



Bee Network Committee

Date: Thursday 25th January 2024
Subject: Bikes on Metrolink Pilot
Report of: Danny Vaughan, Head of Metrolink, TfGM

Purpose of Report

To provide a progress update on the carriage of non-folding bikes on Metrolink trams and outline the next steps, including a guided pilot scheme.

Recommendations:

The Committee are requested to:

1. Note the contents of the report;
2. Endorse the proposal of a guided pilot to test various scenarios for the carriage of non-folding bikes on Metrolink; and
3. Note that a further report will be presented to the Bee Network Committee in summer 2024 on the outcomes of the pilot, together with ongoing technical studies, and proposals as to how to safely enable the carriage of non-folding bikes on Metrolink.

Contact Officers

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Equalities Impact, Carbon and Sustainability Assessment:

Recommendation - Key points for decision-makers

Insert text

Impacts Questionnaire

Impact Indicator	Result	Justification/Mitigation
Equality and Inclusion	A	The guided pilot will test the impact of people taking bikes on Metrolink on those with protected characteristics. It will also provide insights into possible mitigation measures. The guided pilot will be controlled such that wheelchair space users are prioritised over volunteers with bikes. TfGM will invite volunteers to take part in the guided pilot and interview passengers on their views during the pilot. The results will inform the EQIA and longer term policy.
Health		
Resilience and Adaptation		
Housing		
Economy		
Mobility and Connectivity		The guided pilot might marginally impact capacity of individual trams on certain days. CSRs will be there to supervise.
Carbon, Nature and Environment		
Consumption and Production		
Contribution to achieving the GM Carbon Neutral 2038 target		The guided pilot will not contribute to this target.

Further Assessment(s):

Equalities Impact Assessment and Carbon Assessment

G Positive impacts overall, whether long or short term.	A Mix of positive and negative impacts. Trade-offs to consider.	R Mostly negative, with at least one positive aspect. Trade-offs to consider.	RR Negative impacts overall.
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Carbon Assessment		
Overall Score		
Buildings	Result	Justification/Mitigation
New Build residential	N/A	
Residential building(s) renovation/maintenance	N/A	
New build non-residential (including public) buildings	N/A	
Transport		
Active travel and public transport		
Roads, Parking and Vehicle Access	N/A	
Access to amenities	N/A	
Vehicle procurement	N/A	
Land Use		
La		
No associated carbon impacts expected.	High standard in terms of practice and awareness on carbon.	Mostly best practice with a good level of awareness on carbon.
	Partially meets best practice/ awareness, significant room to improve.	Not best practice and/ or insufficient awareness of carbon impacts.

Risk Management

Section 6 of the report covers risk management for the guided pilot.

Legal Considerations

Any legal claims arising from the pilot will be dealt with in the usual manner by TfGM and KAM (Keolis Amey Metrolink). The applicable insurance cover is the joint primary public liability policy taken out by KAM and TfGM. KAM have been asked to notify the insurers of the proposals.

Financial Consequences – Revenue

Costs of the pilot are negligible at this stage.

Financial Consequences – Capital

There is no capital expenditure at this stage. Should permanent modifications to trams and tram stops be necessary, this will be considered at the next stage.

Number of attachments to the report:

None.

Comments/recommendations from Overview & Scrutiny Committee

Not applicable.

Background Papers

The carriage of non-folding bikes on Metrolink was last considered formally by the Transport for Greater Manchester Committee in 2010. Technical studies and papers considered at that time are available on request.

Tracking/ Process

Not applicable.

Exemption from call-in

Not applicable.

Overview and Scrutiny Committee

Not applicable.

1. Introduction/Background

- 1.1. TfGM is considering permitting the carriage of non-folding bikes on Metrolink. Consideration is also being given to adapted bikes used as mobility aids, scooters and a broader range of mobility scooters than are currently permitted.
- 1.2. Metrolink currently allows folded bikes and provides cycle parking at most stops. Certain sizes of mobility scooters are also allowed, subject to a permit scheme.
- 1.3. The Metrolink network is designed to be as accessible as possible, with level boarding and step-free access at all stops, with some requiring lifts for this purpose.
- 1.4. The trams are designed with two wheelchair spaces, which can also be used for pushchairs, prams and certain types of mobility scooters.
- 1.5. The idea of allowing bikes on Metrolink has been considered throughout more than 30 years of operation, most significantly through a technical study and accompanying report in 2010 that recommended permitting folding bikes only. This decision was made due to safety, operational and capacity constraints.
- 1.6. TfGM is once again reconsidering these issues, to understand the physical or operational changes that are needed, if any, to permit the carriage of non-folding bikes on trams.
- 1.7. The refreshed Active Travel Mission, presented to the Bee Network Committee by GM Active Travel Commissioner, Dame Sarah Storey in December 2023 committed to a pilot of allowing non-folding bikes on Metrolink.
- 1.8. TfGM commissioned consultants in 2023 to report on these issues and to learn lessons from light rail and tram networks that have successfully allowed bikes on board. An important next step is to study the impact of non-folding bikes and adapted bikes on trams in practice, in various scenarios, and therefore TfGM is proposing a guided pilot, before making a final recommendation to the Bee Network Committee in summer 2024.

2. Issues for Consideration

- 2.1. The Metrolink network was not designed to carry bikes, therefore it is anticipated that adaptations to fleet and other infrastructure may be required if the carriage of non-folding bikes is permitted.

- 2.2. Light rail networks and trams have different characteristics to the mainline railway and trains. In some significant respects trams are more like buses. Specific consideration is required when assessing bike carriage in terms of safety, operations, capacity, and the passenger environment.
- 2.3. The proposed guided pilot will provide further insight and inform how Metrolink network would need to be adapted.

Safety

- 2.4. Given the requirement to operate in mixed traffic, with other road users including pedestrians, trams stop more quickly than trains, assisted by magnetic track brakes in emergency, resulting in very high deceleration forces. Therefore, bikes should be secured if allowed on board.
- 2.5. Careful consideration of the impacts at Metrolink stops is also required, as some are narrow, particularly busy, or do not have ramps at both ends and are therefore not suitable for bikes. Changes to stop infrastructure may therefore also be needed.

Operations

- 2.6. Trams typically operate over shorter distances than trains. Average journeys per passenger are between 5km and 10km with stops on average every 1km. Journeys are fast and frequent, requiring very short times at the tram stops (“dwell” times). Allowing bikes on board could lengthen journeys, due to it being difficult to reverse a bike off a busy tram, potentially impacting on frequency and reliability of the network.
- 2.7. The Metrolink network is staffed by drivers and the deployment of customer service and security personnel. There are no guards or conductors on board every tram to enforce operational rules or restrictions around the safe carriage of bikes.
- 2.8. These issues will have to be considered in the design of any permanent proposal but will be managed in the pilot phase by ensuring that staff are always present.

Capacity

- 2.9. Trams are shorter and narrower than trains, with fewer seats. The space on board is designed to accommodate significant numbers of standing passengers as this is more acceptable over shorter distances.

- 2.10. Metrolink has returned to pre-covid levels of patronage for most commuter journeys and is exceeding pre-covid patronage at weekends and for leisure journeys. Capacity on board is a concern for Metrolink passengers.
- 2.11. Given the need to safely secure bikes on board, whilst at the same time not adversely impact capacity on board, the removal of some seats or changes to the wheelchair spaces may be required.
- 2.12. The pilot will allow TfGM to assess the space required for bikes in practice, and this will inform a longer-term proposal.

3. Other networks

- 3.1. Currently in the UK, Edinburgh is the only city that permits the carriage of non-folding bikes on its tram network. TfGM has contacted Edinburgh Tram to learn more from their experience.
- 3.2. Edinburgh is a low-floor network, with conductors on board every tram. It is a single line with no complicated junctions.
- 3.3. The low floor nature of the network is better suited to allowing bikes on all parts of Edinburgh's infrastructure. Having Ticketing Services Assistants (TSA) on board means that staff can supervise the carriage of bikes. For example, they require cyclists to position the cycles in specific locations on the tram and always hold their bikes while on board.
- 3.4. Edinburgh does not allow bikes during peak times and during busy periods, including the whole month of August during the Edinburgh Festival. This is to minimise the risk of injury due to bikes being manoeuvred on the trams during busy periods.
- 3.5. Since opening the recent extension to Newhaven and the increased demand, Edinburgh Tram is currently reviewing its policy to look at times of travel, understand the risks around electric bikes and also the use by food delivery cyclists.

4. Recent Progress

- 4.1. TfGM established a multi-disciplinary working group comprising experts from Safety, Active Travel, Inclusion, Operations and Engineering teams as well as the operator, KAM to consider all aspects of a pilot and potential policy change.

- 4.2. Independent consultants have been commissioned to study the carriage of bikes on Metrolink. The study includes research into other light rail and similar transport networks in the UK and beyond and their bike carriage policies. It also includes a review of current relevant legislation, regulations and guidance.
- 4.3. The working group, together with consultants, carried out a static test of bikes on trams at Old Trafford depot and also undertook a Human Factors workshop.
- 4.4. Early discussions have taken place with the Disability Design Reference Group (DDRG), adapted bike users and some cyclists.
- 4.5. To conclude this work and provide recommendations for the long term to the Committee, the next step is to conduct a guided pilot as described below.

5. Proposed guided pilot

- 5.1. TfGM propose to undertake a guided pilot during early 2024 to gain more insight into how the carriage of bikes could be accommodated safely.
- 5.2. Working with the Metrolink Operator, KAM, TfGM will invite volunteers to take their bikes on specific journeys on Metrolink, accompanied by staff to ensure passenger safety. The pilot will allow closer observation of some of the issues described above which will provide insight into the identified risks and issues of this policy.
- 5.3. This approach will enable a pilot to take place whilst controlling the safety and operational risks as far as possible. The public will not be able to take part in the guided pilot unless invited by TfGM.
- 5.4. The guided pilot will enable observation of volunteers with various bikes, travelling to several locations at different times of day. At the same time as bikes users, we will invite those who have a range of lived experience including people with disabilities and those travelling with pushchairs. We can then create the scenarios that would exist if bikes were introduced on trams, in a controlled manner and record the experiences of the participants as well as the travelling public.

- 5.5. The pilot will aim to test several scenarios, including:
- Travelling with a bike/ adapted bike during different periods (mornings, evenings, weekdays and weekends)
 - Using a range of different locations – including sample of all line and stop types
 - Using a range of areas on board the tram while travelling with a bike
- 5.6. TfGM will appoint independent researchers to observe the guided pilot, interview the volunteers, customers and staff and produce a report which will inform the safety risk assessment, Equality Impact Assessment (EQIA) and operational considerations in relation to requirements to enable a potential policy change.
- 5.7. A risk assessment has informed the pilot. The guided (i.e. supervised) nature of the pilot is the primary mitigation for any risks identified.
- 5.8. The guided pilot is scheduled to commence at the end of February, with results being analysed during April and May.
- 5.9. Following this, in summer 2024, TfGM will bring a further report to the Bee Network Committee on the outcomes of the pilot, together with technical studies, and proposals regarding how to allow the safe carriage of non-folding bikes on Metrolink for consideration.