Waverley Hoppa Community Transport

Registered Charity No. 1104954

CLEANER TRANSPORT ACTION PLAN

Draft – November 2020 (RS)
Updated to V2.1 – February 2021 (SN)

Introduction

The purpose of this document is to set out a high level action plan for Hoppa, to be carried through over the next few years, to achieve the goal of enabling our community transport operations to function well, utilising cleaner fuel technologies that are becoming available.

Cleaner Fuel Technologies that are currently becoming available for the transport sector are:

- Electric power
- Hydrogen fuel

At the outset, it is envisaged that Hoppa would explore electric power, while keeping out a watching brief for hydrogen fuel possibilities. Therefore this plan outlines some necessary steps for Hoppa to adopt electric power for an appropriate part of its operations.

The plan sets out the steps and milestones necessary for adoption of electric power, from the following perspective:

- Capital resources (i.e. Vehicles);
- Infrastructure (i.e. Electric power supply);
- Operational considerations.

It is assumed that a pilot project will run first from which experience and confidence will be gained to ensure a successful transition of the entire fleet by approximately 2030. Ideally the pilot project will include 2 vehicles and the appropriate electric power supply but we are poised to adapt to the funding that is available.

Hoppa is a non-profit organisation and a registered charity; external co-funding is necessary for all phases of this plan.

Background

For almost 20 years Hoppa has provided a range of wheel-chair accessible transport services to the elderly, rurally isolated, vulnerable, and disabled population using, typically, diesel minibuses.

Hoppa operates in and around Waverley Borough which encompasses Cranleigh, Farnham, Godalming and Haslemere. The buses also travel outside the Borough from time to time to take passengers to, for example, the Royal Surrey County Hospital in Guildford. There are currently 27 buses in the fleet and the average daily mileage for each bus is in the range of 200 miles (significantly more for some routes and roles).

Community transportation (CT) is inherently green, safe, supportive, and sustainable. Our buses make around 70,000 passenger trips per year (outside of the time where sustained transmission of the Covid-19

virus was experienced) and our staff is quite expert at routing the buses efficiently. CT reduces road congestion which improves road safety and air quality for everyone.

Rationale

Hoppa has always been awake to its responsibility to the environment and community, regularly identifying and implementing ways to manage and reduce environmental impact. Vehicle tracking systems, satellite navigation systems, and disciplined vehicle maintenance and replacement are just some examples.

The time is right, though, to consider the utilisation of cleaner fuel technologies. According to Surrey County Council's environmental officer in November 2019, Mike Goodman, all the county's buses will be zero emissions and run on electric (or hydrogen) by 2030. The cost of switching to electric vehicles (EVs) is still prohibitively high but EVs have virtually zero emissions and are much quieter and cheaper to run than current diesel vehicles so preparing Hoppa for a transition to cleaner fuel technology makes good sense at this time. We expect it may even increase already high levels of satisfaction with this community service thereby increasing the usage and relevance of community transportation in and around Waverley Borough. We also expect that as EVs become more commonplace, we'll see a reduction in price.

Capital resources (i.e. Vehicles)

At the time of writing, it would appear that electric mini-busses are expensive to acquire (£75k +), with limited mileage capacity (around 100 miles). This compares with current diesel new vehicle costs of £35k and overall range of [300 – 400] miles.

We are aware that the cost per mile of electric compared with diesel appears to be 50 – 60%, and, obviously the emissions of electric vehicles (post-production) is virtually zero, so from the perspective of environmental impact, electric vehicles would have a benefit for air quality within Waverley.

Without external co-funding, electric vehicles do not appear to make financial sense at this stage, but if external "green initiative" co-funding were to be available, then we should look positively on a pilot project.

Actions

- Initiate dialogue with SCC and WBC (and RSCH/ health centres?) to identify their initiatives and points of contact and to indicate our willingness to be involved;
- Identify which localities and routes would be most appropriate for initial pilot projects;
- Continue to monitor availability, cost and capacity of electric minibuses suitable to the needs of our customers and stakeholders;
- Continue to identify and make contact with alternative (non-Council) sources of funding for capital investment in green initiatives such as rural transport, including possibility of crowdfunding.
- Track values of second-hand diesel fuel minibuses, to keep track of market values against depreciated values of our existing fleet.
- Explore the suitability of Surrey County Council's Your Fund Surrey for the pilot project.

Infrastructure (i.e. Electric Power Supply)

In order for electric vehicles to operate, there needs to be a reliable source of overnight charging, as well as intra-day recharging locations.

We need to establish the feasibility, costs, possible suppliers and timetable for the (initial) installation of vehicle charging points in the Hoppa base in Coopers' Place. There is the need to open up a constructive dialogue with the lessors of our parking space there, to get their approval for the installation. Alongside this is a need to establish the feasibility and potential costs of an extended (or new) lease term, to extend our use of the parking lot for a sufficient period over which to depreciate the cost of installation of the EV charging points.

We need to work with the local councils in the towns (and other relevant stakeholders such as RSCH) where we operate to establish (and influence) their plans for the installation of EV charging points specifically for the use of public transport operators such as ourselves. It would be important that such charging points have high capacity (for rapid charging), and high availability (or priority useage) to ensure that re-charge routines can reliably be built into the scheduling for each electric vehicle in use.

We would probably also need to build up a network of emergency charging points throughout the Borough, to cater for unforeseen circumstances, and ensure that vehicles and passengers never get stranded for want of recharging points.

Actions

- Identify and seek quotations from potential installers of EV charge points for the car-park at Coopers' Place.
- Establish indicative approval from lessors of the car park.
- Establish interest in (and potential costs) related to the extension/ agreement of a longer lease period on our car park.
- Identify and establish contact with the relevant officer in each of the town councils (and RSCH/ health centres) to establish interest in, and commitment for, the establishment of EV recharging points in each town/ main health location, and plans for priority useage/ availability schemes for public transport operators relevant to us.

- Identify and document our own “ideal location” map for EV charging points to support our [health and non-health] transport operations, for discussion with interested parties.
- Identify and approach possible sources of funding for establishment of green transport infrastructure relevant to us.
- Identify and approach possible “emergency network” charging points (e.g. private houses; utility fleet operators; supermarkets, shopping centres, fuel stations etc.)

Operational considerations

[To be discussed/ fleshed out] We need to think about:

- Route Planning
- Scheduling
- Driver Training
- Insurance
- Servicing
- Communications

Typical Budget for Pilot Phase

This is an indicative budget only for the pilot project.

Capital Item		**Cost**
Charging points	2 x 22kw	£ 4,000
Electric vehicles	Vehicle 1	£ 75,000
	Vehicle 2	£ 75,000
Livery @	£550	£ 1,100
Satnav & tracker @	£310	£ 620
		£ 155,720