Clean & Green Transport plc.

Swanwick House,
22 Towcester Road, Old Stratford,
Milton Keynes, MK19 6AQ, England
Tel (+44) (0) 07721378223, email: JimH@jimmyharkins.com

Bus Rapid Transit! is the Myth is Dead yet!

In recent years, a chorus of so-called Siren voices has continued to promote the mistaken belief that Bus Rapid Transit (BRT) is a direct substitute for Light Rail in urban development and can do the same job as a tram or light rail, often overlooking both the unique benefits of rail-based systems and the pace of technological innovation.

These advocates persist with outdated arguments, disregarding advances such as Very Light Rail (VLR)—notably the proven trams capable of carrying 100 passengers—which now offer cleaner, more efficient alternatives to battery-electric solutions.
A recent study of a proposed Mass Rapid Transit BRT (an oxymoron in itself) for Greater Milton Keynes March 2026, elsewhere on this site confirms this.
https://applrguk.co.uk/admin/dashboard/Milton-Keynes-MRT-VLR

Furthermore, this narrative fails to acknowledge the UK government's pivotal shift from the traditional 'predict and provide' approach to the more forward-looking 'Vision, Validate and Placemaking' strategy, introduced in February 2026, which recognises and seeks to correct the historic bias against Light Rail investment.
As we move into an era defined by sustainability, regeneration and community-centred planning, it is crucial to challenge these myths and reframe the debate around transport infrastructure.

The key lessons emerging from the UK's experience with Bus Rapid Transit systems, and to explain why cities seeking long-term, generational change should now look beyond bus-based solutions.

This is particularly relevant as we consider the future of our own transport corridors and the scale of transformation required to support healthier communities, stronger local economies and a more resilient urban environment.

Over the past two decades, several UK cities have invested in BRT or guided-bus systems, including Belfast, Cambridge, Greater Manchester and Glasgow.

These schemes have delivered improvements to bus travel, especially in terms of reliability, branding and journey times. However, the evidence is consistent: while BRT can enhance a bus network, it does not create the kind of permanent, city-shaping infrastructure that supports regeneration, long-term investment or sustained behavioral change.

One of the clearest lessons is that BRT lacks permanence. Because these systems operate on the road network, they can be altered, diluted or removed far more easily than fixed rail-like systems. Developers and investors understand this, and as a result, BRT corridors rarely attract the kind of private-sector confidence that accompanies tram, light rail or very light rail.

The experience in Glasgow with Fastlink, and in Cambridge with the guided busway, demonstrates how quickly a bus-based system can lose momentum or become the subject of debate about future conversion to rail. Without visible, irreversible infrastructure, regeneration simply does not follow at the scale cities hope for.

A second lesson concerns environmental and health outcomes. Modern buses are cleaner than their predecessors, but they still generate significant non-exhaust emissions from tyres, brakes and road wear.

These particulates are now recognised as a major contributor to poor air quality, particularly in communities already facing health inequalities. BRT schemes across the UK have delivered only modest improvements in air quality, typically too small to shift long-term health outcomes. Cities with entrenched deprivation and high illness burdens need a transport solution capable of delivering deeper, structural change.

A third lesson is the risk profile. Some BRT schemes have required substantial civil engineering, yet the benefits remain those of a bus system.

The Cambridge Busway has faced cost overruns, structural issues and ongoing maintenance challenges. This creates a situation where a city takes on rail-scale risk without securing rail-scale returns.

If a corridor requires major infrastructure investment, it is reasonable to expect that investment to deliver the permanence, regeneration impact and long-term value associated with fixed rail-like systems.

Finally, there is the question of public confidence. BRT is often presented as “tram-like” or “metro-like”, but public perception quickly settles on the reality that it remains a bus. While this does not diminish the value of improved bus services, it does limit the ability of BRT to inspire the kind of civic confidence and long-term behavioral change that permanent systems achieve.

Cities that have invested in fixed rail-like modes have seen those systems become part of their identity, shaping development and travel patterns for generations.

Taken together, these lessons point to a clear conclusion. For cities that need incremental improvements to their bus networks, BRT can be a useful tool. But for cities like ours, where the ambition is to deliver cleaner air, stronger regeneration, healthier communities and a transport spine that will still matter in fifty years, BRT is not the right strategic choice.

Generational change requires infrastructure that is permanent, legible and capable of anchoring long-term investment.

A fixed, rail-like system provides that foundation; a bus-based system does not.

Light Rail (UK)

UK BRT Cities vs Very Light Rail designed before February 2026

City / Mode	Permanence	Regeneration	Air Quality	Non-Exhaust Emissions	Reliability	Public Confidence	Long-Term Value
Glasgow (Fastlink BRT)	Low	Low	Small	High	Fragile	Low	Low
Belfast (Glider BRT)	Medium	Low–Medium	Moderate	High	Medium	Medium	Medium
Leigh Guided Busway	Medium	Medium	Moderate	High	Medium–High	Medium	Medium
Cambridge Guided Busway	Medium	Medium	Moderate	High	Mixed	Mixed	Medium
Liverpool (Proposed BRT)	Low–Medium	Low	Small	High	Medium	Medium	Low–Medium
Milton Keynes (Proposed BRT)	Low–Medium	Low	Small	High	Medium	Medium	Low–Medium
Leeds (Proposed BRT)	Low–Medium	Low	Small	High	Medium	Medium	Low–Medium
Bradford (Proposed BRT)	Low–Medium	Low	Small	High	Medium	Medium	Low–Medium
Derby (Proposed BRT)	Low–Medium	Low	Small	High	Medium	Medium	Low–Medium
Very Light Rail (VLR)	High	High	Large	Low	High	High	High

Light Rail (UK)

Metric comparison (post-Feb 2026 Green Book, Vision & Validate, placemaking)

City / Mode	Permanence & Place-making	Transformational Change	Carbon & Air Quality	Health & Inequalities	Regeneration & Land-Value	Risk Profile	Value for £ (post-2026)
Glasgow – Fastlink BRT (built)	Low	Low	Small improvement	Small	Low	Medium–High (dilution, reversibility)	Low
Belfast – Glider BRT	Medium	Low–Medium	Moderate	Modest	Low–Medium	Medium	Medium
Leigh Guided Busway	Medium	Medium (on corridor)	Moderate	Modest	Medium (local)	Medium	Medium
Cambridge Guided Busway	Medium	Medium	Moderate	Modest	Medium	High (defects, litigation)	Low–Medium
Liverpool – proposed BRT	Low–Medium	Low	Small	Small	Low	Medium	Low–Medium
Milton Keynes – proposed BRT	Low–Medium	Low	Small	Small	Low	Medium	Low–Medium
Leeds – proposed BRT	Low–Medium	Low	Small	Small	Low	Medium	Low–Medium
Bradford – proposed BRT	Low–Medium	Low	Small	Small	Low	Medium	Low–Medium
Derby – proposed BRT	Low–Medium	Low	Small	Small	Low	Medium	Low–Medium
Very Light Rail (VLR)	High	High	Large improvement	Large	High	Medium (infrastructure, but matched by benefits)	High

How the picture changes under the new Green Book

Under the old, predict-and-provide mindset, BRT could look acceptable because it ticked boxes on journey time and basic value-for-money ratios.

Under the 2026 Green Book and Vision & Validate thinking, the scoring shifts:

1. Permanence and place The updated guidance explicitly pushes place-based, long-term, transformational investment. BRT's reversibility and weak place-making drag its score down; VLR's fixed, legible infrastructure scores strongly.
2. Transformational change The new framework asks whether a scheme genuinely changes how a place works; not just how fast vehicles move. Existing and proposed BRT schemes remain incremental; VLR is designed as a city-shaping spine.
3. Carbon, air quality and health With stronger treatment of carbon, $PM_{2.5}$ and wider health outcomes, small tailpipe gains from BRT are no longer enough. VLR's zero-emission operation and reduced non-exhaust emissions push it clearly ahead.
4. Regeneration and land-value The updated Green Book and place-based analysis give more weight to land-value uplift and long-term economic restructuring. BRT corridors have weak evidence here; fixed rail-like systems do not.
5. Value for £ Once you price in permanence, regeneration, health, carbon and risk, the apparent cheapness of BRT erodes. Rail-like systems look more expensive up front but deliver far more social value over the appraisal horizon.

If Belfast Glider, Leigh, Cambridge, Fastlink and the proposed BRT schemes in Liverpool, Milton Keynes, Leeds, Bradford and Derby were appraised today under the post-Feb 2026 Green Book, their value-for-money cases would weaken relative to a well-designed VLR option.

They would still improve buses; they would not pass the test for transformational, place-based, generational change.

Schemes like Belfast Glider, the Leigh Guided Busway, the Cambridge Guided Busway, Glasgow Fastlink and the proposed BRT systems in Liverpool, Milton Keynes, Leeds, Bradford, and Derby were assessed today under the post-February 2026 Green Book, their value-for-money cases would look quite different from when they were first conceived.

All of these schemes were designed under a predict-and-provide mindset that prioritised vehicle movement and short-term transport metrics. The updated Green Book now places far greater weight on place-making, long-term health outcomes, carbon reduction, regeneration, and the ability of infrastructure to deliver transformational change.

Under this new framework, bus-based BRT systems would still be recognised for improving bus services, but their limitations would become far more visible. They lack permanence, they do not anchor regeneration, their air-quality benefits are modest, and they do not deliver the deep behavioural change required to shift travel patterns at a city-wide scale.

As a result, their overall value for money would weaken when judged against the broader social, environmental, and economic outcomes now required.

In contrast, a well-designed Very Light Rail system aligns closely with the new Green Book principles. It provides fixed, legible infrastructure that supports long-term investment, delivers stronger air-quality and health benefits, reduces non-exhaust emissions, and acts as a catalyst for regeneration.

It offers a level of permanence and place-shaping power that bus-based systems cannot match.

The conclusion is clear. While BRT can enhance bus networks, it does not meet the test for transformational, place-based, generational change. Under today's appraisal standards, VLR provides a stronger, more future-proof foundation for cities seeking long-term economic, social, and environmental value.

Is it too late to challenge proposed BRT schemes or extensions?

In almost every case, no — it is not too late. Transport schemes in the UK can be challenged, reshaped or replaced right up until the point where they receive statutory approval and funding is contractually committed. Even after that, there are still mechanisms to pause, review or redesign a scheme if the evidence base has shifted.

What *has* changed is the policy environment. Since the 2026 Green Book update and the shift to Vision & Validate, Place-Based Outcomes, and Health & Carbon weighting, the bar for approving bus-based BRT has become significantly higher.

That makes challenge easier, not harder to Challenge the strategic pre context case 2026

The legitimate, recognised routes, all grounded in UK transport governance, not activism or obstruction.

Under the post-2026 Green Book, a scheme must show:

• transformational change • place-making impact • long-term regeneration value • carbon and health benefits

BRT struggles with all four. If a council fails to show these results, the scheme may be paused or revised.

This is the strongest and cleanest route.

By Challenging the economic case as the updated Green Book places far more weight on land-value uplift • health outcomes • carbon reduction • long-term social value

BRT's value-for-money case weakens under this lens.

A VLR-type system scores higher on every metric except short-term capital cost.

If the economic case no longer stacks up, the scheme can be withdrawn or replaced.

By challenging the environmental case because BRT still produces • non-exhaust particulates, road-surface pollution, higher maintenance emissions, limited $PM_{2.5}$ & pm 10s reduction

Under the new appraisal rules, these are no longer minor issues, they are material weaknesses.

A city can legitimately argue or charge that BRT does not meet its own climate or clean-air commitments and is now under the Challenge the deliverability and risk case

Guided busways and BRT corridors now face scrutiny because of Cambridge Busway defects, high maintenance liabilities, reversibility and dilution risk, political fragility

If a scheme carries rail-scale risk but only bus-scale benefits, it can be re-evaluated.

Challenge from the public-engagement and consultation process can be made if consultation did not present alternatives fairly, relied on outdated appraisal methods, did not reflect the 2026 Green Book, did not consider VLR or fixed-guideway options, then the consultation can be reopened or repeated regardless of costs spent so far,

This is common and entirely legitimate.

Challenging the funding case if a scheme was costed or justified under pre-2026 rules, the funding body (DfT, CA, or Treasury) can require a refreshed business case, a new appraisal, a mode-shift comparison, a place-based assessment

This could lead to BRT being replaced by a more sustainable fixed-guideway option

Thus, the next question is what happens if a city wants to switch from BRT to VLR?

This is more common than people think. Cities have switched modes at:

• Strategic Outline Case • Outline Business Case • even Full Business Case (rare, but possible)

If the evidence shows that BRT no longer meets the updated appraisal framework, a city can:

1. Pause the BRT scheme
2. Refresh the appraisal
3. Rerun the options assessment
4. Introduce VLR as the preferred option
5. Submit a revised business case

This is entirely legitimate and has precedent.

The bottom line

It is not too late to challenge or replace proposed BRT schemes in:

• Liverpool • Milton Keynes • Leeds • Bradford • Derby • or any BRT extension elsewhere

The 2026 Green Book changes have made it easier, not harder, to argue that BRT no longer meets the standards for:

• transformational change • regeneration • health impact • carbon reduction • long-term value for money

A fixed, rail-like system such as VLR aligns far more closely with the new appraisal framework.

We urge a review of all BRT schemes to avoid negative long-term impacts and address climate change.

Hydrogen VLR, by contrast, is:

- fixed
- legible
- durable
- politically defensible

It signals long-term commitment — something Glasgow has lacked in previous transport programmes.

Alignment with National Policy

Hydrogen VLR aligns with:

- the new Green Book
- Scotland's Net Zero strategy
- Clyde Metro recommendations
- ISO 14001 environmental-management principles

BRT does not.

Cabinet will want a mode that strengthens, not weakens, the Region's case for national funding.

Political Conclusion

Glasgow has already tested BRT. It did not deliver the outcomes the Region needs. Scaling it up will not change that. The comparison table makes the choice clear: only Hydrogen VLR provides the permanence, regeneration impact, health benefits, and energy-security value required for a generational transport investment.

Choosing VLR positions Glasgow City Region as a leader in clean transport, green industry, and long-term urban renewal — and avoids repeating the mistakes of Fastlink.

James Harkins CILT
Clean & Green Transport