# **FlexiBus East Leeds Review**





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## **1** Executive Summary

#### **1.1 Context**

- 1.1.1 FlexiBus East Leeds (FBEL) is a project to trial a digitally enabled Demand Responsive Transport (DRT) service in East Leeds. It is led by West Yorkshire Combined Authority (WYCA). The three-year pilot launched on 27<sup>th</sup> September 2021 saw the introduction of a flexible bus service based on demand rather than traditional fixed line bus services.
- 1.1.2 WYCA have commissioned Go Travel Solutions (GTS) to undertake a review of the service based on the first three months of operation. The consultancy has experience in developing and coordinating a DRT in Leicester and have had input into FBEL pre-launch.
- 1.1.3 FBEL has generated significant public interest and political support since its launch. Through the <u>Bus Service</u> <u>Improvement Plan (BSIP)</u>, there is scope for future schemes to be developed across West Yorkshire. This Review will help to inform the future design and deployment of these schemes. The cost of operating DRT schemes is significant. Future such services will need their own business case and ensure they are contributing to the vision and objectives of WYCA, as specified in the BSIP.

#### 1.2 Overview

- 1.2.1 There is much positive feedback on the service from existing customers. The quality of service delivered by First, and particularly the customer care shown by its drivers, are consistently praised. This is evidenced from the customer surveys and travelling on the service.
- 1.2.2 Here are some of the key current operational stats per week:



600 customers per week (and rising).



1,500 miles operated per week.



On-bus revenue of c. £400-£450/week: This excludes concession reimbursement and an allowance for M Card transactions.

Operational cost of c. £9,500/week paid to First. This excludes the cost of the seven electric buses purchased from Mellors and the software costs paid to Data Images.

- 1.2.3 The service is operating significantly below where it needs to be for viability and acceptability. In addition, it is not yet fulfilling the ambition of attracting significant proportions of new customers to using the bus and there is limited multi-occupancy of the minibuses. Here are some key findings:
  - The **full costs of operation** (including all fixed costs) are c. £18,000 per week. This is based on aggregating all the three-year project costs and dividing by 156. If you assumed that the average ticket yield was £1.50/customer, then the current financial performance can be summarised as follows:
    - 9.5% of *operational costs* are being covered. For operational costs to be fully covered, it would require a growth in customers from the current 600/week to 6,333/week, a growth of 955%
    - 5% of *full costs* are being covered. For full costs to be covered., it would require a growth of customers from the current 600/week to 12,000/week, a growth of 1,900%

The above levels of growth are not achievable because there is not the capacity in the service to accommodate this uplift.

The other means of closing the deficit is by increasing the ticket yield. The current cost of travel is very inexpensive. If the average ticket yield increased by 33%, from £1.50 to £2, then it would increase the coverage of operational costs to around 12% and to over 6% of full costs.

12% cost recovery has been discussed with the Senior Leadership team at WYCA as the critical benchmark for continuation of the service beyond the eighteen-month trial. Going forward, it will require a combination of increasing the ticket yield and customer levels, to reduce the budget deficit to acceptable levels.

The average number of customers per trip is currently 1.38. Over the last two months, it has ranged from 1.24 to 1.38. This means most current trips only have one person on them from start to finish. Aggregation is being constrained because of several factors: The most notable being that the configuration of the current software allows customers to book a weekly journey for 52 weeks (without payment) and set a 'drop-off' time at the destination. Once that journey is booked, aggregation of journeys on that same vehicle is only possible if another journey is requested that is +/- 5 minute and has an almost identical route. There are now many journeys (and in turn buses) block booked with single journeys at peak time. Until the parameters are changed, and customers reallocated, no greater aggregation will be possible.

- The ability to book a journey is becoming more difficult. In a recent sample of 100 attempted trip bookings on the app by Go Travel Solutions, across a range of times and days, 16% of the requests were not able to be provided with a journey option. This is particularly the case at peak time Monday to Friday (07:00 9:00 and 15:00 17:00) when there are many pre-booked commuter journeys in the system. This will have a knock-on impact on customer confidence in the service and repeat business. Not being offered a request has a negative impact on customer retention, especially for new users. In Transport for London research on Slide Ealing, 10 per cent of people who did not receive an offer on their first try did not try to book again (see <u>Demand responsive bus trials May 2021 (tfl.gov.uk</u>))
- The growing lack of service availability is reflected by the current level of vehicle utilisation. There is around half of bus service hours left for accommodating new trips. This in part is being constrained by how the service operates with driver breaks taken within the service hours and the need for vehicles to go back to the First garage for recharging part way through the day. In theory, there are 432 service hours per week available for carrying customers. This is based on 6 buses x 6 days/week x 12 hrs per day. However, this is reduced by 48 hours/week because of driver breaks and further reduced by the regular need for buses to go out of service because of recharging requirements. It means there are restrictions on the service being supplied. Service availability is also being constrained a little by the location of one of the strategic stops. The Duke Street is a stop that is very popular because it provides proximity to the city centre and bus station. However, it's location on the road network makes it difficult to serve and often means the FlexiBus service is being caught in congestion.
- Based on the responses from the FBEL Customer Survey (NB. Sample size of 54) there is **currently limited mode shift taking place**.



39% of current FBEL journeys were previously undertaken on other local bus services.

9% were being made by car Consequently, currently FBEL is not making a significant positive impact on reducing carbon emissions, nor on improving health and wellbeing. As a counterbalance it is being well received by existing users and it is helping

20% on foot/cycling

• The lack of confidence in service availability is having a knock-on impact on the ability to undertake additional promotional activity and grow the service. There is **currently limited promotional activity** taking place. Project partners, such as the Travel Plan Network, are not currently promoting the service with their members because of increasing negative reaction from customers unable to access the service, particularly around the peak times, Monday to Friday.

#### **1.3 Recommendations and Action Plan**

local people accessing employment.

- 1.3.1 Whilst scheme viability is an objective, this should not be at the expense of testing out different service designs in East Leeds for the longer-term benefit of potential future schemes in other parts of West Yorkshire.
- 1.3.2 The recommendations are summarised in the FBEL Action Plan. The rationale behind the actions is contained in the body of the report. The actions have been prioritised. This is based on the need to improve service availability prior to undertaking promotion and business development.

For more details behind the recommendations, see section 4.

Focus	Reference	Action				
4.1. Project management	4.1.1	Logging customer enquiries to identify volume, concern and how to resolve. Relocating customer enquiries to MetroLine. Reinstating booking via phone.				
	4.1.2	Setting and managing new KPIs.				
and governance	4.1.3	Developing new Project Board with First, Data Images, Mellors, and WYCA focused on addressing operational issues and business development with new Terms of Reference.				
	4.2.1	Addressing the vehicle recharging issue with buses unable to undertake a full days' work on one charge.				
4.2 Operation	4.2.2	Review of driver rotas to increase bus hours 'in service'.				
	4.2.3	Review of virtual stops and the strategic stop at Duke Street				
	4.3.1	Deliver co-ordinated sustainable travel campaign with Travel Plan Network to engage employers in East Leeds. To be directed through existing TPN members and used to attract new members. Promotion of total transport offer not just FlexiBus.				
4.3 Marketing and	4.3.2	Create FlexiBus social media accounts.				
Communication	4.3.3	Customer retention strategy.				
	4.3.4	Direct mail to households within operational area.				
	4.3.5	Lamp column markers for virtual bus stops.				
	4.4.1	Introducing a fare of +£1 for an additional customer making the same journey.				
	4.4.2	Inclusion of payment module on app.				
4.4 Pricing and ticketing	4.4.3	'Green Trip' discount.				
	4.4.4	Review adult bus fare from £2 to £2.50.				
	4.5.1	Update app so that customers can select to receive notifications and provide greater user feedback. (Push and SMS).				
	4.5.2	Accessibility audit.				
4.5. Арр	4.5.3	'Live' guided customer app demo.				
	4.5.4	Real time tracking of vehicles.				
	4.5.5	Review of all pre-booked journeys in systems. Recommendation of all journeys being recast with wider trip time parameters to allow for greater aggregation. Intro of maximum 12 week booking window.				
	4.5.6	Push customers towards relevant trips for aggregation.				
	4.5.7	Adjust 'Arrival within time' parameter.				
	4.5.8	Increase maximum journey time parameter.				
	4.5.9	'Feeder Service' module.				
	4.5.10	Link stop details to Google maps for guided route.				
4.6. Service	4.6.1	Integrate FlexiBus as part of East Leeds public transport offer.				
development and integration	4.6.2	Engage with Leeds Teaching Hospitals NHS Trust to identify scope for St James's Hospital to Seacroft Hospital shuttle.				

# Priority

Immediate
Medium term – next 3 months
Longer term – next 6 months

## 2 The Review

## 2.1 Objectives of Review

- 2.1.1 Provide recommendations on addressing current operational barriers to improve the customer experience and ability of WYCA to deliver the service:
  - Review of the App, being fit for purpose and recommend changes.
  - Assess the messaging to customers and how this may need to change to improve the customer experience.
  - Recommend how customer support can be more effectively delivered.
  - Gathering of feedback from First drivers, customers, and project partners.
- 2.1.2 Give direction on how to grow FlexiBus East Leeds patronage. To promote the viability of the service into the longer-term; more shared use trips are required, and a strategy needs to be developed to evolve the offering to be able to capture more of these trips. This project will review measures to increase the number of trips taken on the service from their current levels at c.500 trips to nearer 1,000 trips per week.
- 2.1.3 Support the effective design and deployment of future potential FlexiBus services in West Yorkshire using lessons learnt from East Leeds

#### 2.2 Approach adopted to review

- 2.2.2 **FBEL Customer Survey**: several collectors were created to enable customer data collection from the following sources:
  - On-bus
  - Via the FBEL app
  - Via the Travel Plan Network
- 2.2.3 One to one sessions with key project partners. These were the key ones:
  - First including driver feedback
  - Data Images the developers and operators of the FBEL app
  - WYCA Communication
  - Travel Plan Network
  - Councillor Groves via the fortnightly meetings
- 2.2.4 During January 2022, Go Travel Solutions were regular attendees at the First and WYCA **project meetings**, to hear first-hand current service feedback and priorities going forward.
- 2.2.5 Some **research was undertaken on other DRT schemes** in the UK and Europe. In addition, Go Travel Solutions knowledge of DRT schemes and UK operators, was used to help inform the review.
- 2.2.6 The project lead for the review travelled on bus on two days, to gain first-hand experience of FBEL.

## 2.3 Overview on FlexiBus East Leeds



2.3.1

FBEL has the following key operational features:

Operates Monday to Saturday 07:00 – 19:00.

Operated by Mellor Orion electric minibuses with 6 in service and 1 spare. All buses are fully accessible and can accommodate one occupied wheelchair. The vehicles have 12 seats.

- 2.3.2 Fares are:
  - £2 flat fare pay by contactless payment card/app when you board the bus.
  - Under 19s pay £1.20.
  - All MCard products are accepted smartcards and MCard Mobile.
  - Holders of Senior and Disabled Person's bus pass travel free after 09.30am on weekdays and all day on Saturdays, Blind person's pass holders travel free all day on weekdays and on Saturdays.
  - All current bookings are via the FBEL app. Up until the 30<sup>th</sup> November there was a phone call option for booking journeys. This was withdrawn because the Access team did not have sufficient resource to manage the demand. Customer enquiries are still coming through to the Access team because of past information.
- 2.3.3 Operating area is as below.



For more information: www.wymetro.com/buses/flexibus-east-leeds 2.3.4 This project is funded through the fares revenue, Dept for Transport Better Deal for Bus Users, Leeds Public Transport Investment Programme, the Local Transport Plan Integrated Block Programme, and Section 106 contributions. The total scheme cost is c. £2.9 million.

Organisation	Provision	Implementation	Monthly	Annual	<b>3 YEAR TOTALS</b>
First	Operations	£26,865	£40,900		£1,499,265
Data Images	Customer and driver app	£9,500		£12,000	£45,500
Mellors	Electric minibuses	£1,294,041			£1,294,041
Magpie	Marketing communication	£24,750			£24,750
<b>3 YEAR TOTALS</b>		£1,355,156	£1,472,400	£36,000	£2,863,556

2.3.5 Here is a summary of the project costs over three years:

- 2.3.6 The **delivery of a new DRT service during 2021 has been an exceptional achievement** by the team at WYCA and the key project partners (namely Data Images and First). The challenge has been all the greater because of:
  - Using electric minibuses for the first time on such a service in the UK.
  - The planning and launch of the service took place during a pandemic.
  - The Flexiroute software used for the FBEL service was its first ever application.
  - Delivering a new concept bus service for the residents of East Leeds.
- 2.3.7 Magpie Marketing agency delivered a comprehensive marketing programme for the launch of the FlexiBus service. It included a range of online and offline marketing methods and community/business engagement. A separate review of launch activity has been undertaken by Magpie Marketing.

# **3** Performance of the service to date

#### 3.1 Operational data from First

Here is a summary of operational data from First. For reference Week 27 is w/c 26<sup>th</sup> September and Week 34 is w/c 15<sup>th</sup> November 2021. Many of the graphs show a dip in week 40. This was w/c 26<sup>th</sup> December.



The above shows the increase in service mileage, broken down for the six service vehicles. This reflects the growth in service take-up (see below).



The above shows the weekly number of passengers carried on the service. In the early weeks there was strong growth. In more recent weeks, growth has plateaued with the exception of the Christmas week.



The above graph identifies the number of passengers paying the full fare of £2 and £1.20 (under 19s).



The above pie chart provides a breakout of the different ticket categories using FBEL. Those paying fares on board make-up 63% of customers, with 54% adults and 9% under 19s.



Though customer numbers have grown over the weeks, there has been little change in average trip occupancy. For most trips, there is only one passenger on FBEL.



The above is a snapshot of boarding data by hour and ticket category for the 17<sup>th</sup> to 22<sup>nd</sup> January 2022. It reflects the difference in demand between the peak and off-peak, reflecting high levels of use for commuting.



The above is a snapshot of data by day for the same week (17<sup>th</sup> to 22<sup>nd</sup> January 2022), reflecting the far greater use of the service Mondays to Fridays. This is now an established pattern each week.



The above plot from First is based on boarding data gathered by First. The larger the circle, the greater the volume of trip making from this location. The largest of all the circles is St James's Hospital.

#### 3.2 Data from the FBEL app



The above is a plot based on the origin and destination of journeys based on the virtual bus stops within the operating area. The colour represents the frequency of that location being selected by customers. Unsurprisingly the above plots correlate closely with the First boarding data. There is also a close correlation between origins and destinations, reflecting customers making return journeys on FBEL.

#### 3.3 Feedback from customers

- 3.2.1 A survey of 54 customers took place during January 2022. There were three channels used:
  - On-bus: Customers were handed a leaflet for them with a QR code and web link to undertake the survey.
  - Via the FBEL app: A message was posted via the Alert function on the app to invite app users to undertake the online survey.
  - Via the Travel Plan Network: A link to the FBEL customer survey was included in the newsletter that went to employers in the Winter 2022 update.

The survey link was not circulated to registered app customers because this did not comply with GDPR requirements. A priority is for permissions to be included in the app to enable improved future data collection.

3.2.2 In terms of demographics for those that took part in the survey, here is a summary:

- Age: 40% Under 35, 30% 35 54 and 30% 55+
- Gender 60% Female, 38% Male and 2% Not specified
- Ethnicity: 93% White British, 2% White Other and 5% Other Mixed



Overall positive feedback on the experience of registering with 70% describing it as easy or very easy. What needs to be remembered that this is a survey of those that have registered. There could be several people who tried to register but were unable to do so, who could provide a different response to this question.



The feedback on the app user experience is more mixed. Though 64% said it was either good or very good, 22% said it was bad.



Customer motivations for registering for FlexiBus were many and varied. Flexibility was the most popular with 94% of customers selecting this.



There was no single place customers heard about the service. Social media, which was a focus of the launch activity, was the most popular response (39%), closely followed by friend/relative (35%) and people that saw the FlexiBus (33%).



An initial ambition of the project was to be supporting access to employment. The most popular use of the buses is for commuting with 72% of survey respondents saying they used it for this purpose.



A key consideration in evaluating the benefit of the FlexiBus service will be whether it is helping to achieve mode shift from cars, and in so doing reduce the carbon impact of local travel. Based on this relatively small survey, then currently the service is not attracting existing car drivers in significant numbers. There was 16% of respondents who stated this. Most respondents (66%) now using FlexiBus, were previously using fixed line bus services in East Leeds. Taxi featured as a response in 'Other', with around 10% stating this as their previous mode of travel.

Here is a summary of other findings from the FBEL Customer Survey

- On a scale of 1 to 10, how likely are you to recommend the FlexiBus service?
  - o 64% 10 out of 10
  - 95% 7 or more out of 10
- How could the FlexiBus service be improved?
  - 68% stated operating beyond 7am 7pm Monday to Saturday
  - 54% stated reducing the 1 hour booking window
  - o 54% stated other reasons e.g. app development/improved customer contact

#### 3.4 Impact of Covid on current demand

- 3.4.1 The current suppression of demand due to COVID-19 is difficult to fully quantify. Anecdotally however, demand of 70% against pre-pandemic levels is widely reported in the UK bus industry. What is certain is that due to a combination of official guidance, government restrictions, and general reticence, patronage can be expected to increase as society and the economy become less curtailed by the pandemic.
- 3.4.2 According to official UK Gov statistics (<u>Official Statistics</u> -Transport use during the coronavirus (COVID-19) pandemic) nationwide bus patronage fell from a pre-pandemic high of 103% utilisation to a low of 4% at the peak of national lockdown. Currently (as of 17<sup>th</sup> January 2022), a utilisation of 72% has been recorded.

As the country exits 'Plan B' it should be expected that patronage potential will increase as wider service utilisation increases. However, this could take some considerable time to re-establish pre-pandemic levels and is subject to a wide range of unknowns.

3.4.3 To reflect the impact of the pandemic on another urban DRT service, below is a graph of rides (bookings) and passenger numbers for the ArrivaClick Leicester service. The service started on 29<sup>th</sup> April 2019. In April 2020 was when lockdown restrictions were being fully applied in Leicester. In the last six months, demand on this service has been suppressed due to driver shortages.



ArrivaClick Leicester bus patronage figures graphed over time.

3.4.4 There is no doubt that all things been equal, demand for FlexiBus will rise as the impact of the pandemic recedes. What is unknown is the scale of this increase in demand, its timing and crucially, whether FBEL has the service capacity to accommodate. The latter is being constrained by the current app aggregation settings and restrictions of vehicle availability due to driver breaks and recharging requirements.

## 4 Addressing operational barriers and growing business

#### 4.1 Project management and governance

- 4.1.1 **Revision to customer enquiry management** is a priority. There is not sufficient resource in the Access Team to accommodate the number of enquiries being generated. Discussions have already started with MetroLine to be the customer contact point. This is the recommended route as they are open during the hours the service operates and offer a 'one-stop' facility for all West Yorkshire public transport enquiries. In parallel with this change, the following are recommended:
  - Creation of customer enquiry log to identify reason for contact and to assist with identifying resolution.
  - Develop closer liaison with First customer contact and a common approach, given First are likely to increasingly receive enquiries.
  - Soon after the reallocation of customer enquiries to MetroLine has taken place, it is recommended the ability
    to book via telephone is reinstated. This is important to widen access to all local people in East Leeds,
    irrespective of whether they own/wish to use a smartphone. Metroline will need to use the Flexiroute backoffice system as the AccessBus team have done. For operational reasons for the AccessBus team, the FlexiBus
    service is not segregated from the AccessBus service. In order for Metroline to use either the back-office
    system or the online, portal development will be required to either deploy a new instance of Flexiroute to be
    used solely as the back-office system for FlexiBus or to develop the online portal to allow booking by a thirdparty.
- 4.1.2 Setting and managing new KPIs. Here are the recommendations:
  - Total number of app downloads and number of apps activated for trip bookings.
  - Total customers booked (via the app) and boarding FBEL (via data from First).
  - Average number of customers carried per driver hour.
  - Average number of customers per bus journey.
  - No seat availability (based on the % of times when a booking is requested, and a trip is not offered).
  - % of journeys when a customer is offered a journey, but it is not booked.
  - % of journeys where there is 'no show' by the customer.
  - % of bus service hours left for accommodating new trips.
  - % of journeys previously undertaken by car.

The work now started by First in creating a dashboard is a significant step forward. This can be used as the place for data from First, Data Images, and any other sources, to be gathered and then reported against the KPIs. It is recommended this is undertaken monthly for the Project Board (see 4.1.3)

- 4.1.3 Creating a **Project Board** would help accelerate resolution of current issues and focus on service development. The existing delivery groups have enabled the launch of FlexiBus East Leeds to happen in a very short time frame, with the multiple challenges of the pandemic and new technology being applied (in respect of the minibuses and app). Here are some of the recommended key features of the Project Board:
  - New terms of reference, to reflect its role and reporting lines.
  - Major contractors for FBEL to be part of Steering Group (e.g. First, Data Images and Mellors).
  - Initially meeting monthly because of the urgency there is to resolve outstanding issues.
  - KPIs to be reported monthly into the group.

## 4.2 Operation

4.2.1 Addressing the vehicle recharging issue is a priority for the FlexiBus service. First are currently using an ad hoc system, to enable a swap and recharge and to ensure booked trips are fulfilled. In the early months of the service, the impact has not been great because of greater vehicle availability. However, it is now starting to become a constraining factor on customer growth because it is reducing the available vehicle service hours and in turn available time for new bookings to be made.

One potential solution would be to switch to diesel vehicles. This is not seen as acceptable because of the significant adverse reaction this would generate.

Here are some suggested steps to be investigated:

- Establish with Mellors whether there are any short-term and longer-term measures that could enable an increase in miles per bus on a single charge.
- Identify whether there is any potential location in the zone, particularly to the east (given that the First garage is just to the west of the operating zone), where electric vehicle recharging and driver breaks could take place. This would help to increase service availability.
- 4.2.2 As reflected earlier in the review, one of the significant findings is that customers are increasingly finding that they are unable to book a journey. Go Travel Solutions undertook an exercise and sought to book 100 journeys on the app over different days and times. 16% of these were not offered a journey option. One way to improve the availability of the service is by **reviewing driver shifts**. Currently drivers stay with their vehicles when on break. There are some advantages to this e.g. undertake vehicle recharging/swap. However, one significant disadvantage is that this reduces service availability significantly. Of the maximum 432 service hours/week (based on 6 buses x 6 days x 12 hrs/day), currently 48 hours/week are 'lost' because of driver breaks. This represents 11% of total service hours. As demand for the service is expected to grow and there is a clear business need for service growth, every opportunity to help increase bus availability is to be sought.

It is understood there will potentially be a cost to this because driver hours will need to increase. Any potential additional cost will need to be considered in the light of the benefits it would bring.

4.2.3 One of the consistent pieces of feedback from First and its drivers, are the inefficiencies created by using the Duke Street stop. This is location is close to the bus station on the edge of the city centre. The road layout in the area makes serving Duke Street problematic often meaning that the FlexiBus service is being caught in congestion. This then has the knock-on effect on service reliability and reduces vehicle utilisation. What is recommended is a **review of all key strategic virtual stops for FlexiBus with Duke Street being prioritised.** 

## 4.3 Marketing and communication

#### 4.3.1 Develop and deliver targeted marketing campaigns

- Deliver a co-ordinated sustainable travel campaign with the Travel Plan Network (TPN) to engage employers
  in East Leeds. To be directed through existing TPN members and used to attract new members. Promotion to
  be of the total transport offer not just FlexiBus. This would provide a good opportunity to engage with nonusers to understand their awareness of FlexiBus and their perception of whether it is a service they potentially
  would use. The engagement directly with non-users has not been part of this review and is recommended as
  a future priority.
- A case study campaign of real-life service users and the benefits they are seeing from using the service. Case studies are valuable in providing social proof of the benefits service users receive and gives consumers confidence in trusting the brand.
- Peer-to-peer marketing campaign. Recommendations from colleagues, friends and family can influence decision makers to a large extent.
- B2B campaign to market the service to businesses within the operational area. Utilise the Travel Plan Network as a platform of communication to businesses. Businesses then to be incentivised to raise awareness of the service internally. The commuter market is to be a priority because of the levels of repeat business, However the operation needs adjusting to ensure trip aggregation is possible.
- 4.3.2 **Create and develop FlexiBus Social Media accounts** and consider paid advertising for targeting postcodes within the operational area. A strong online presence increases social exposure. Social Media ads can target specific locations and can be used to target residents within the operational area.
- 4.3.3 Development and implementation of a **customer retention strategy**. Consider a customer loyalty scheme. Implement a Voice of Customer (VoC) program to enable a feedback loop with customers, inclusive of customer service analytics and satisfaction surveys to capture customer feedback. Consider and implement a 'Refer a friend' incentive. These are recommended to retain existing customers.
- 4.3.4 **Direct mail** to households within the operational area or a maildrop to households next to key operational locations as per the data from First/Data Images. This is recommended as you will be delivering information about the service directly to potential customers.
- 4.3.5 **Consider placards on lamp columns at the location of virtual bus stops**. This would help customers to locate stops and would also act as some promotion for the service. QR codes could be included to lead people to online resources.
- 4.3.6 The above marketing suggestions are recommended to be implemented after the app and service updates. The service must be able to accommodate a higher demand before further marketing activity takes place.

#### 4.4 Pricing and ticketing

- 4.4.1 Introducing of **+£1 fare** for an additional customer making the same journey (free for concessions). This would automatically help to incentivise trip aggregation without requiring any additional bus resource.
- 4.4.2 Inclusion of **payment module on app** with payment to be taken at point of booking and refunded automatically if the trip is cancelled. No refund should be available if cancelled (for example) 30 mins before the trip is due to be taken. Ensure this is applied to all prebooked trips. The in-app payment is on the Data Images roadmap for future development. The current pre-payment system in Flexiroute could be used such that cancelled trips (subject to configured cancellation charges in the fare template) would not be charged and the credit would remain in the customer's account for future trips.

Currently trips can be booked as much as 12 months ahead with no commitment from the customer. Reduction in the number of pre-bookings going forward will increase the flexibility of the current fleet to match and aggregate journeys.

- 4.4.3 Consider the **introduction of a 'Green Trip' discount**. I.e. at trip booking, offer a 50p fare discount *if* the customer is prepared to wait longer to be booked into a bus with more than two people already on it (offering therefore greater aggregation for that journey and therefore a more sustainable trip) in a different slot.
- 4.4.4 Assess opportunity to **increase adult bus fare from £2 to £2.50.** FBEL provides a more personalised service than a standard bus service. A higher fare should be achievable without any significant customer loss. The perception is the cost is too low. A higher fare would assist with cost recovery and detract from some customers using the service where lower cost alternatives exist.

#### 4.5 App development and adjusting the aggregation parameters

- 4.5.1 Update app so that customers can select to **receive notifications and provide greater user feedback**. This should allow for SMS notifications/push notifications to be sent to customers giving details of delays, reduction in service/cancellation due to unforeseen operational circumstances, as well as promotional and feedback opportunities and aid in the delivery of these things in a seamless manner. SMS notifications can be done using 'GOV.UK Notify' which is possibly being implemented for the Home to School service. There may be a charge associated with this service that WYCA would need to budget for. Push notifications would require use of a third-party service for which there would be an additional charge (as yet unknown).
- 4.5.2 Conduct **accessibility audit** on the public facing booking app to inform inclusion and usability improvements to user interface. The current app is WCAG Level 2.1 AA accessibility compliant.
- 4.5.3 Produce **'live' guided demo** for first time app users demonstrating the apps full functionality and 'how to'.
- 4.5.4 Make improvements to **real time tracking of vehicles** on the customer app. Link to push notifications/SMS e.g. 'Your Bus is 15 mins away'.
- 4.5.5 **Review of all pre-booked journeys** in systems. Recommendation of all journeys being recast with wider trip time parameters to allow for greater aggregation. Introduction of a maximum 12 week booking window. Charging at point of booking will naturally drive down the overall number of far-off pre-bookings which are 'regular weekly' trips, due to the financial commitment associated with block booking.
- 4.5.6 **Push customers at booking stage towards any relevant trips** which already have more than one passenger on them use this in combination with 'green trip discount' where applicable to better promote aggregated trips.
- 4.5.7 **Adjustment of 'Drop-off' time parameter** from 5mins to 10-15mins to allow greater flex in booked journeys to allow greater opportunity for trip aggregation.
- 4.5.8 Increase maximum journey time parameter from 30 mins (Data Images would recommend 45 mins) to allow greater flex in overall journey time by 'Gamma' factor 1 Gamma = 100% more time than point to point time (suggested default). Longer journeys should have a reduced gamma proportionate to trip length. This will reduce overall extra time allowed as journey length increases to reduce long trip times for longer distance trips.
- 4.5.9 Consider dedicating some/a vehicle(s) to **'feeder service' model**. E.g. dedicated drop of at (for example) St James's Hospital, Bus station, Railway Station. Allowing trip booking and boarding in the usual way, but only alighting at the dedicated destination. This will allow other vehicles to still operate in the 'free flow' model but would prevent multiple vehicles being 'out of the mix' due to being booked for longer out of zone trips.
- 4.5.10 Implement (as part of live journey updates) a link to Google Maps to guide customers to their pickup point.
- 4.5.11 Any changes to live service parameters (e.g., drop-off window, overall trip length) should be tested in a dummy 'sandbox' environment to ensure technical viability ahead of real-world implementation.
- 4.5.12 As part of this review, Go Travel Solutions have compared the input of Data Images on this project with knowledge of other DRT technology providers. The FlexiRoute product is less developed than other DRT platforms (e.g. Padam, Via) etc and reflects being new to market (although FlexiRoute has been used by the AccessBus service for over 10 years). However, the indications are that Data Images have a commitment and growing capability to address the areas of shortfall. What is key to maximise Data Images investment in FlexiBus is for WYCA to have clear communication and a live log of issues, and for them to form part of the proposed Project Board going forward, so they have even greater ownership and understanding of the issues to be addressed.

#### 4.6 Service development and integration

- 4.6.1 **Integration of FlexiBus as part of East Leeds public transport offer** is a major long-term recommendation. There are several reasons why this needs to be a priority:
  - Average vehicle occupancy of 1.38 reflects that the current service is not working as desired. Even if there was 100% growth in the service, it would still probably fall short of what is required to justify FBEL.
  - There are some locations in the operating area that could act as transport interchanges e.g. Seacroft Green Shopping Centre or Cross Gates train station, where the DRT could help to act as a feeder to existing fixed line services, be they bus or rail.
  - Based on the small customer survey, most FlexiBus journeys were previously undertaken by bus, walking, and car sharing. Journeys previously taken by car accounted for only 16%.

When you review other well established DRT schemes, particularly in Europe, integrated transport is a given. In the situation for East Leeds, the FlexiBus service is independent of the fixed line public transport network. Whether it's De Lijn in the Netherlands, or the Padam Mobility schemes in and around Paris or the Orleans scheme in France, transport integration between bus + bus and bus + rail and bus with other modes is a central theme.

The current FlexiBus service needs to be repositioned from being standalone to an integrated part of the local public transport network in East Leeds. In its current format it will fail to achieve both viability and the aim of reducing car dependency. A repackaged service, focused on being integrated with the existing bus and rail network, both in terms of ticketing and timetabling, could ultimately be successful in reducing car dependency.

Though there are a number of different bus operators that operate in East Leeds, First are the primary operator. When it comes to potential integration, this could prove very helpful given their commercial interest in the area with fixed line services. In addition, First already have a relationship with Prospective Labs. They provide input into bus network planning and have experience of working with DRT integration. The question has been asked of First whether they have interest in discussing this opportunity.

4.6.2 Engage with Leeds Teaching Hospitals NHS Trust to identify scope for St James's Hospital to Seacroft Hospital shuttle and a more dedicated facility as part of the FlexiBus service. Leeds Teaching Hospitals have expressed interest in a direct bus service between St James's Hospital and Seacroft Hospital. This is an opportunity that needs to be reviewed urgently because in March 2022 the Trust introduces a change to their parking policy. This will impose greater restrictions and cost on staff parking. A conversation with the Trust now may prove beneficial. It could help to support NHS staff switching from driving their cars to using the bus. Potentially there could be financial support from the Trust to support FlexiBus. To progress this opportunity, then the route to the Trust is via the Travel Plan Network.

In addition to the potential of the Trust having a partnership with FBEL, there are other opportunities going forward, which could help to provide funding for FBEL. The East Leeds Extension with c. 5,000 new homes, has an estimated £4.2 million of funding for bus enhancements over the whole allocation. Whilst it is premature to position FBEL as the total answer to the public transport requirements of the East Leeds Extension, a phased approach of allocating some funding in future years is worthy of consideration.