



# **ZERO CARBON RUGELEY**

# WP17-D12-1: USER-CENTRIC DESIGN & COMMUNITY ENGAGEMENT: MOBILITY IN RUGELY (ENERGY HERITAGE DAY 2021)

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# USER-CENTRIC DESIGN & COMMUNITY ENGAGEMENT: MOBILITY IN RUGELEY (ENERGY HERITAGE DAY 2021)

# Executive summary

This report summarises the activities and findings of activities held to gain inputs from community participants around aspects of mobility in and around Rugeley as part of the first Rugeley Energy Heritage Day run in October 2021. This event was held as part of a suite of user-centric design and community engagement activities as part of the InnovateUK Zero Carbon Rugeley project, which aimed to design a smart local energy system for the town of Rugeley in Staffordshire, with user-centric design as an underlying principle.

In keeping with the 'energy heritage' theme of the day the activities explored participants' views of Rugeley's past, present and future, which brought out discussions of mobility and transport, as well as specifically exploring participants' views of different mobility options in and around Rugeley including trains, buses, and barriers to active travel through cycling and walking. Activities were also designed to understand more about mobility patterns and desires around Rugeley, as well as inputs into locations of potential mobility hubs and public EV charging stations.

Key points emerging from these discussions included:

- A desire for a vibrant town centre which needed supporting by improved connectivity into the town centre.
- Perceived poor facilities and accessibility associated with Rugeley's two train stations. In particular concerns were expressed about only having stairs access between the platforms which limited accessibility to those with mobility issues, as well as those with prams and bicycles, and concerns about the lack of accessible routes to the train station. Concerns were also expressed about the lack of passenger facilities while waiting for trains.
- Perceived poor bus routes, that provided little connectivity within Rugeley and between estates within Rugeley, and were felt to be prohibitively expensive
- Perceived poor cycling and walking infrastructure with limited bike lanes and poor
  quality of pavements which affected the desirability of cycling and walking for those
  with less cycling confidence and people with prams or mobility scooters.

Suggestions were made for appropriate locations of mobility hubs which were seen
as potentially desirable if it combined bus services, bike rental and public EV
charging. However, there were still doubts by some as to whether a mobility hub
would be adequately used by the community.

The outcomes of these discussions with local community members highlights the importance of engaging the local community to understand mobility patterns and barriers to support the co-creation of more sustainable mobility options for a place.

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# 1. Introduction:

This report outlines the activities and findings related to mobility which were carried out at the first Zero Carbon Rugeley-led Energy Heritage Day in October 2021. The energy heritage day was one event as part of the user-centric design and community engagement activities led by Keele University in collaboration with New Vic Borderlines, as part of the InnovateUK Zero Carbon Rugeley project which aimed to design a smart local energy system for the town of Rugeley in Staffordshire, underpinned by principles of user-centric design.

The key outputs from these activities are three maps (figures 10, 11 and 12), which focus on capturing local perspectives about mobility needs and transport experiences around the town of Rugeley. We do not seek to quantify the degree of acceptance of these different outputs, particularly given the diversity of our sample. However, these outputs are drawn from rich, qualitative data which explored the entanglement of local histories, sense of place and local mobility, as well as through assessing demand through comparing findings between the Rugeley Community Energy and Heritage Day and regular social media engagement through the EngageZCR Facebook page.

# 2. Rugeley energy heritage day outline

The first Rugeley energy heritage day, held at the Rugeley Rose Theatre, was run in October 2021 as an all-day event to provide the opportunity for residents of Rugeley to learn more about the Zero Carbon Rugeley project, and its different dimensions and as a way to collect data about different aspects of the Rugeley smart local energy system design. The theme of 'energy heritage' was chosen due to the strong sense of heritage around energy, and in particular the coal mining and coal-fired power station past. Further detail of the sorts of activities held at the Rugeley energy heritage day can be found in Report WP17-D9 which outlines the second day of this kind held in October 2022. This report focuses specifically on activities and findings related to mobility, and how questions of mobility fit with the concept of energy heritage and change for the town of Rugeley.

Throughout the day, a stand was run by the New Vic Borderlines, focusing on questions of mobility within Rugeley. The approach was organised across the two themes of i) 'Rugeley Past, Present, and Future' and ii) 'Getting Out and About in Rugeley'. The aim of these themes was to engage with the heritage aspect of the event – so as to understand how local histories, individual circumstances and prior experiences of local transport interplayed with the types of mobility solutions participants were more likely to accept. This built on the data from previous workshops run as part of the user-centric design and community engagement activities within the Zero Carbon Rugeley project, which had focused on aspects of mobility and transport. These activities as part of the energy heritage day also sought to build relationships with community stakeholders and local residents who could be engaged in future research activity.

To explore the above themes, members of the public were invited to help to fill in two blank monopoly boards of Rugeley (one for each theme). This was a crucial part of facilitating discussion around Rugeley as it exists today and how they would like to see Rugeley change as part of a journey toward a greener future. Participants therefore created the key 'stops' in Rugeley at each time scale. Anything added to either board was compounded by deliberative discussions between the community and research team, and therefore moveable and changeable, allowing members of the public to drop in throughout the day and add, change, or develop the work of others. The research team kept track of any changes. The outcomes are the informally agreed insights of around 25 participants across the day. Participants varied demographically and included members of local religious groups, young families, older residents, and people living with mobility issues as well as their carers. Thus, we present a diverse sample of perspectives within the Rugeley community.

# 3. Activity outline and results

## 3.1 Board 1 - Rugeley: Past, present and future

#### 3.1.1 Activity outline:

The first board (Figure 1) explored the theme of heritage by inviting participants to populate the blank monopoly board one street at a time. The first street detailed the Rugeley of the

past, the second the Rugeley of the present, and the third the Rugeley of the future, with the final blank street left to discuss the steps the community of Rugeley might take to reach the future they would like to see. The outcomes of this activity are detailed below.



Figure 1: 'Back to the Future': Game 1 - Rugeley past, present and future.

#### 3.1.2 Results

## Rugeley of the past

In the completion of the 'past' street of the Rugeley: past, present and future board, participants expressed mixed feelings about their community's heritage, with some participants keen to celebrate heritage ('heritage is great') and others expressing that the town holds onto its past to its detriment ('1960's throwback') as shown in Figure 2, and reflected later in game 2 where participants highlighted a need for redesign and modernisation of Rugeley's bus and train stations. The thread connecting and, in some senses, balancing these two perspectives is Rugeley's heritage as a mining community. This aspect of the town's history was tied not only to residential areas such as the Pear Tree estate but also to St Augustine's as a church built by and for the mining community. Here, the themes of heritage and energy aligned with an acknowledgment that historic buildings, such as the church, need material retrofitting but without historic features of the building

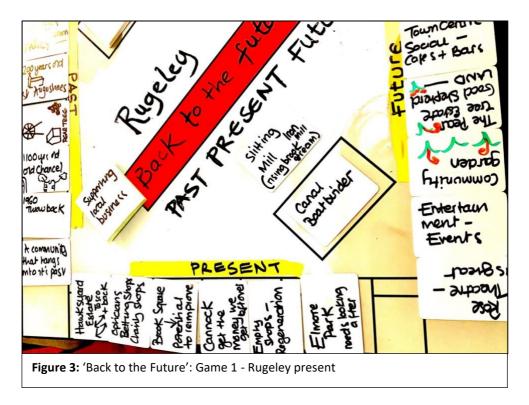
such as windows being lost or compromised. This discussion point lead neatly to engaging with the Rugeley of the present.



Figure 2: 'Back to the Future': Game 1 - Rugeley past.

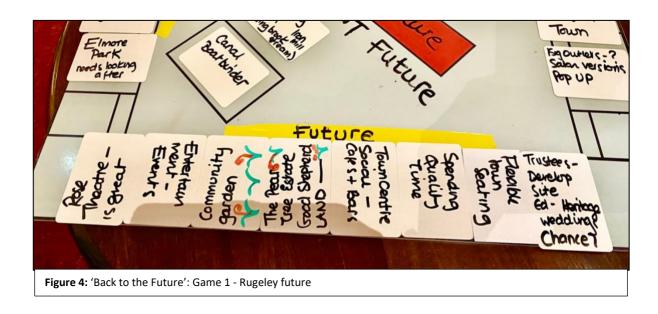
# Rugeley of the present

When discussing Rugeley of the present (Figure 3), participants focussed on a lack of funding in the area and a desire to maintain and develop the town. As shown in the image below, there was a perception that 'Cannock get (sic) the money, we get leftovers' and participants drew attention to specific areas of the town they felt needed improvements. This included highlighting empty shops in the town in need of regeneration, as well as pointing to public spaces such as Brook Square and Elmore Park which needed improvements.



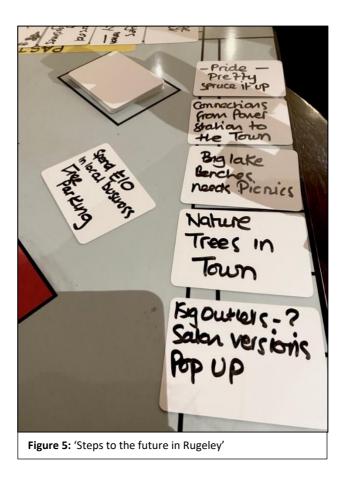
# Rugeley of the future

In the completion of the third street on the board on Rugeley's future (Figure 4), the themes that emerged centred around a vision of the town as a service/consumption economy which encourages people to socialise in the town. This included an appetite for spaces for community gardening, for the town centre to be a social centre through the provision of cafes and bars, a mix of seating spaces which encourage people to spend time in the town, as well as highlighting an appetite for more spaces for entertainment and events.



## Steps to the future

The final street of the board (Figure 5) asked participants to envision steps that could be taken to begin to move from the Rugeley of the present as they had defined it, to the Rugeley of the future they had just laid out. Some of the initial steps identified were cosmetic and centred around building a sense of pride in the town by 'sprucing it up'. These included bringing nature into the town by planting trees and encouraging people to use natural spaces by, for example, providing picnic benches. The second set of suggestions centred on encouraging people to come to the town to use it. Here participants highlighted building connections between the power station and the town to encourage residents into the town centre as well as free parking schemes for people spending money in local businesses. These emerging themes of mobility between residential areas and Rugeley town centre were explored in more detail in the second game, where transport and mobility were the focus.



## 3.2.1 Activity outline

Using the second board, participants were asked first to help build a monopoly board (Figure 6) of Rugeley before then adding to the board the current ways of travelling around the town. At this stage, facilitators asked participants to think about ways that transport and mobility in the town would need to change as part of a transition to a low carbon future. The board they had created was then used to facilitate discussion around how they would like to see transport change as part of any transition, how a transition could help solve current mobility issues in the town, and potential barriers to any transition. The following section highlights key moments in participant discussion.

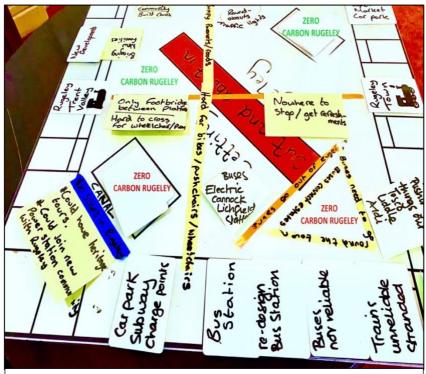


#### 3.2.2 Results

## Use of the canal

Following on from the theme of heritage, participants were keen for the canal to be used as a mode of, and route for, transport for the town (Figure 7). This was framed in the first instance as a leisure activity, with the suggestion being that canal boats could give heritage

tours for people visiting the town. However, the suggestion was also made that if there were canal stops in Rugeley, then canal boats could also be used to connect the new community at the power station development with the town centre.



**Figure 7:** Better use of the canal was regularly requested by the community.

#### **Train stations**

There was a lot of discussion by participants around the need for Rugeley's two local train stations to be redesigned and upgraded. Central to this discussion was the theme of accessibility, with several participants highlighting that the only way to change platforms was via a footbridge. This was seen as a major accessibility issue for members of the public in wheelchairs, with pushchairs, and even with bikes. Participants saw the accessibility issues as discouraging both the use of public transport to visit nearby towns as well as active travel to get to and from the station. A second motivating factor in the call for train station redesign was a lack of passenger waiting spaces and facilities. Participants pointed out that the stations did not have anywhere for passengers to stop and sit if they were waiting for a train or to get refreshments if they were meeting someone at the station. Both accessibility and passenger waiting spaces and facilities were seen as high priorities in any future redevelopment of the stations.

# **Road surfaces**

In the discussion of current mobility issues in Rugeley, participants highlighted poor quality road surfaces as a barrier to active travel. Bumpy roads were seen as discouraging less confident cyclists and people from using mobility scooters, and participants felt that improved road surfaces would not only make active travel more accessible to a larger section of the public but would also make road and pavement use easier for wheelchair users and people with pushchairs.

#### Buses

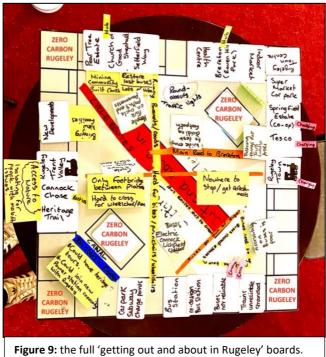
Local buses were highlighted repeatedly as a key mobility issue in the town (Figure 8). Two key issues around bus services were identified: i) the coverage of available bus routes; and ii) the cost of bus travel locally, with both being framed as prohibitive. Regarding the coverage of bus routes in Rugeley two issues were identified. First, current bus routes tend to connect Rugeley to other nearby towns and do not enable Rugeley residents to travel around the town. Second, currently available bus routes within Rugeley connect estates to the town but not to one another. Considering the above, participants highlighted a need to re-design the bus station and routes prioritising affordability and mobility around the town as well as between the estates.



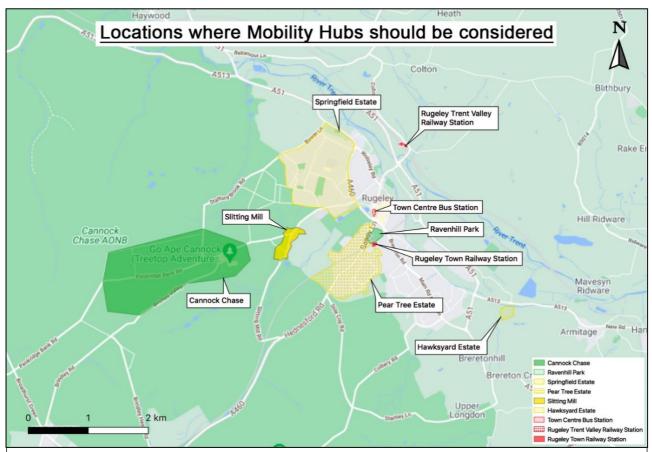
## **Mobility hubs**

Another key area of discussion with participants centred around the provision of mobility hubs. This included the modes of transport they would like to see at these hubs and where they think would be best for them to be situated around the town. As with bus routes, the key idea to emerge from discussion was connecting Rugeley's estates with one another as well as with the town and train stations. Participants were keen for mobility hubs to include bike rental as well as charging points for electric vehicles and mobility scooter rental. Taking these three modes of transport (buses, bikes, electric vehicles) into account alongside the need to connect Rugeley's estates with the town formed the rationale for the placement of mobility hubs.

For electric vehicle charging points the hubs need to be situated in places with plenty of parking. Due to this consideration, it was suggested that hubs at both Rugeley Town train station and the Springfield Estate Co-op would work well. To ensure that mobility hubs allowed connectivity between estates, participants discussed good locations in other estates to Springfield to situate hubs, with the church in the Pear Tree estate being suggested as ideal. To encourage active travel participants highlighted a need for lanes exclusively for bicycles, and highlighted issues with cars parking in cycle lanes as discouraging less confident cyclists. To this end, the main road to Brereton was identified as wide enough to test temporary cycle lanes (in which pedestrians, bicycles, and cars are separated) with Raven Hill Park in Brereton suggested as another potential location for a mobility hub to encourage this. Figure 9 shows the complete mobility monopoly board.



Broadly speaking, mobility hubs were seen as an opportunity to address some of the transport issues in present day Rugeley. In Figure 10 below, we show a map which synthesises where mobility hubs were seen as being most beneficial in the community.



**Figure 10:** A map comprising the key locations where mobility hubs were requested by the community. This map included additional inputs from participants contributing to these discussions via the Engage ZCR Facebook page.

The most important features of any hub to participants included:

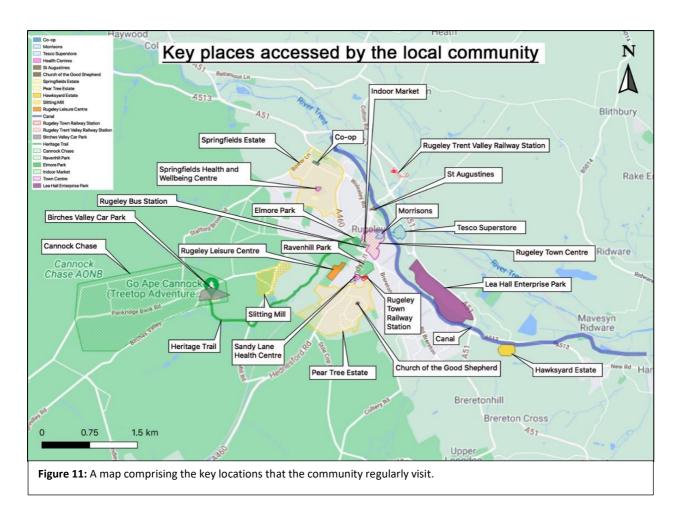
- Mobility scooter rental to improving mobility/accessibility for people living with mobility issues.
- Bike rental to encourage active travel around the town and between the estates.
- Social space including seating areas and places to get refreshments.
- Connectivity through locating mobility hubs in areas which connect the town to the estates and the estates with one another.
- Charging points for electric vehicles to encourage their use.

Whilst participants generally saw mobility hubs as holding the potential to address some transport concerns in the town, some concerns were raised about their introduction, with the main concern being whether members of the public would use the hubs. Concerns included poor road surface quality being an issue that may discourage bicycle use amongst less

confident or experienced riders even where bike rental is provided, as well as cost of any rental service needing to be affordable for residents. Thus, perceptions of road surfaces interplayed strongly with perceptions of mobility hubs as a viable solution.

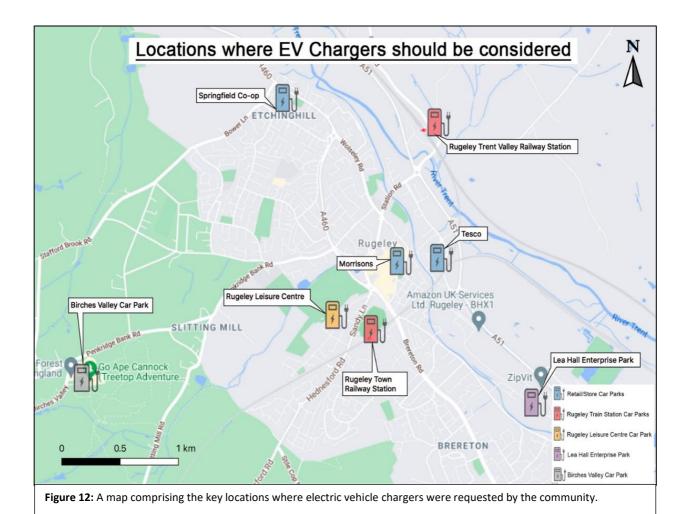
# Travel routes within Rugeley

Underpinning many of the discussions around mobility and transport choices and facilities around Rugeley was a discussion of the different places within Rugeley that people travelled to and between. A summary of these discussions is shown in Figure 11.



## **EV Charger locations**

In addition to the above discussions that took place around the Monopoly Board there were separate discussions and activities where participants were asked to comment on where they would like to see public electric vehicle chargers within Rugeley. The results of these inputs are summarised in Figure 12.



## 4. Conclusion

This report summarises the activities and findings from the Rugeley Energy Heritage Day that focused on questions of mobility and transport choices and facilities around Rugeley, in the context of the wider heritage and energy heritage of Rugeley. Discussions with participants engaged in the activities highlighted diverse views of Rugeley's past and how that influences its present. A strong vision for the future of Rugeley with a vibrant town centre, along with improved social amenities, centred around transport connectivity to the town centre. Discussions also highlighted a range of perceived barriers to low carbon transport within Rugeley including accessibility issues and poor passenger facilities at train stations, poor bus routes and prohibitive costs, poor cycling infrastructure such as cycle lanes, as well as poor pavements. The discussions frequently highlighted issues of accessibility and the need to consider mobility scooters and those with prams and mobility issues.

These activities and discussions highlight the importance of engaging directly with community members to understand mobility patterns and needs, as well as the experiences of travel within the local community, and the perceived barriers to more low carbon mobility options. Engaging with community members using these sorts of activities can help design appropriate solutions for the community and will help support the successful implementation of developments within a local community.