Employee Travel Survey Report 2023

Contents

1 Executive Summary

The Council calculates its carbon footprint annually, and within this footprint are emissions associated with business travel and employee commuting. The Council's current knowledge and understanding of how its employees travel to and from work is limited. An employee travel survey was issued to gain more accurate data on employee commuting, home working, and the barriers our employees have to adopting more low carbon / sustainable travel methods.

The Employee Travel Survey received a total of 628 responses during the period it was live (14/11/2023 – 22/12/2023 It should be noted that the respondents to this survey were primarily office-based employees. The survey was not open to school employees who represent a large proportion of Council staff, and access for frontline workers within Social Services, Housing and Communities and Streetscene and Transportation was limited.

85.5% of respondents stated they are office/home based, and a total of 80.6% of respondents work from home at least one day per week, with 12.8% of those having a green energy supply. These figures reflect the cross section of respondents being primarily office based.

With regards to the distance between employee's home and place of work, almost half have a commute of 10 km or less, and a further quarter between 11-20 km. The average distance between home and place of work is 15.9km.

Regarding the modes of transport that employees use to travel to work and how often they use them, was difficult to determine due to a large amount of data being considered unreliable as it suggested many employees commute to work more than 5 working days in a week. This indicates employees were uncertain on how to respond to that question.

The latter part of the survey asked respondents what would encourage them to adopt more sustainable modes of transport. When asked about private vehicles, a large portion (65.4%) were interested in a salary sacrifice scheme for hybrid (47.2%) and electric (18.2%) vehicles. However, respondents stated that such a scheme would need to be affordable and for vehicles to have a greater battery range and charging speeds.

Regarding active travel transport modes such as cycling and public transport, there were a number of barriers highlighted and respondents stating they would not adopt such methods. Such barriers to adoption are vehicles being required to conduct work duties, personal commitments like childcare or no alternatives being available. However, some respondents did suggest safer routes would encourage walking or cycling to work, more frequent and direct buses would encourage the use of public transport and help finding an employee who does a similar journey would encourage car sharing.

2 Introduction

Each year, the Council must calculate its carbon footprint. Within this footprint are emission sources from:

- Fleet Vehicles
- Business Mileage
- Employee Commuting

And these emission sources have varying levels of accuracy.

Emissions from fleet vehicles are determined by the volume of fuel used through bunkered fuel and vehicle fuel cards – this gives us an accurate picture of the fuel used by fleet vehicles. Emissions from business mileage are determined by the data included within business mileage claims – this gives us data for employee car types, fuel type used and distance travelled. Emissions from employee commuting are unable to be determined due to a lack of data around employee travel to and from the workplace.

Flintshire County Council has a target to become Net Zero Carbon by 2030 and aims to reduce emissions from Mobility and Transport by 80% by 2030.

Actions within this theme include providing electric vehicle charging infrastructure, transitioning fleet vehicles to ultra-low emissions vehicles, launch a salary sacrifice scheme for ultra-low emission vehicles, and promotion and collaborative working of active travel and public transport networks.

Between 14/11/2023 and 15/12/2023, the council conducted an employee travel survey to better understand our employee commute emissions, understand barriers to engaging with these actions, and plan interventions to decarbonise. The results of this have been summarised within this report.

3 Employee Travel Emissions

3.1 Employee Commute Emissions

Figure 1 shows the employee commute emissions for Flintshire County Council. The baseline year of 2018/19 had commute emissions of 2409 tCO_2e. There was a drop in emissions of 1.7% in the 2019/20 period, then a significant drop of 15% against the baseline in 2020/21 due to the Covid-19 pandemic and an increase of employee working from home.

In the 2021/22 period, emissions increased from the previous year as Covid-19 restrictions eased, however emissions were 10.5% lower than the baseline.

In the most recent reporting period of 2022/23, emissions increased again on the previous year, but overall remain 8.5% lower than the baseline year.

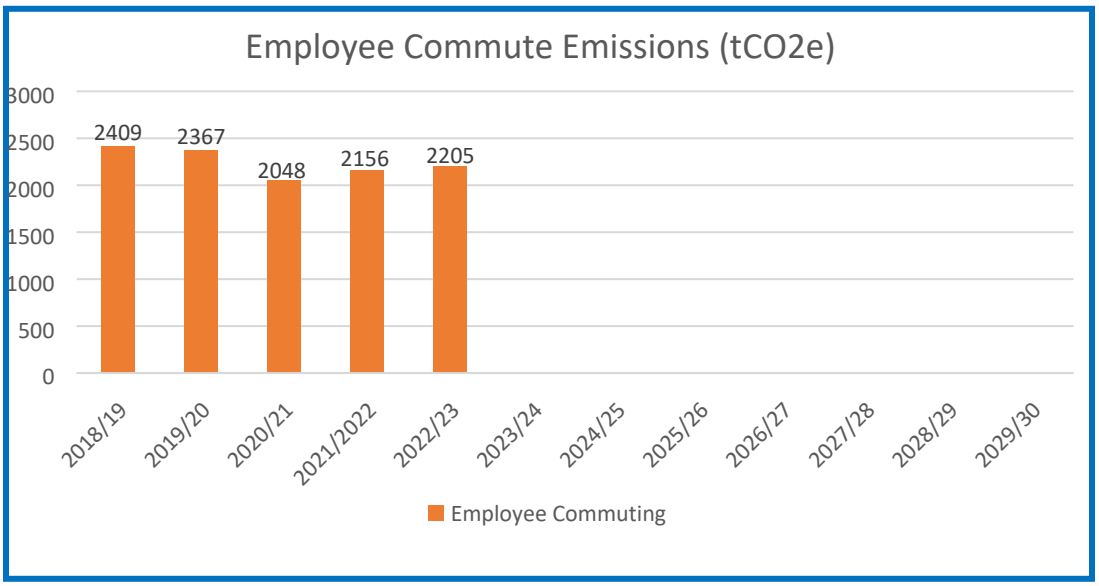

Figure 1 *Flintshire County Council carbon emission from employee commute*

4 Survey Results

This section presents the results from each travel question in the survey, highlighting the top response (or responses if more than one answer was requested), a summary of key comments provided by employees and commentary on what the results mean.

4.1 Survey Overview

There were 628 responses to the survey, which is 10% of employees according to the headcount summary provided in May 2023. It should be noted that the respondents to this survey were primarily office-based employees. The survey was not open to school employees, and access for frontline workers within Social Services, Housing and Communities and Streetscene and Transportation was limited.

Many questions were “skipped”, where employees did not give an answer. Some of these will be a result of the survey providing additional questions for employees who have working from home days, so those who did not work from home were not provided these questions (e.g., Question 5).

The number of skipped questions is provided for each question in Section 4.2.

In terms of demographic, 63.6% of respondents were female (347 employees) and 33% were male (180 employees). These accounted for 7.3% of females and 12% of males employed by the council. 3.5% of respondents were employees who preferred not to say (19 employees).

The age demographic for respondents is show in **Table 1** below with 84 respondents choosing to skip this question.

Answer Choice	Response Percent	Response Total
16 - 24 years	6.1%	33
25 - 34 years	14.5%	79
35 - 44 years	20.4%	111
45 - 54 years	27.9%	152
55 - 64 years	28.9%	157
65 - 74 years	2.2%	12
75 and above	0.0%	0

Table 1 *age demographic of survey respondents*

4.2 Survey Responses

This section will present the results of each question asked, supported by commentary on the findings, and a summary of key comments from respondents where a question allowed.

In tables, the top responses are highlighted in **Blue** for ease of identifying.

Q1: Your Portfolio

Table 2 shows the number of responses that were received from each portfolio and the share of employees from each portfolio that responded (data source for comparison is the Council’s headcount and diversity report issued May 2023).

The Housing and Communities portfolio was the largest responder of the travel survey with 162 responses, with the Chief Executives providing the fewest responses. However, when the responses are weighted against the number of employees within each portfolio, Governance were the most engaging with the survey.

Q1. Your Portfolio
Skipped: 0

Answer Choice	Survey Share	Response Total	Share of Portfolio	Share of FCC Staff
Chief Executives	4.6%	29	46%	1.0%
Education and Youth	8.8%	55	25%	4.6%
Governance	17.8%	112	**59.9%**	3.3%
Housing and Communities	**25.8%**	**162**	50.8%	5.3%
People and Resources	8.8%	55	26%	3.7%
Planning, Environment and Economy	14.3%	90	48.6%	3.2%
Schools	0%	0	0	52.2%
Social Services	12.9%	81	8.3%	18.1%
Streetscene	7.0%	44	9.3%	8.6%

Table 2 *number of responses received from portfolios, and % share of employees in those portfolios.*

Q2: Please select the option below which best describes the nature of your work?

This question was asked to determine the apportionment of employees who work from home during their working week. Table 3 shows most respondents work either from an office, at home or both, with only 14.5% of respondents being community-based. As described in the previous section, these figures reflect the cross section of respondents being primarily office based. This data cannot be used as an apportionment of home workers across the whole organisation due to such a large proportion of non-office based workers not being adequately represented. Work was undertaken with the internal Comms team to encourage engagement with community based employees in both Housing and Streetscene. The Climate Change team visited Alltami Depot on two occasions to support employees who have limited or no access to equipment to complete the survey. However, better engagement with frontline workers would provide a clearer understanding of the apportionment of office/home based employees and community based.

Q2. Please select the option below which best describes the nature of your work? Skipped: 0		
Answer Choice	**Response Percent**	
Office/home based	85.5%	
Community based e.g., Streetscene operative / tradesperson / home care worker	14.5%	
	Office/home Based	**Community Based**
Chief Executive	100%	
Education and Youth	72.7%	27.3%
Governance	98.2%	1.8%
Housing and Communities	77.7%	22.3%
People and Resources	100%	
Planning, Environment and Economy	95.5%	4.5%
Social Services	87.7%	12.3%
Streetscene	45.5%	54.5%

Table 3 *share of respondents who are home/office based or work in the community.*

Q3: How many days OR hours per week are you contracted to work?

This question was asked to determine a baseline for the number of days employees worked per week so that this could link to Q4 determining the number of days worked from home, and Q8 determining the number of those days that employees used different travel modes. The average number of working days in the week reported by respondents is 4.7 (data removed where hours were added in the 'day' column or no answer provided).

Respondent's working hours average for a week averaged 35, of which 411 reported working 37 hours per week or more (one response stated a 40-hour week).

There were a few cases of erroneous data which was either adjusted where possible (e.g., 37 hours stated in the 'days' section was converted to 5 days) or removed where it was not clear enough to make an adjustment.

Q3. How many days OR hours per week are you contracted to work? Skipped: 1		
Answer Choice	**Average**	**Responses**
Days	4.7	338
Hours	35.2	492

Table 4 *number of days or hours worked per week by employees.*

Q4: How many days a week do you work from home?

This question allowed us to determine the number of days employees are working from home so that we can use this data rather than the high level data that was collated previously. As can be seen in Table 5, most respondents (20.9%) work 4 days per week at home, with the second largest response (18.3%) working 3 days per week at home.

122 employees reported to never work from home with 32.8% coming from Housing and Communities, the largest portfolio with this response.

Note that working from home days may be limited by the number of days a respondent works in a week. Again, these figures reflect the home working days of the survey respondents (approx. 10% of Council employees) and not Council employees as a whole.

Q4. How many days a week do you work from home? Skipped: 0		
Answer Choice	**Response Percent**	**Response Total**
1	11.9%	75
2	13.4%	84
3	18.3%	115
4	**20.9%**	**131**
5	16.1%	101
I never work from home	19.4%	122

Table 5 *number of days employees work from home.*

Q5. If you work from home, do you purchase a Green energy tariff at home?

Question 5 asked employees who worked from home at least one day per week whether their home is powered using a green energy tariff, otherwise known as renewable electricity tariff. Those who do not work from home were not asked this question. This question was asked to allow us to utilise this accurate data on emissions from home working rather than a national average fuel type calculation.

According to the Centre for Alternative Technology, these tariffs are labelled as green if some or all of the units of electricity are 'matched' by units generated from a verified renewable energy source. For example, a wind farm, solar array or hydroelectric power station.

A large majority (87.2%) of respondents reported they do not have green energy tariffs. However, according to the Department for Business, Energy & Industrial Strategy (BEIS), 9 million British (England, Scotland and Wales) households are on green energy tariffs, this equates to 33%.

This suggests respondents may not have a full understanding of what 'green tariff' means.

Q5. If you work from home, do you purchase a Green energy tariff at home? Skipped: 129	
Answer Choice	**Response Percent**
Yes	12.8%
No	**87.2%**

Table 6 *number of employees who are on a green energy tariff.*

Q6. If you work from home, what is your home heating source?

For employees working from home, the survey asked what energy source was used to power their heating. As previous, this allows us to utilise this data within our carbon emission calculation from home working rather than the national average methodology.

Almost 80% of respondent's homes are heated using gas (79.6%), with oil (also known as heating oil or kerosene) is used by 9.8% of respondent's homes.

Q6. If you work from home, what is your home heating source? Skipped: 129	
Answer Choice	**Response Percent**
Gas	**79.6%**

Oil	9.8%
Electric	4.4%
Renewable	0.8%
Multi-fuel	3.6%
Other	1.8%

Table 7 *energy sources employees use for home heating.*

Q7. What is your travel distance – one way – to your usual place of work?

This question allows us to more accurately determine the average distance employees are travelling to their workplace so that emissions associated with employee commuting can be more accurately calculated. Table 8 shows that almost half (49.7%) of respondents live up to 10 km from their place of work, and a further 24.7% between 11 and 20 km.

The average travel distance from home to work was 15.9km.

The results indicate that a large proportion of respondents are also Flintshire residents, therefore present an opportunity to influence others in their community.

Some data has been excluded from calculations as the question was either skipped (45) or distances were significantly high, and employees are not working from home (e.g., 405km). These may be a typing error but as it cannot be sure, have been removed.

Q7. What is your travel distance – one way – to your usual place of work? Skipped: 45		
Answer Choice km	**Number**	**Percentage**
0-10	**290**	**49.7%**
11-20	144	24.7%
21-30	65	11.1%
31-40	44	7.5%
41-50	18	3.1%
51-60	12	2.1%
61-70	2	0.3%
71-80	1	0.2%
81-90	1	0.2%
91+	4	0.7%

Table 8 *the distance (km) employees commute from home to work (one direction). Excludes data that wasn't provided (45)*

Q8. Please specify the number of days in a week you typically use any of the following modes of transport?

Question 8 asked employees to state how many days per week they commuted by transport mode. This question was asked to better apportion the average number of days that employees use different transport modes so that this data can be utilised to determine employee commuting emissions.

Unfortunately, a significant number of answers received for this question appear to be erroneous data as some employees claimed to use their car 5 days per week while also working from home 4 days per week (giving a total of 9 working days in a week), or some data was incomplete where the number of days selected for a mode of transport did not add up to the total number of days they work in a week.

Where data was found to be accurate, or minor adjustments made with confidence, it was found that 67.1% of working days involved commuting by private car alone, with home working the next highest response at 24.6%. This is based on a total of 249 responses out of 628.

Q8. Please specify the number of days in a week you typically use any of the following modes of transport? Skipped: 48	
Answer Choice	**Response Total** (%)
Private Car (alone)	**67.1%**
Private electrical vehicle (alone)	0.5%
Private motorbike/moped	0.4%
Work vehicle (car or van)	4.4%
Car share	1.1%
Taxi	0%
Bus	0.5%
Train	0%
Cycle	0.3%
Walk	1.2%
Work from home	24.6%

Note: Not clear in question whether this means for work only or combined work and personal use, this is supported by comments (line 25, 36, 47 as examples)

- Several respondents stated they work from home, only travelling to a place of work on occasion for meetings.
- Public transport is not available to arrive at the office at a suitable time
- Respondent stated they would like to cycle to the Flint office more often but there is no where safe to lock the bike, nor are there showering facilities.

Table 9 *frequency of when employees use a mode of transport.*

Q9. If using a private vehicle, what is the fuel type of that vehicle?

This question was asked to determine more accurate employee commuting emissions. Table 10 shows that most respondent's private vehicles use petrol as their fuel source at 52.2%, with 42.1% using diesel. Only 3.8% of responses stated that vehicles were electrified whether hybrid/ plug-in hybrid or fully electric.

Some respondents stated 'other' where they used different vehicles for their commute or liquefied petroleum gas (LPG).

Using UK Government Data from 2023, a column has been included with the table to demonstrate the tailpipe emissions in kilograms of carbon dioxide equivalent ($kgCO_2e$) per km for each average sized car.

Q9. If using a private vehicle, what is the fuel type of that vehicle? Skipped: 70		
Answer Choice	**Response Percent**	**$kgCO_2e$ per km**
Petrol	**52.2%**	**0.16391**
Diesel	42.1%	0.16983
Electric	0.9%	0
Hybrid/Plug-in Hybrid	2.9%	0.11898 / 0.06588
Other (please specify):	2.0%	0.19662 (LPG)
- LPG - Split use of petrol, diesel and electric - Electric and Hybrid cars are too expensive, maintain car myself to keep costs down - We would consider an electric car but we don't have the infrastructure in the car park for the time being.		

Table 10 *fuel types that are used in employee private vehicles.*

Q10. What influences your travel choices: Please select two options.

Question 10 asked respondents to provide the two main reasons why they use their current mode of transport (e.g., private vehicle, bus, etc.) with 'convenience' being the standout reason at 62.3%. This question was asked to identify barriers to employees using different types of transport to travel to work.

The second most common reason is because there is no alternative (35.3%) mode available for reasons outlined in the comments for 'other'.

This response suggests that using a private vehicle will continue to be the primary and/or only option for many employees in order to fit with both their work and personal commitments.

Q10. What influences your travel choices: Please select two options. Skipped: 45		
Answer Choice	**Response Percent**	**Response Total**
Cost	31.4%	183
Convenience	**62.3%**	**363**
Childcare considerations	13.7%	80
Environmental concerns	4.5%	26
Use of company car	1.4%	8

Fitness/exercise	5.0%	29
Disabilities	2.9%	17
No alternative	**35.3%**	**206**
Other (please specify):	11.0%	64
- Vehicle is required for work - No alternatives available (e.g., public transport in rural areas) - Childcare commitments		

Table 11 *reasons that determine how an employee commutes to work.*

Q11. What would encourage you to walk or cycle to work? Please select three options.

This question was asked to identify barriers to employees utilising active travel for commuting to the workplace. Table 12 below shows the response for Question 11 which asks employees to state three options that they would require to consider walking or cycling to work.

Most respondents (59%) stated that there is no option that would encourage them to walk or cycle to work, with 31.9% selecting 'other' in which they provided comments stating that distances are too far, vehicles are required for their work, and bike safety is of concern to name a few.

The third most answered was the need for a safer route to the workplace (26.4%), which was also reflected in respondent's comments.

Respondents working in Housing and Communities were the highest to comment they required a vehicle for work commitments.

Q11. What would encourage you to walk or cycle to work? Please select three options. Skipped: 45		
Answer Choice	**Response Percent**	**Response Total**
I already walk/cycle to work	2.4%	14
Secure cycle parking	9.1%	53
Information about walking/cycle routes	6.3%	37
Lockers and drying facilities	11.8%	69
Free adult cycle training	1.9%	11
Having someone to cycle with	2.9%	17
Free bicycle maintenance sessions at work	1.9%	11
A safer route to the workplace	**26.4%**	**154**
Nothing	**59.0%**	**344**
Provision for basic maintenance in the workplace	3.8%	22
Cost of salary sacrifice scheme is prohibitive	4.3%	25
Other (please specify):	**31.9%**	**186**

- Distance to work is too far
- Vehicle is required for work
- If I worked closer, I would walk or cycle to work
- Need to carry work equipment is prohibitive
- Safety on a bike is a concern, with safe cycle routes suggested

Table 12 *levers to increase walking or cycling to work to commute to work.*

Q12. If there was an option for a salary sacrifice scheme for a zero or ultra-low emission vehicle, would you be interested in this?

Question 12 asked employees whether they would be interested in using a salary sacrifice scheme to purchase a zero or ultra-low emission vehicle.

65.4% of respondents stated they would be interested in a salary sacrifice scheme for zero or ultra-low emission vehicle, with more than double of those interested opting for a hybrid vehicle (47.2%) over one that is fully electric (18.2%).

Over a third (34.6%) of respondents felt they would not be interested in a salary sacrifice scheme for a zero or ultra-low emission vehicle. It is not specifically known whether the scheme or the fuel-type is the main issue for those who selected 'no'.

Q12. If there was an option for a salary sacrifice scheme for a zero or ultra-low emission vehicle, would you be interested in this? Skipped: 45		
Answer Choice	**Response Percent**	**Response Total**
Yes - electric	18.2%	106
Yes - hybrid	**47.2%**	**275**
No	34.6%	202

Table 13 *employee interest in salary sacrifice scheme by vehicle type.*

Q13. What would encourage you to consider a zero or ultra-low emission vehicle? Please select two options.

This question looked to identify barriers to utilising a an ultra low emissions vehicle. Table 14 shows the responses to Question 13 which asked Employees to state the two options that would encourage them to consider a zero or ultra-low emission vehicle.

The vast majority (69.5%) of respondents stated that an affordable scheme would encourage them to consider these vehicles, showing that high costs are a barrier. This is a similar response to those who selected 'yes' in Question 12.

The second most selected answer was the need for greater battery range and charging speeds at 27.3%.

A notable response was 'improved charging infrastructure in the county' with a 23% response, which would likely be influential on addressing concerns for greater battery range and charging speeds.

Q13. What would encourage you to consider a zero or ultra-low emission vehicle? Please select two options. Skipped: 45		
Answer Choice	**Response Percent**	**Response Total**
An affordable scheme	**69.5%**	**405**
Greater battery range and charging speeds	**27.3%**	**159**
Reliability	15.4%	90
Better understanding of options available	16.0%	93
Improved charging infrastructure at home	13.9%	81
Improved charging infrastructure at work	15.1%	88
Improved charging infrastructure in the county	23.0%	134

Table 14 *levers to increase use of zero or low-emission vehicles to commute to work.*

Q14. What would encourage you to car share? Please select two options.

Employees were asked what two options would encourage them to car share. There was an even split for the top two responses of 'help to finding someone who does similar journeys' and 'other' at 34.8% each, and currently only 5.7% of respondents stated they already car share to work.

Those who selected 'other' provided several additional comments stating reasons why they cannot or would not car share such as requiring a vehicle for their work commitments, convenience or simply wishing to not travel with others.

Q14. What would encourage you to car share? Please select two options. Skipped: 45		
Answer Choice	**Response Percent**	**Response Total**
Information about car sharing	14.6%	85
Guaranteed ride home	24.9%	145
I already car share to work	5.7%	33
Incentives and rewards	27.4%	160
Help to find someone who does a similar journey	**34.8%**	**203**
Other (please specify):	**34.8%**	**203**
- It is not convenient to share a car/ not flexible - Own vehicle is required for work - Childcare commitments - Preference not to travel with others - Having someone doing the same shifts would be helpful		

Table 15 *levers to increase car sharing to commute to work.*

Q15. What would encourage you to use public transport to travel to work? Please select three options

The final travel-related question in the survey asked employees which three options would encourage them to use public transport for work.

Most responses (50.9%) stated that no option would encourage the use of public transport, with comments provided from respondents giving some reasoning such as a vehicle is required for their work.

More direct (31%) and frequent (26.9%) bus services were the second and third most selected options showing there are several employees who feel public transport could become a viable option with the right improvements.

Q15. What would encourage you to use public transport to travel to work? Please select three options Skipped: 45		
Answer Choice	**Response Percent**	**Response Total**
I already use public transport for work	2.4%	14
Improved public transport waiting facilities	14.4%	84
More frequent rail services	2.6%	15
More direct rail services	5.7%	33
More frequent bus services	**26.9%**	**157**
More direct bus services	**31.0%**	**181**
Guidance on the safe use of public transport	1.2%	7
Discounted public transport ticket	22.6%	132
Information about public transport routes	5.8%	34
Nothing	**50.9%**	**297**
Other (please specify):	20.6%	120
- Availability and reliability of public transport is poor with no bus stop near Alltami Depot - Complex public transport (e.g., multiple bus changes) - Pool vehicle at work would support using public transport - Vehicle is required for work		

Table 16 *levers to increase public transport use to commute to work.*

4 Next steps and recommendations

Despite issues with transport mode data, low use of car sharing (5.7%), cycling/walking (2.4%) and public transport (2.4%) indicates that travel in privately-owned, petrol and diesel vehicles is by far the most used method for commuting to work.

Responses highlighted many barriers that would prevent employees from moving away from privately-owned vehicles such as work duties, personal commitments, cost barriers and a lack of alternatives. It is likely that privately-owned vehicles will continue to be the primary and/or only option employees have to commute to work.

With this in mind, and strong interest in a salary sacrifice scheme, methods should be investigated that support employees to transition away from private vehicles powered only by petrol and diesel, as well as using those vehicles more sustainably through car sharing.

Transitioning to other modes of transport have additional challenges and less interest from respondents. However, these should not be discounted considering the number of employees who live a short distance from their workplace and the additional benefits that could be gained, such as mental and physical well-being.

With many employees living within the county, there is also opportunity for them to become advocates of sustainable travel if they are informed and well-supported to make the transition.

Recommendations are as follows:

- Investigate salary sacrifice schemes which provide employees an affordable and accessible means to transition from Petrol or Diesel vehicles to zero and ultra-low emission vehicles that provide sufficient range per charge.

- Following a review of the council's Cycle to Work scheme, actively promote the scheme, highlighting the benefits and information on local infrastructure.

- Investigate suitability of existing car-sharing platforms that are employee-led, and identify ways in which using such a platform can be incentivised.

- Investigate how the barriers to using active travel (safer routes) and public transport (bus services) can be addressed despite current limitations.

- Review and update the methodology used to calculate employee commute carbon emissions, improving accuracy by including employee commute distances and modes of transport highlighted in the survey.

- Establish an effective process to ensure those employees who do not have easy computer access, are provided the opportunity to complete future iterations of this survey – thus allowing a more representative reflection of the quantity and frequency of employee commuting and home working within our employee base.

5 Appendix 1 – Glossary

Carbon Dioxide Equivalent (CO_2e): a unit of measurement that compares the emissions from greenhouse gases on the basis of their global warming potential (GWP).

Erroneous Data: Erroneous data is data that is abnormal or falls outside of what is acceptable. This is should be rejected where found.

Green Energy: Tariffs are labelled as green if some or all of the units of electricity are 'matched' by units generated from a verified renewable energy source. For example, a wind farm, solar array or hydroelectric power station.

Net Zero Carbon: Emissions of greenhouse gases are balanced by the removal of greenhouse gases from the atmosphere such as by trees, peatland and carbon capture and storage technologies.