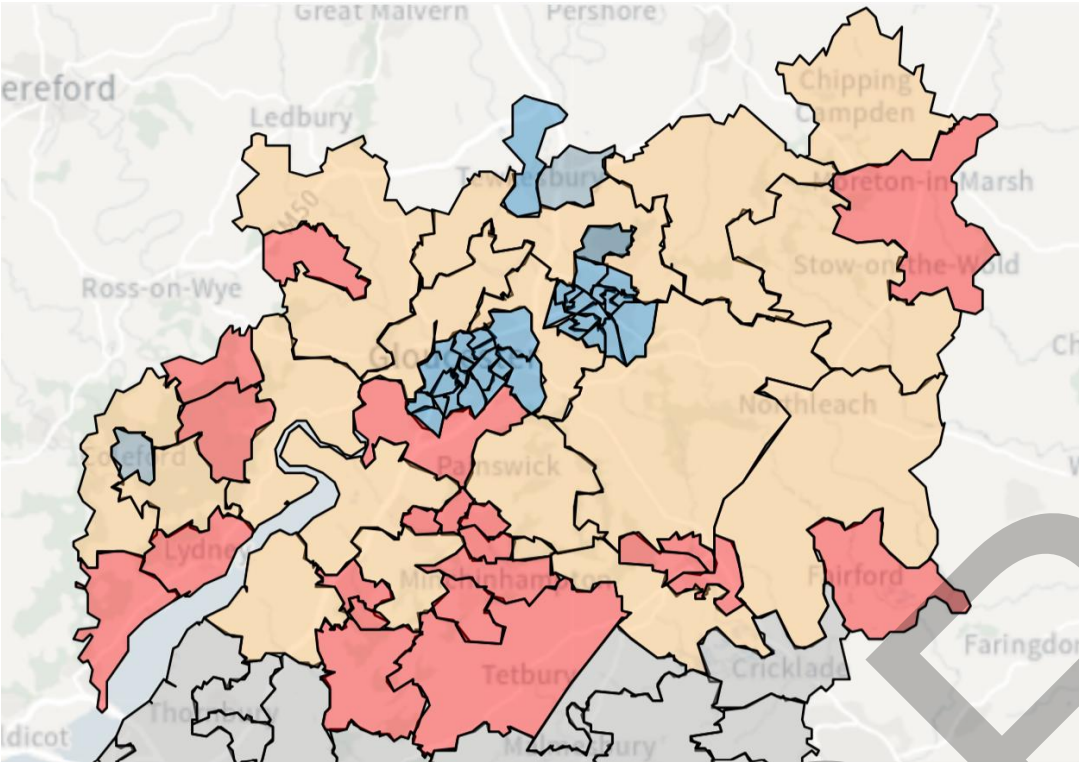
**35%** of emissions\* are from trips made entirely **within Gloucestershire**.



**32%** of emissions\* are from **through trips**.

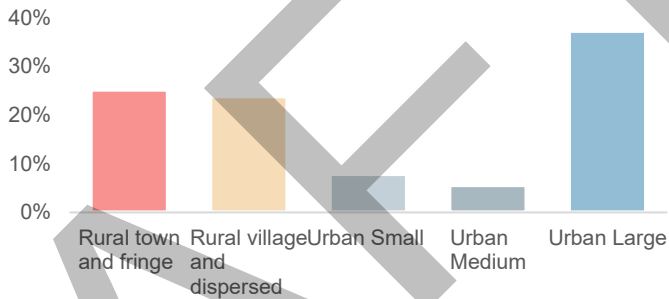
\*These percentages are relative to car, LGV and HGV emissions only (excludes rail and PSV).

# User carbon emissions by place-type



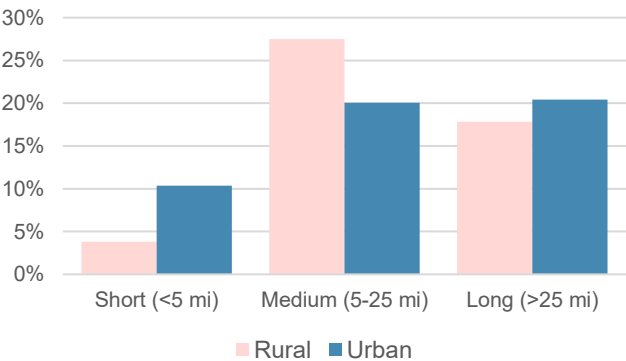
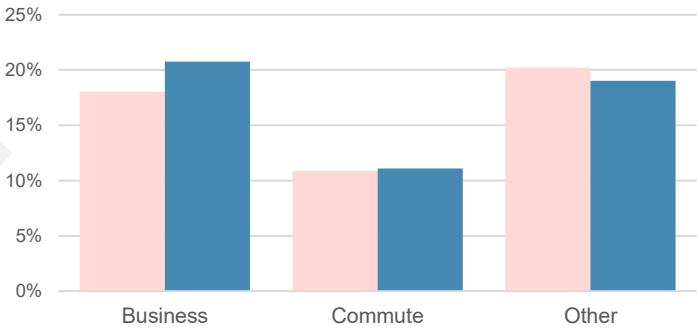
| Rural Urban Classification |                                                   |
|----------------------------|---------------------------------------------------|
| Rural                      | Rural town & fringe                               |
|                            | Rural village & dispersed                         |
| Urban                      | Urban Small (within urban area with pop <25k)     |
|                            | Urban Medium (within urban area with pop 25-100k) |
|                            | Urban Large (within urban area with pop 100-250k) |

The place type data provide a high-level estimate of how emissions vary depending upon the geography of Gloucestershire.



51% of emissions are concentrated in urban areas, while 49% originate from rural place types.

- Business trips are the largest source of transport user emissions in urban place type.
- Rural emissions are dominated by 'other' trips, followed by business trips.

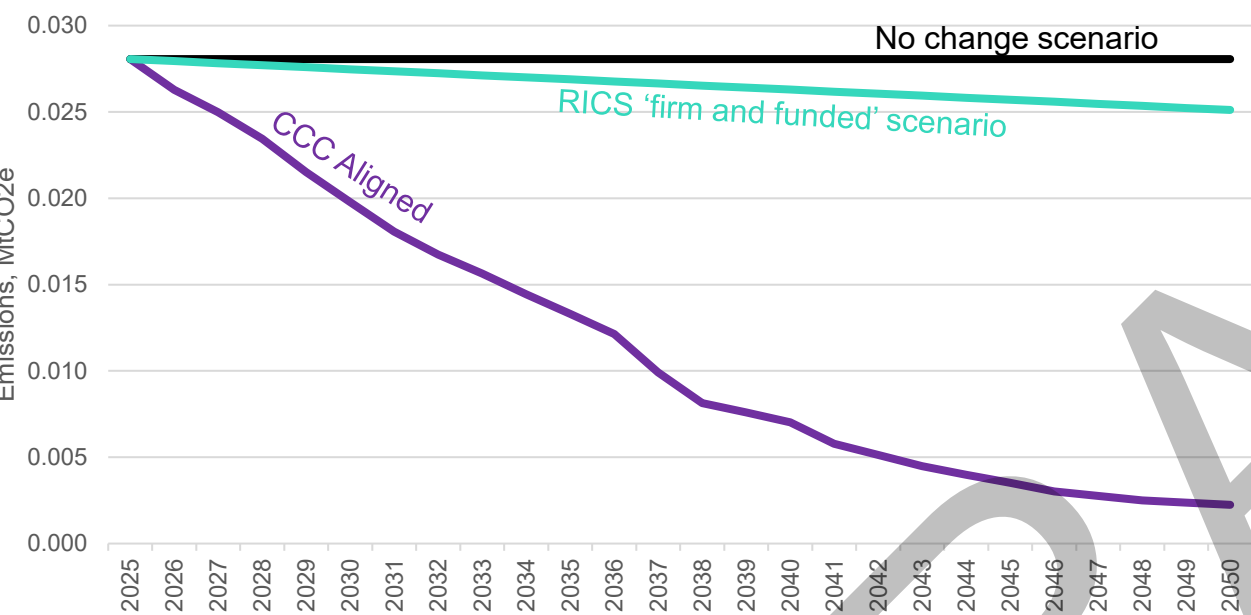


- Medium trips (5-25 miles): Rural areas emit approx. 37% more than Urban as rural residents travel further for everyday services.
- Urban areas: Long distance trips (>25 miles) have the highest emissions.
- A higher frequency of short distance trips are seen in urban place types.

Note: All the place type emissions are attributed to trips originating in Gloucestershire.

# Infrastructure carbon emission sources and forecast

Forecasts of GCC highways & transport infrastructure carbon



In 2026 GCC were provided by ADEPT's Carbon Leadership Programme with a carbon footprint of all highways maintenance and operations activities. This estimated that these infrastructure carbon emissions were 28,061 tCO<sub>2</sub>e for the financial year 2024-2025. This does not include major projects.

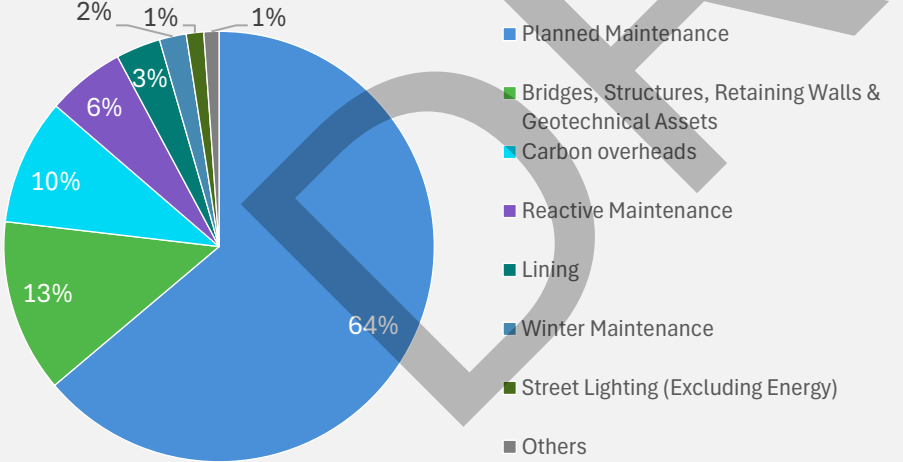
A breakdown of these emissions is shown in the pie chart. Planned maintenance represents the largest source of GCC's infrastructure carbon emissions from repeatable activities: 17,915 tCO<sub>2</sub>e in 2024/5.

If these emissions remain constant in future years these activities would be responsible for 729,600 tCO<sub>2</sub>e between 2024 and 2050.

It is likely however that these emissions will reduce as a result of background trends that decarbonise energy and materials. This has indicatively been forecast using RICS 'firm and funded decarbonisation' scenario which suggests 50% decarbonisation of maintenance, repair and replacement emissions over a 120 year period; equating to 0.42% a year. Under this scenario GCC's cumulative highway maintenance and operation emissions would be 691,290 tCO<sub>2</sub>e between 2024 and 2050. This is equivalent to 3% of the user carbon emissions forecast to be emitted under a business-as-usual scenario over that same time period.

The Government however is seeking to decarbonise the economy by 2050. A more ambitious scenario of decarbonisation is therefore plausible. To represent this possible future an 'accelerated industrial decarbonisation' scenario has been tested using the annual reductions for the industrial sector included in the Committee on Climate Change's (CCC) Seventh Carbon Budget advice which focuses on reducing emissions from diverse production activities, energy use, and process emissions within industry. Under this scenario GCC's cumulative highway maintenance and operation emissions would be 302,913 tCO<sub>2</sub>e between 2024 and 2050. This is equivalent to 1.9% of user carbon emissions forecast to be emitted under an 'accelerated ZEV uptake' scenario over that same time period.

Emission breakdown by activities (financial year 2024-25)

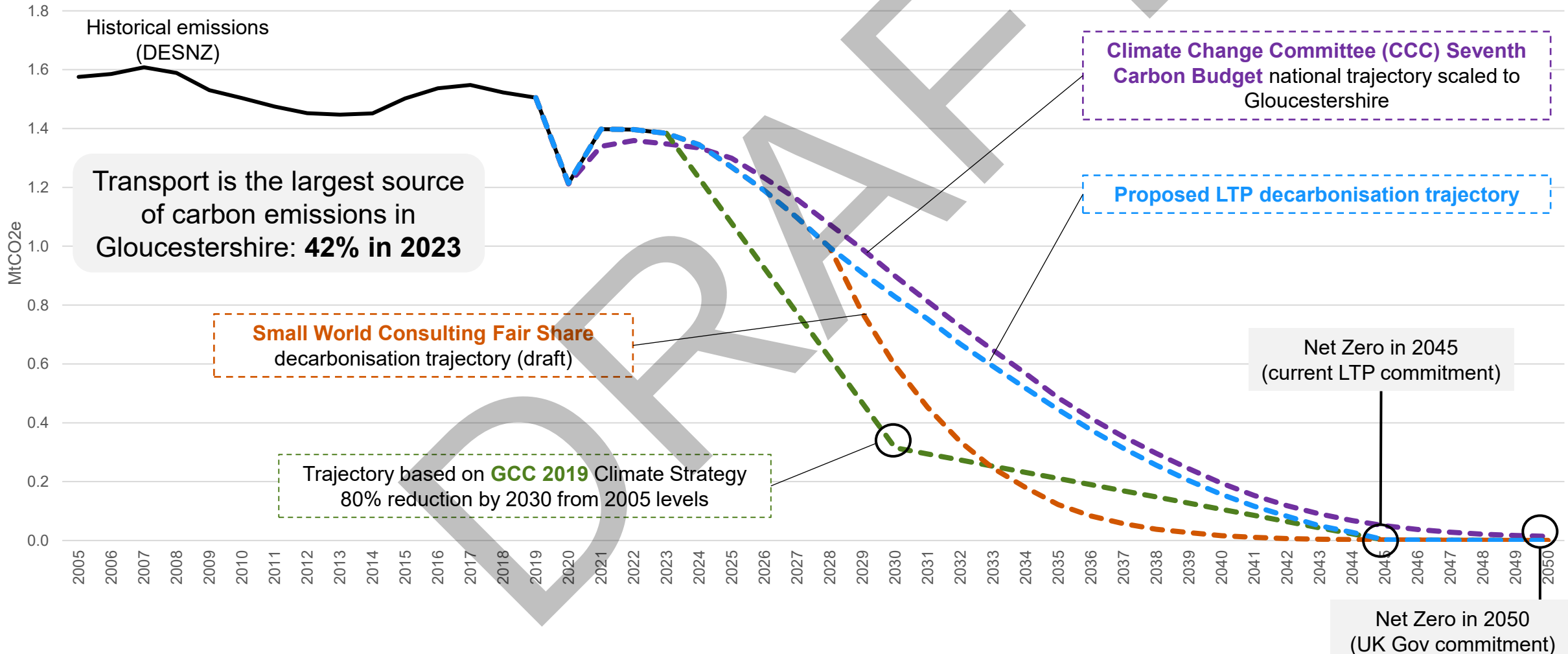


# Decarbonisation Pathway Scenarios

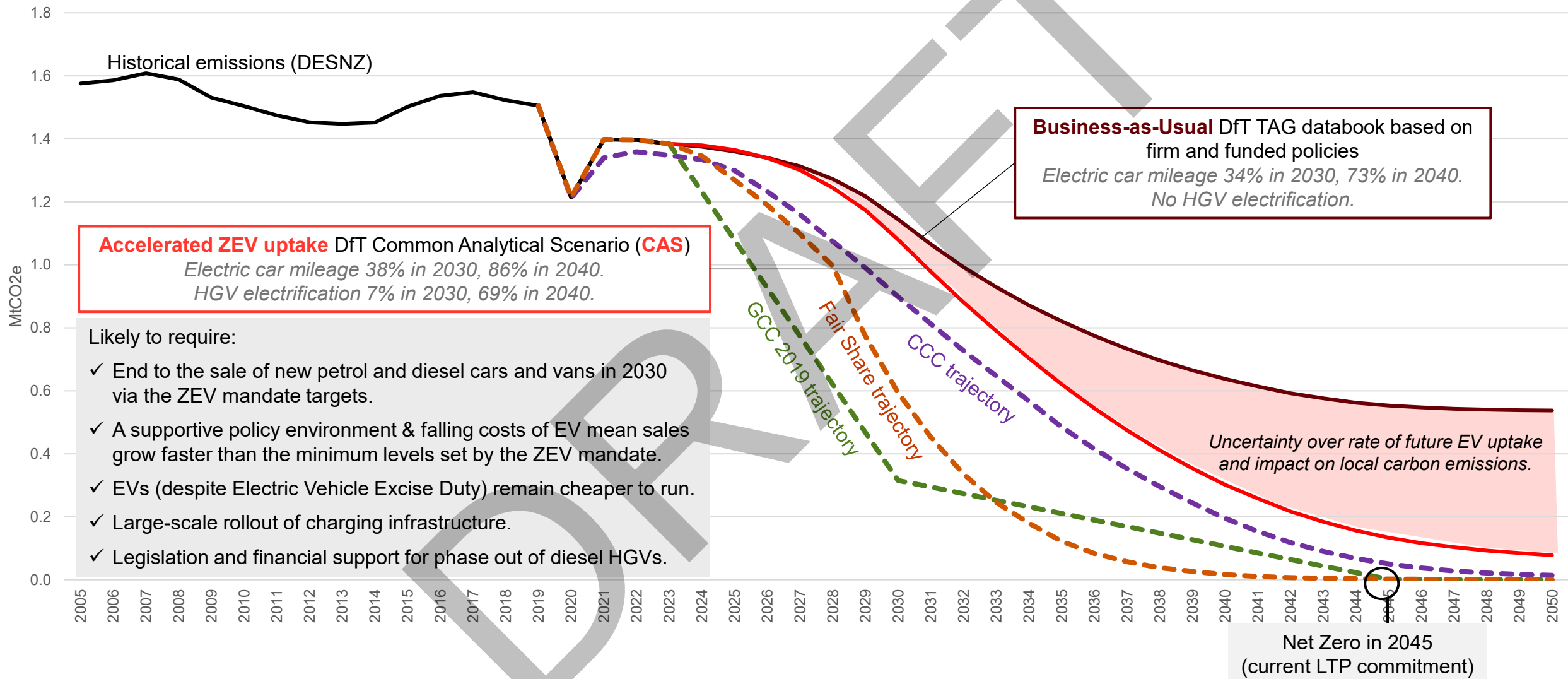


# How quickly should transport decarbonise?

The chart illustrates different decarbonisation trajectories for Gloucestershire's transport emissions. All of the trajectories shown here would see the contribution of Gloucestershire's transport to climate change reduced at least in line with the national pace of transport decarbonisation the Climate Change Committee (CCC) have suggested is needed to achieve the UK's carbon budgets. Informed by this, an LTP decarbonisation trajectory has been developed that would achieve Net Zero by 2045 and be consistent with UK carbon budgets.



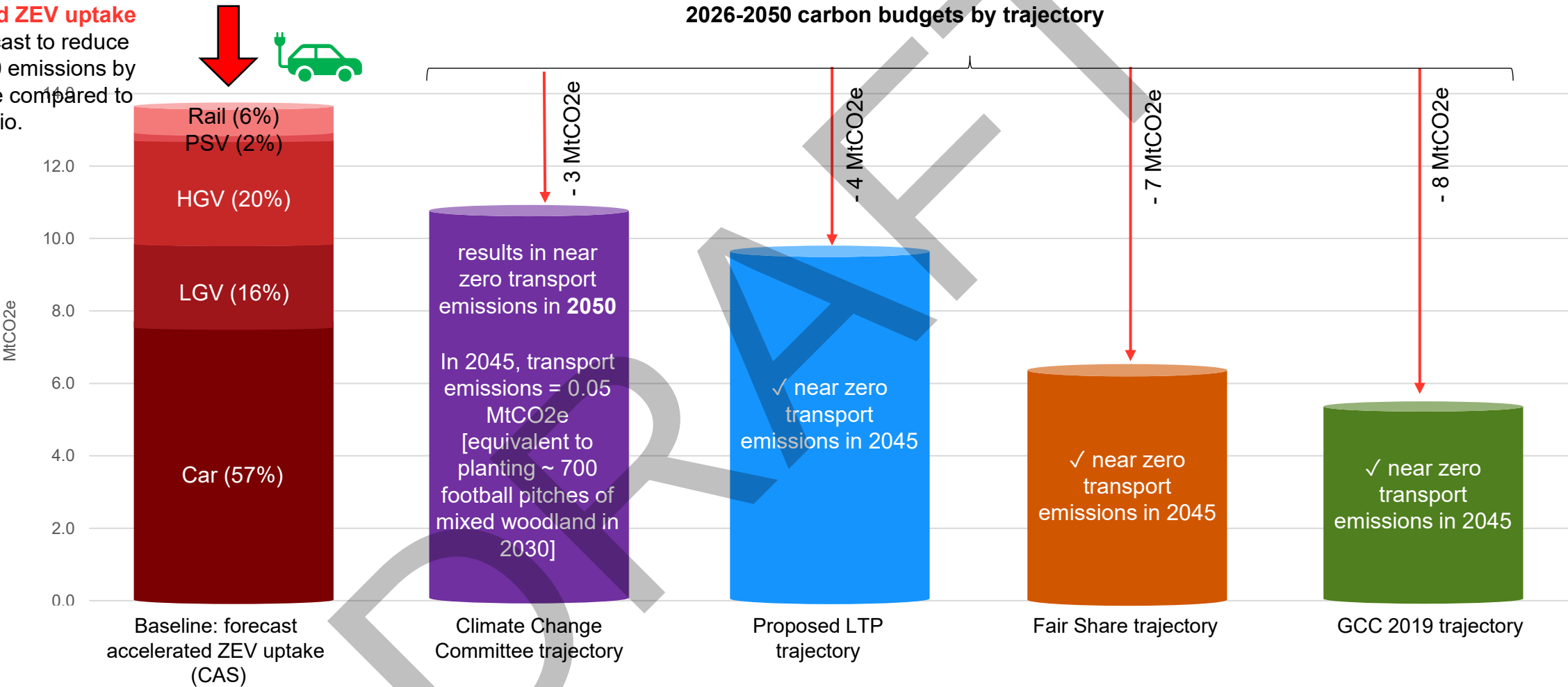
# Electric Vehicles won't be enough...



While accelerated ZEV uptake could deliver the majority of transport emission reductions, even ambitious scenarios leave residual emissions and are largely dependent on national policy. This means Gloucestershire cannot reach Net Zero through electrification alone, requiring the LTP to also seek to avoid and shift travel demand.

# Scale of challenge

**Accelerated ZEV uptake (CAS)** forecast to reduce 2026 - 2050 emissions by 6.5 MtCO<sub>2</sub>e compared to BaU scenario.



The chart illustrates the carbon budgets associated with an accelerated ZEV uptake scenario (red) and alternative decarbonisation pathways (coloured cylinders), highlighting how the total (cumulative) emissions differ under each. The gap between the ZEV-led baseline and the pathway budgets shows the additional emission reductions required beyond electrification emphasising that the pace of decarbonisation and cumulative emissions are critical to staying within climate limits.

# Impacts of vehicle led decarbonisation pathway



Persistent congestion and pressure on road space leading to need for capacity schemes.



EVs are heavier, increasing road maintenance needs.



Continued road safety risks.



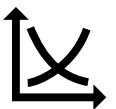
Health impacts from poor air quality associated with particulate matter from tyre wear.



High upfront vehicle costs = inequitable transition.



Missed co-benefits associated with sustainable travel (e.g. improved health outcomes, better public realm spaces).



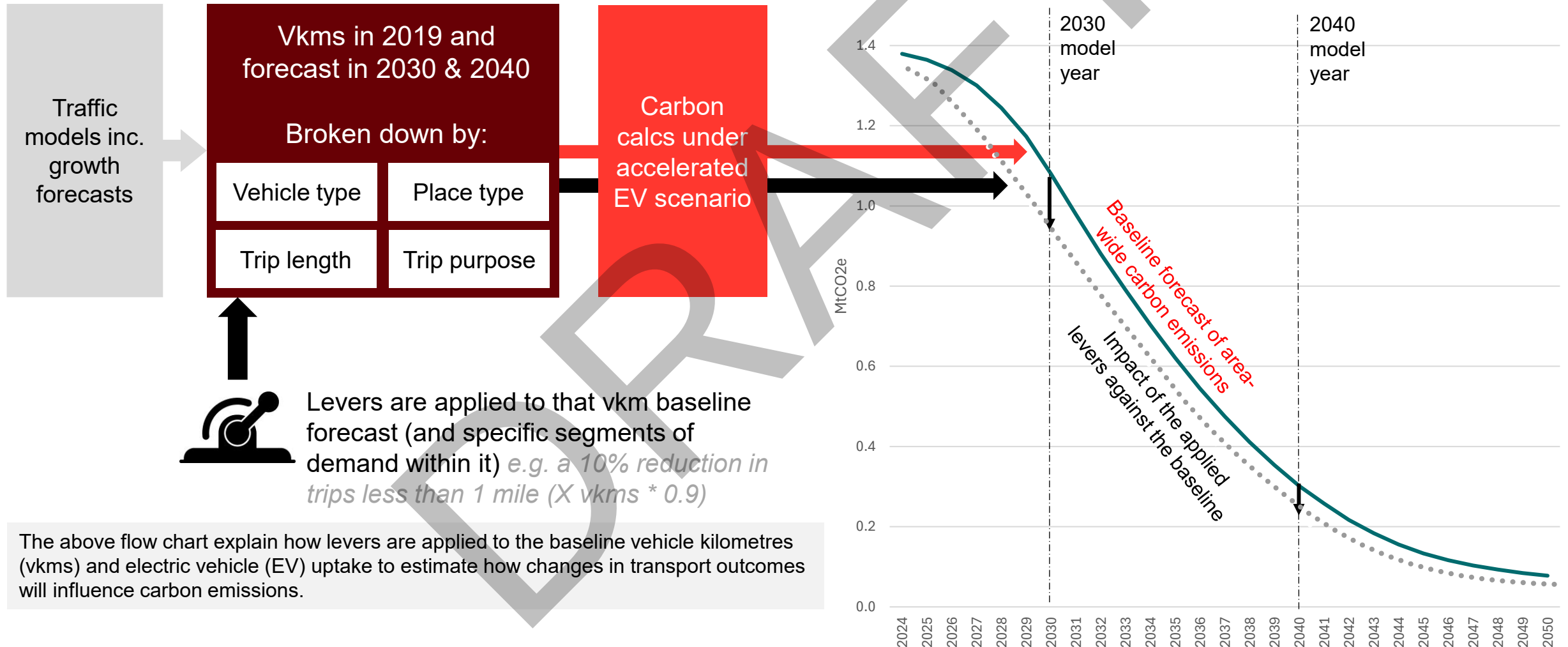
Feasibility risks (e.g. whether manufacturers and supply chain can meet demand).

**The Rebound Effect:** a study in Norway found that EV ownership leads to an **increase** in car trip **demand of 10-20%**.

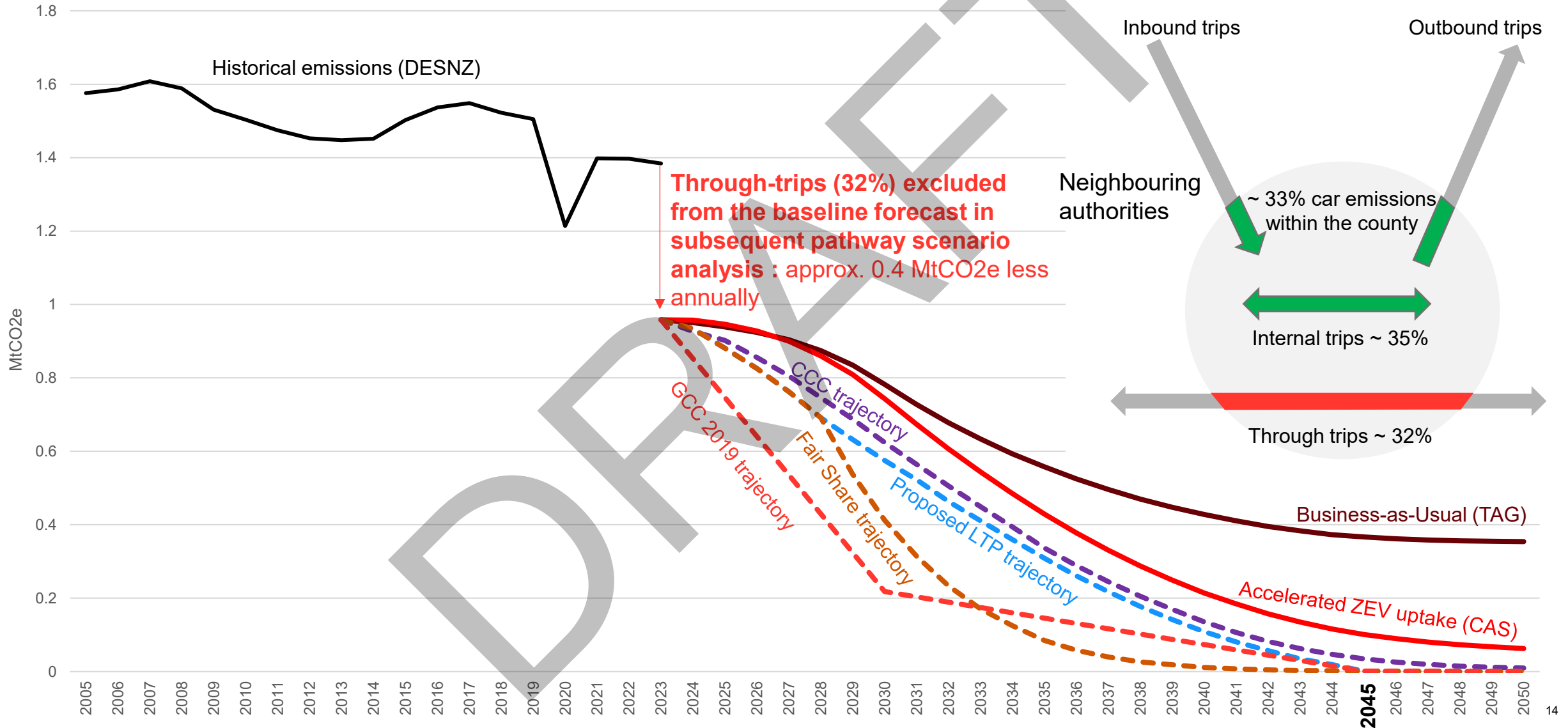


Photo reference Forecourt Trader: EV owners report long queues for chargers over Christmas period.

# Western Gateway STB's Carbon Assessment Playbook



# 33% of transport emissions are from through trips



# Better alternatives to car are essential



## Capability

e.g. confidence, skills, information



## Opportunity

e.g. high-quality networks and services



## Motivation

e.g. health, cost, time, identity

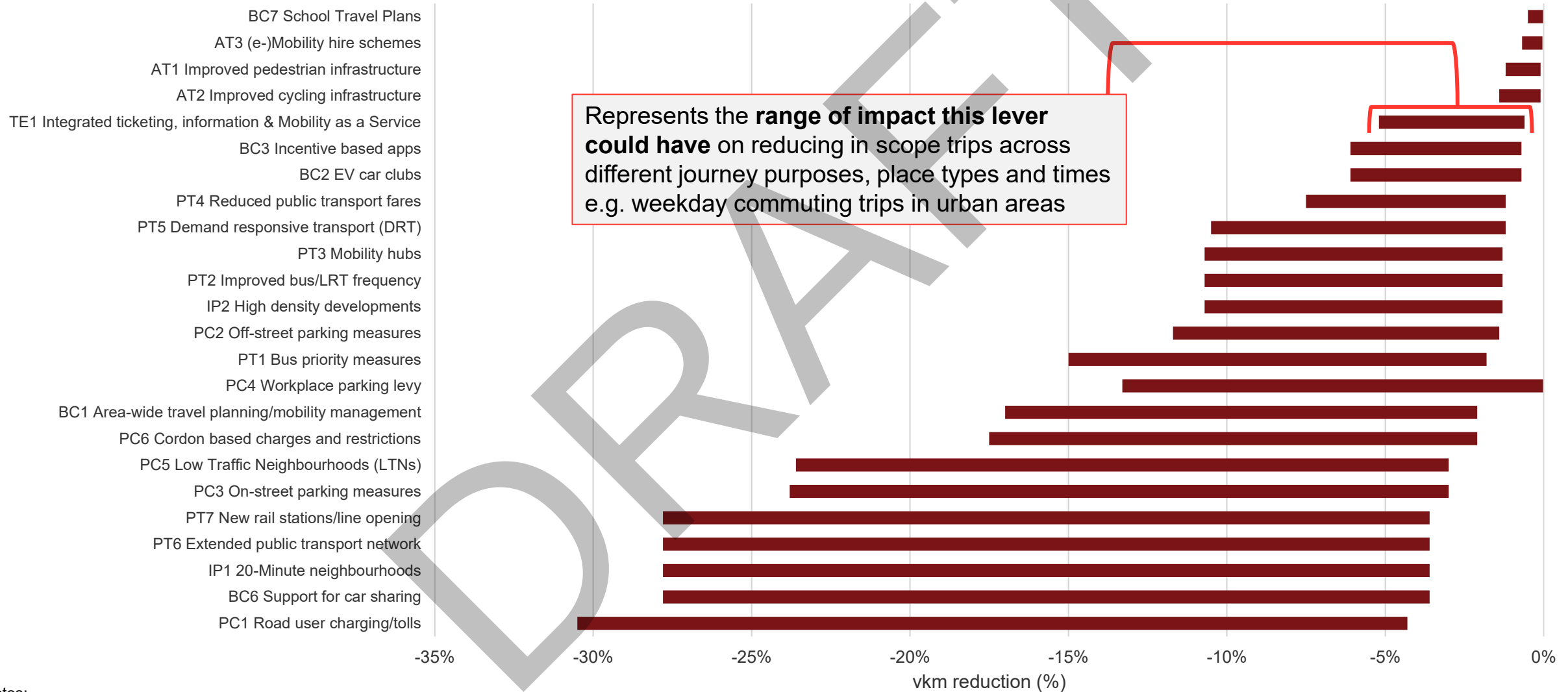


“Achieving meaningful modal shift requires a **combination of measures aiming to reduce car use and measures that offer people alternatives**, supported by effective communication and engagement activities.”

## Behaviour

Focus on car-reduction and increasing uptake of sustainable modes.

# Comparing the impact of different transport policies



- Notes:
- Reflects % reduction against in scope trips only (e.g. weekday commuting trips in urban areas)
  - The range reflects impact across different journey purposes, place times and times

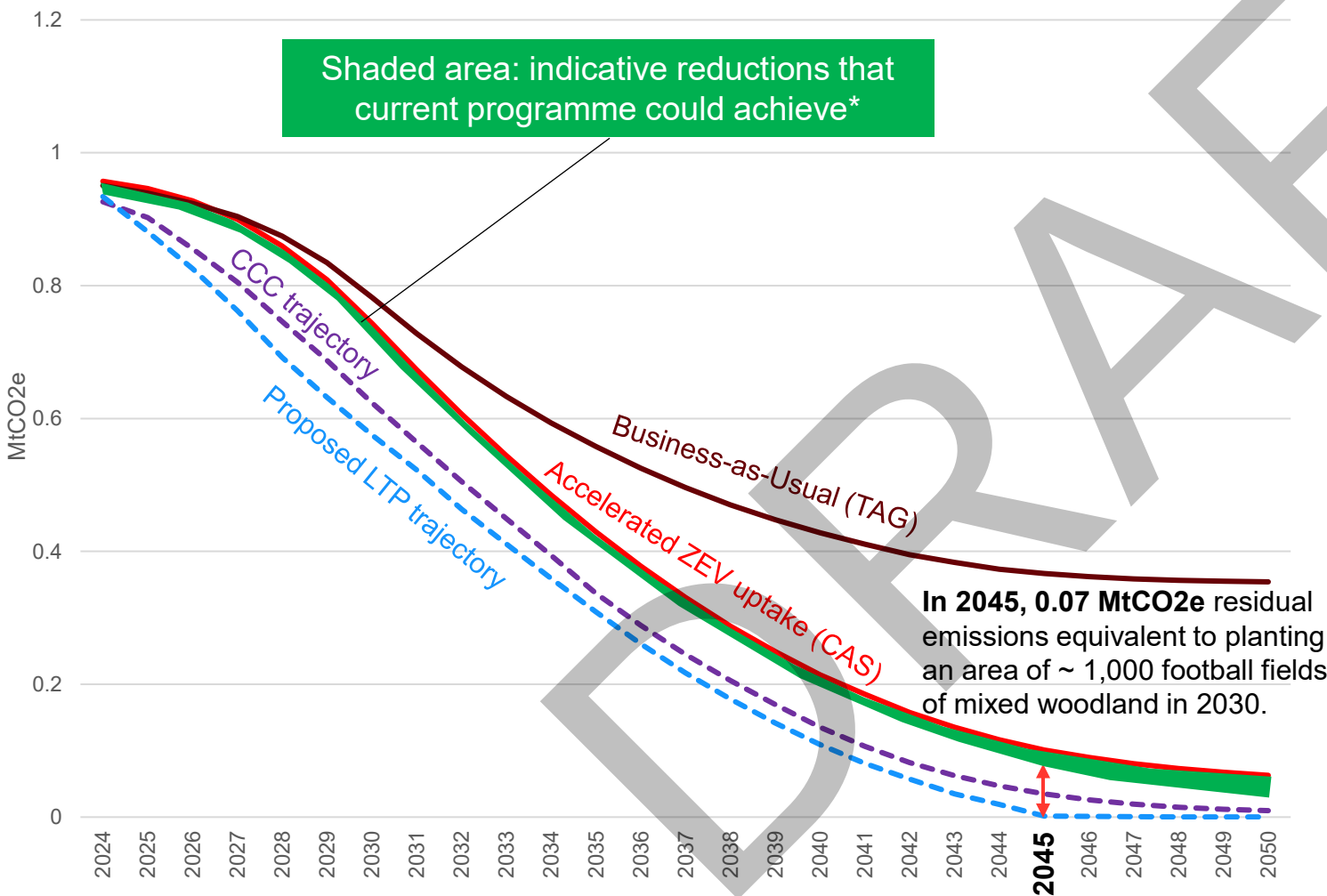
# Decarbonisation Pathway Scenarios

The four scenarios below represent a structured spectrum of policy ambition from continuation of existing initiatives to transformative systemic change.

| Scenario                                                                                            | Ambition level | Defining Policy Mechanisms                                                                                                                                                                                                                                | Emissions Reduction Trajectory                                       |
|-----------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>Scenario 1</b><br>Accelerated ZEV uptake and continuation of GCC's current transport investments | Low            | Continuation of GCC policies: active travel promotion, public transport enhancement, land use planning, speed management. ZEV fleet transition as primary lever.                                                                                          | Modest reductions; significant residual gap to Net Zero.             |
| <b>Scenario 2</b><br>Sustainable transport investment                                               | Medium         | Builds on Scenario 1 with ambitious investment in sustainable transport infrastructure and targeted behaviour change: reducing short-trip car dependency, increasing bus mode share, improving vehicle occupancy, optimising freight movements.           | Stronger reductions than Scenario 1; Net Zero gap remains.           |
| <b>Scenario 3a</b><br>LTP Scenario                                                                  | High           | Combines sustained infrastructure investment with demand management measures increasing the financial cost and reducing convenience of private car use, alongside substantial road network reallocation to sustainable modes.                             | Achieves Net Zero by 2045 with substantial co-benefits.              |
| <b>Scenario 3b</b><br>LTP Scenario + national demand policies or external factors                   | Very high      | Requires reduction in private car travel to levels comparable to the COVID-19 pandemic. Such outcomes are likely beyond local control and would depend on national interventions or external shocks, but highlight the upper bound of what may be needed. | Meets the most ambitious emissions trajectory (GCC 2019 trajectory). |

# LTP Scenario 1: Accelerated ZEV Uptake and continuation of transport investment

**Headline finding:** Continuation of current transport investments is unlikely to be enough to meet a Carbon Budget aligned trajectory.



Continuation of current investment includes:

| Policy                                                      | Potential MtCO2e reduction | Reasoning for potential impact                                                               |
|-------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------|
| Active travel investment inc. completion of the cycle spine | <1%**                      | % of overall trips affected county-wide is small. Physical opportunity alone unlikely enough |
| Bus Rapid Transit (inc. Park & Ride)                        | <1%**                      | Physical opportunity alone unlikely enough.                                                  |
| Local Plan policies compliant with emerging NPPF            | 1-2%                       | Moderate % of trips potentially affected.                                                    |
| Speed limit reductions                                      | <2%                        | Large number of trips affected; lower speeds and less acceleration reduces emissions         |

*\* This is an indicative estimate based on professional judgement and previous scheme assessments. It does not account for potential increases in carbon from highway schemes.*

*\*\* These infrastructure improvements are critical enablers to other policies and provide wider benefits.*

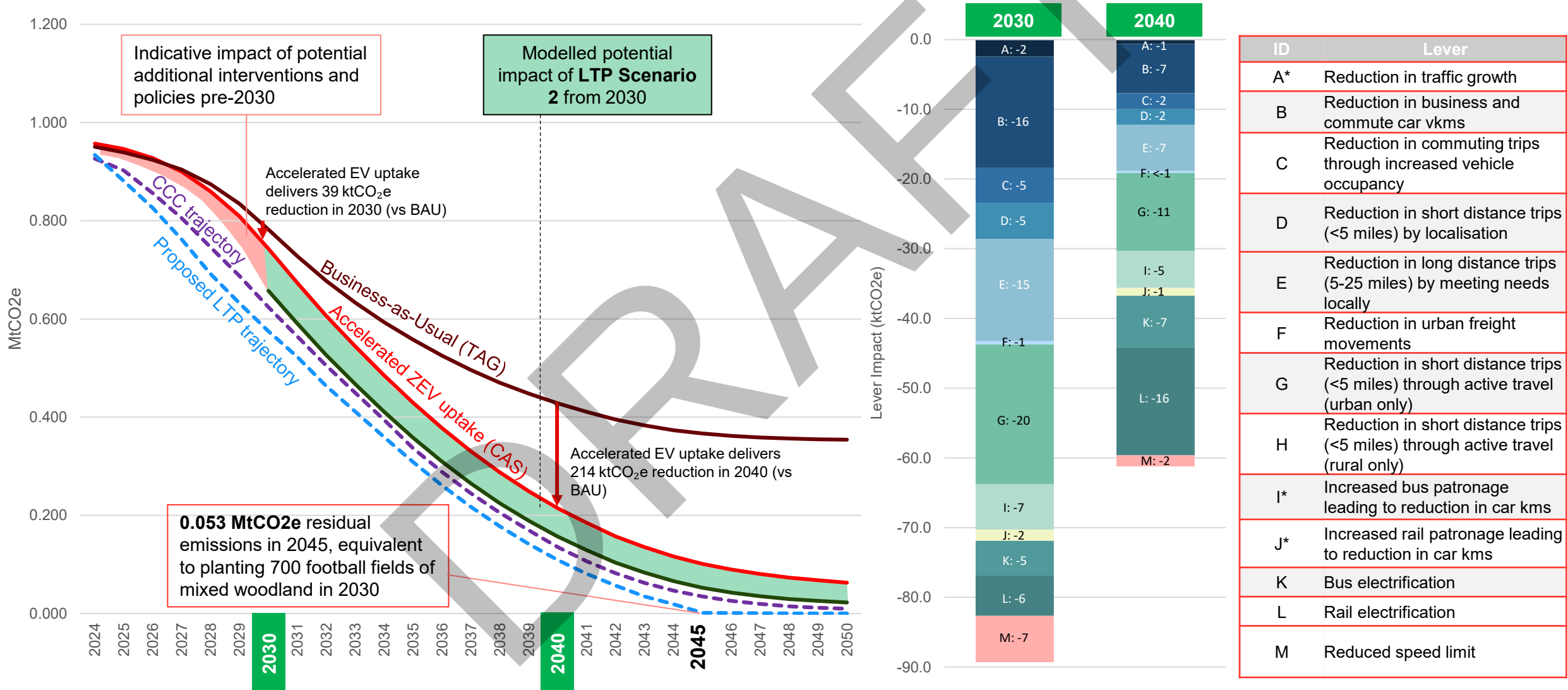
# LTP Scenario 2: Sustainable transport investment

| ID                                                                                                   | Lever                                                                           | Proportion of total county-wide vkms in-scope | Modelled change in 2030    | Modelled change in 2040    | Example interventions                                                                                |
|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------|----------------------------|----------------------------|------------------------------------------------------------------------------------------------------|
| A                                                                                                    | Reduction in traffic growth                                                     | 100%                                          | -2%                        | 0%                         | Vision-led SDS with metrics to reduce trip rates                                                     |
| B                                                                                                    | Reduction in business and commute car vkms                                      | 40%                                           | -5%                        | -5%                        | Support for online services and travel planning                                                      |
| C                                                                                                    | Reduction in commuting trips through increased vehicle occupancy                | 25%                                           | -2.5%                      | -2.5%                      | Support for business travel planning and ride sharing                                                |
| D                                                                                                    | Reduction in short distance trips (<5 miles) by localisation                    | 12%                                           | -5%                        | -5%                        | Improvements in local services (e.g. town centre regeneration & local employment hubs)               |
| E                                                                                                    | Reduction in long distance trips (5-25 miles) by meeting needs locally          | 39%                                           | -5%                        | -5%                        |                                                                                                      |
| F                                                                                                    | Reduction in urban freight movements                                            | 1%                                            | -1.5% (HGV)<br>-2.5% (LGV) | -1.5% (HGV)<br>-2.5% (LGV) | Freight consolidation & last mile solutions e.g. e-cargo bikes                                       |
| G                                                                                                    | Reduction in short distance trips (<5 miles) through active travel (urban only) | 8%                                            | -25% from 2030             | -50%                       | Full build out of urban LCWIP proposals, including targeted road space reallocation + parking policy |
| H                                                                                                    | Reduction in short distance trips (<5 miles) through active travel (rural only) | 4%                                            | NA                         | N/A                        | N/A                                                                                                  |
| I                                                                                                    | Increased bus patronage leading to reduction in car kms                         | 80%                                           | -1.0%                      | -2.5%                      | BSIP delivery / BRT / express network                                                                |
| J                                                                                                    | Increased rail patronage leading to reduction in car kms                        | 80%                                           | -0.25%                     | -0.5%                      | Improved rail access, new stations and increased rail frequency                                      |
| K                                                                                                    | Bus electrification                                                             | N/A                                           | 50% by 2030                | 100% by 2040               | Electric buses                                                                                       |
| L                                                                                                    | Rail electrification                                                            | NA                                            | 25% by 2030                | 50% by 2040                | Expansion of electrified lines                                                                       |
| M                                                                                                    | Reductions in carbon emissions from speed limit changes*                        | 100%                                          | 1%                         | 1%                         |                                                                                                      |
| Cross-cutting behaviour measures :+ increase parking charges and limit supply to support Park & Ride |                                                                                 |                                               |                            |                            |                                                                                                      |

\* This is an indicative reduction on overall emissions, not tested in the tools

# LTP Scenario 2: Sustainable transport investment

**Headline finding:** ambitious sustainable transport networks and a sustainable SDS supported by parking policy could achieve the CCC's trajectory

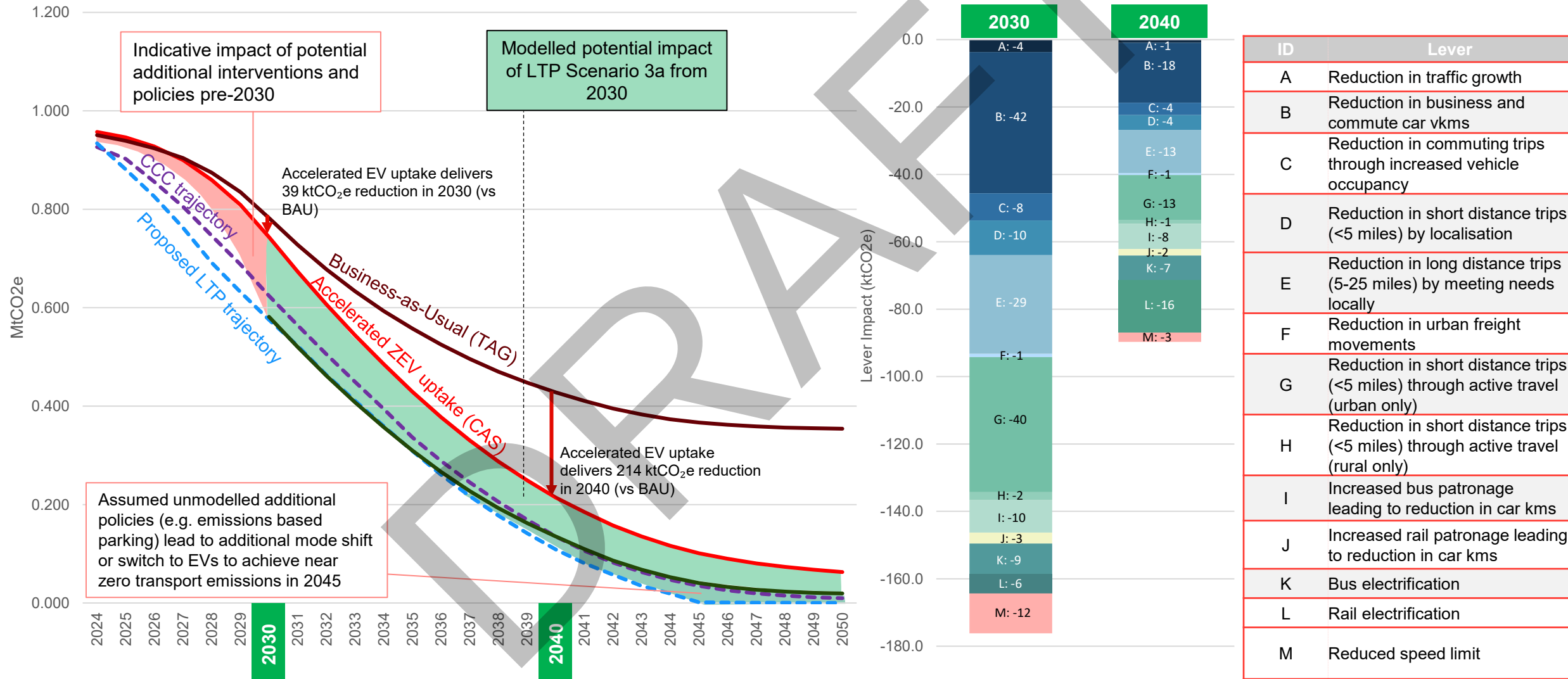


# LTP Scenario 3a: LTP Scenario

| ID                                 | Lever                                                                           | Proportion of total county-wide vkms in-scope | Modelled change in 2030    | Modelled change in 2040    | Example interventions                                                                                         |
|------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------|----------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------|
| A                                  | Reduction in traffic growth                                                     | 100%                                          | -3% (-1%)                  | 0%                         | Vision-led SDS with metrics to reduce trip rates                                                              |
| B                                  | Reduction in business and commute car vkms                                      | 40%                                           | -10% (-5%)<br>-15% (-10%)  | -10% (-5%)<br>-15% (-10%)  | Support for online services and travel planning                                                               |
| C                                  | Reduction in commuting trips through increased vehicle occupancy                | 25%                                           | -4% (-1.5%)                | -4% (-1.5%)                | Support for business travel planning and ride sharing                                                         |
| D                                  | Reduction in short distance trips (<5 miles) by localisation                    | 12%                                           | -10% (-5%)                 | -10% (-5%)                 | Improvements in local services (e.g. town centre regeneration & local employment hubs)                        |
| E                                  | Reduction in long distance trips (5-25 miles) by meeting needs locally          | 39%                                           | -10% (-5%)                 | -10% (-5%)                 |                                                                                                               |
| F                                  | Reduction in urban freight movements (HGV & LGV)                                | 1%                                            | -2% (-0.5%)<br>-5% (-2.5%) | -2% (-0.5%)<br>-5% (-2.5%) | Freight consolidation & last mile solutions e.g. e-cargo bikes                                                |
| G                                  | Reduction in short distance trips (<5 miles) through active travel (urban only) | 8%                                            | -50% (-25%)                | -50% (0%)                  | Full build out of urban LCWIP proposals, including coordinated road space reallocation (e.g. modal-filters)   |
| H                                  | Reduction in short distance trips (<5 miles) through active travel (rural only) | 4%                                            | -10% (-10%)                | -10% (-10%)                | Full build out of county-wide active travel in line with LCWIP                                                |
| I                                  | Increased bus patronage leading to reduction in car kms                         | 80%                                           | -1.5% (-0.5%)              | -3.5% (-1%)                | Complete roll out of express bus network (gold BRT) inc. mobility hubs to capture rural trips                 |
| J                                  | Increased rail patronage leading to reduction in car kms                        | 80%                                           | -0.5 % (-0.25%)            | -0.75% (-0.25%)            | Improved rail access, new stations and increased rail frequency                                               |
| K                                  | Bus electrification                                                             | N/A                                           | 75% (+25%)                 | 100% (0%)                  | Electric buses                                                                                                |
| L                                  | Rail electrification                                                            | NA                                            | 25% (0%)                   | 50% (0%)                   | Expansion of electrified lines                                                                                |
| M                                  | Reductions in carbon emissions from speed limit changes*                        | 100%                                          | 2% (+1%)                   | 2% (+1%)                   |                                                                                                               |
| Cross-cutting behaviour measures : |                                                                                 |                                               |                            |                            | further fiscal measures e.g. a low emission zone, workplace parking levy & reinvest revenue in infrastructure |

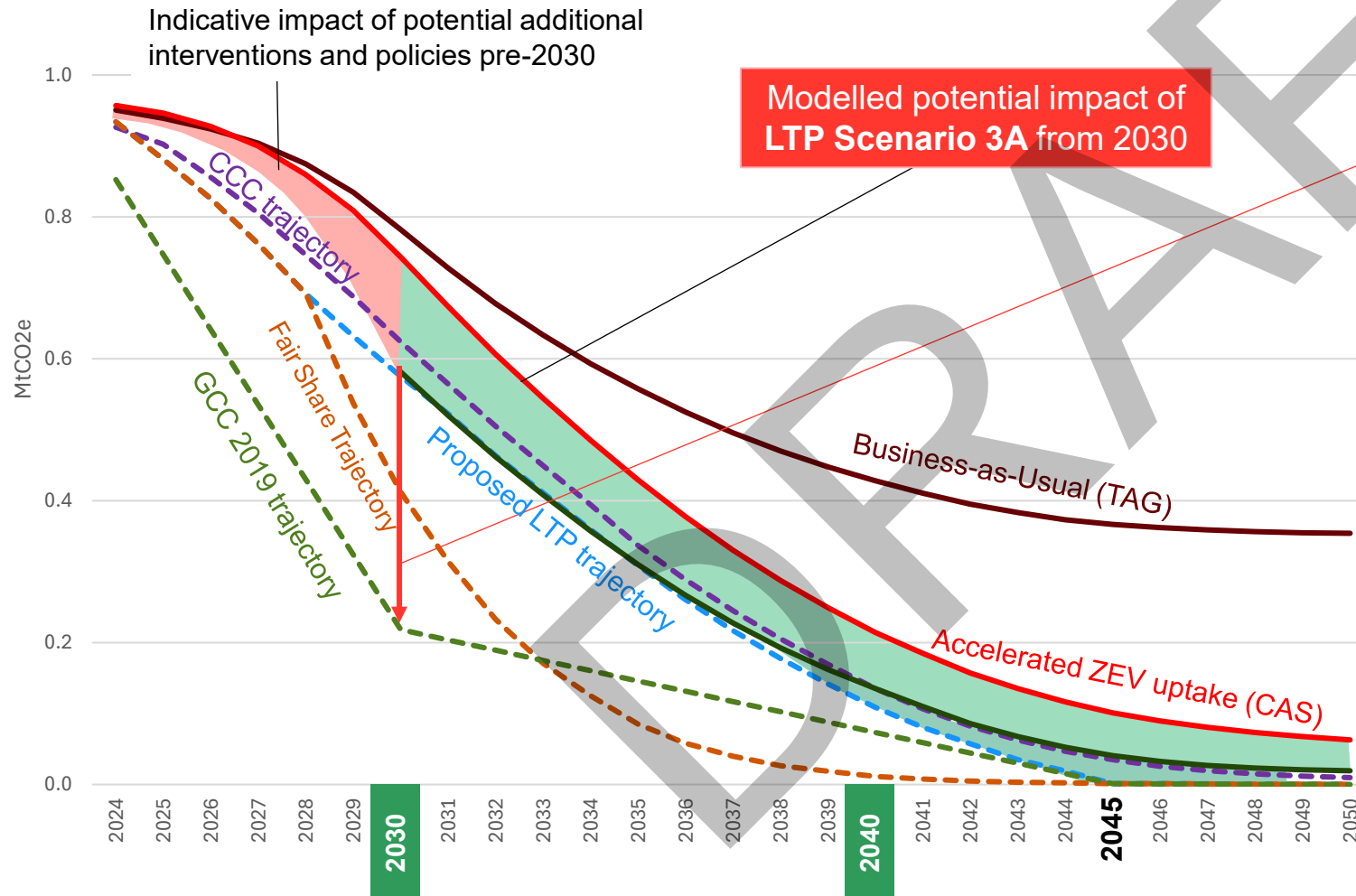
# LTP Scenario 3a: LTP Scenario

**Headline finding:** an LTP that incorporates demand management could achieve an LTP decarbonisation trajectory and Net Zero by 2045



# LTP Scenario 3b: LTP Scenario + National Demand Policies or external factors

**Headline finding:** some form of significant national pricing policy or external factors would likely be needed to achieve the 80% by 2030 ambition or Fair Share Trajectory



**A 30%+ reduction in car vkms** to achieve the Fair Share Trajectory or 80% by 2030 trajectory (similar to traffic reductions from the Covid pandemic).

This would likely require:

- A new model of national road pricing of system-wide demand suppression

OR...

- External factors such as prolonged fuel shortages

# Comparing example policies in each scenario

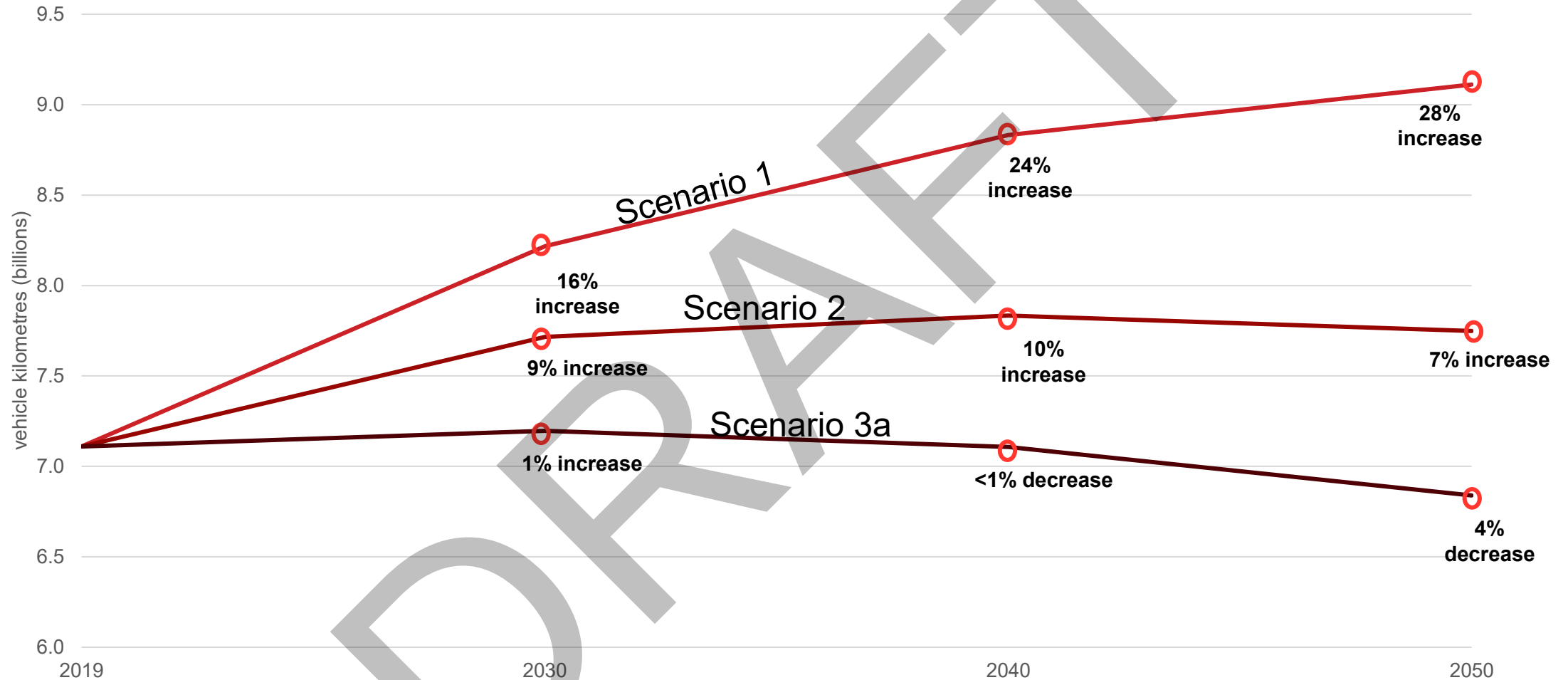
Delivery over time all assuming current levels of annual funding continue

| Delivery over time all assuming current levels of annual funding continue                 |                  |                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario                                                                                  | Category         | 2026-2029                                                                                                     | 2030-2043                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>1</b> (accelerated ZEV uptake and continuation of GCC's current transport investments) | Infrastructure   | Completion of cycle spine & ongoing active travel investment (primarily urban area focused)<br>BRT quick wins | Delivering the BSIP (bronze BRT)                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                           | Spatial planning | Current Local Plan & planning policies                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                                                                           | Behaviour        | 'think travel' campaign                                                                                       | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>2</b> (programme of sustainable transport investment)                                  | Infrastructure   |                                                                                                               | + full build out of urban LCWIP proposals, including targeted roadspace reallocation<br>+ build out of county-wide bus network inc. BRT (silver BRT) inc. Park & Ride and bus priority schemes<br>+ improved rail access, new stations and increased rail frequency<br>+ mobility hubs to capture rural trips<br>+ freight consolidation & last mile solutions e.g. e-cargo bikes<br>+ 50% of bus fleet is electric by 2030 and 100% by 2040<br>+ car clubs |
|                                                                                           | Spatial planning | + vision-led SDS with metrics to reduce trip rates                                                            | + monitoring and managing development sites to achieve desired vision-led metrics<br>+ strengthening local centres & neighbourhoods                                                                                                                                                                                                                                                                                                                         |
|                                                                                           | Behaviour        | + electrification of the bus fleet on core urban routes                                                       | + increase parking charges and limit supply to support Park & Ride<br>+ increased support for online services, business travel planning and ride sharing                                                                                                                                                                                                                                                                                                    |
| <b>3a</b> (LTP Scenario)                                                                  | Infrastructure   |                                                                                                               | + full build out of county-wide active travel in line with LCWIP<br>+ complete roll out of express bus network (gold BRT)<br>+ coordinated roadspace reallocation (e.g. modal-filters)<br>+ greater infrastructure rollout with local revenue from financial measures<br>+ 75% of bus fleet is electric by 2030 and 100% by 2040                                                                                                                            |
|                                                                                           | Spatial planning |                                                                                                               | + bolder vision metrics e.g. high internalisation rates, greater housing density                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                           | Behaviour        | + support for active travel in rural areas e.g. e-bike shared use schemes                                     | + further fiscal measures e.g. a low emission zone, workplace parking levy, emission or vehicle sized based parking charges & reinvest revenue in infrastructure                                                                                                                                                                                                                                                                                            |
| <b>3b</b>                                                                                 | Behaviour        |                                                                                                               | + new model of national road pricing or events such as prolonged fuel shortages                                                                                                                                                                                                                                                                                                                                                                             |

Bolder  
GCC-led  
policies to  
influence  
travel  
demand

National  
policies to  
influence  
travel  
demand

# Impact of each scenario on road traffic volumes from 2019



The graph illustrates the modelled county-wide vehicle mileage forecasts under different scenarios relative to the 2019 baseline. Under Scenario 3a, a 4% reduction in vehicle kilometers by 2050 is observed relative to 2019, based on the levers tested.

# Key risks and mitigations

| Risk                                                                                                                                                               | Potential mitigations                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  Disruption from climate change impacts                                            | GCC's LTP contributes to mitigation of climate change through scenarios 2 or 3a<br>Pursue actions in Gloucestershire's Climate Risk Vulnerability Assessment                                                                       |
|  Insufficient funding                                                              | Consider local revenue generation tools                                                                                                                                                                                            |
|  Public resistance to demand management policies                                   | Community engagement and co-design of policies<br>Investment in sustainable transport<br>Lobby Government for supportive policy                                                                                                    |
|  Infrastructure carbon impacts erode user carbon benefits                          | Continued consideration of whole-life carbon in LTP and scheme development                                                                                                                                                         |
|  Road schemes increase user emissions and have large infrastructure carbon impacts | Adopt carbon management in scheme development and consider supporting policies (e.g. development controls and sustainable travel) to minimise any induced demand                                                                   |
|  Reliance on accelerated EV uptake.                                                | Lobby Government to retain and strengthen EV policy<br>Consider additional local interventions<br>Expand countywide charging infrastructure                                                                                        |
|  Poorly located new development leads to traffic growth                           | Work closely with districts to embed vision-led metrics in Local Plans.<br>Monitor sites and intervene where metrics fall short.<br>Use planning obligations and transport assessments to support sustainable spatial development. |
|  Bus patronage and bus electrification underperform                              | Deliver the BSIP & BRT<br>Collaborate on a joint bus electrification roadmap with operators.<br>Use local levers (e.g. parking revenue) to co-fund fleet upgrades.                                                                 |
|  GCC lack influence on through-trips (approx. 30% of emissions)                  | Collaboration with National Highways and neighbouring authorities<br>Adjust GCC's climate ambition to exclude through-trips                                                                                                        |

# Conclusion

This report sets out the latest carbon evidence base and analysis prepared as part of the development of the updated LTP in 2026. This analysis has included development of a revised transport decarbonisation pathway to inform the ambition, policies and interventions included in the updated LTP.

Key conclusions of this analysis are:

- Transport in Gloucestershire cannot achieve GCC's existing 80% by 2030 ambition or the draft 'Fair Share Decarbonisation Trajectory' without significant national policy to reduce travel demand
- Net Zero by 2045 via a decarbonisation trajectory similar to the CCC's advised Seventh Carbon Budget pathway is achievable and has significant co-benefits
- This is dependent on an accelerated scenario of ZEV uptake, supported by local charging infrastructure delivery
- GCC can't directly influence all trips; collaboration with neighbouring authorities, National Highways and others will be needed but ambition should focus on trips in GCC's influence (i.e. exclude through-trips)
- Demand management policies (e.g. parking policies, local pricing schemes) will be needed alongside a comprehensive sustainable transport network
- Targeted policies (e.g. emissions based parking) could reduce the scale of demand management required and bring down emissions to near zero in 2045
- Some scenarios include residual transport emissions in 2045; extensive woodland creation may be needed if so

