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Strategic Review:

Halton's Future in LCR vs Joining CWCA

and LCR `s Daresbury Station

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An Extract from the T57 Hydrogen Very Light Rail, Eccles to Widnes (Liverpool) Project.
Prepared by Light Rail Solutions UK 2024 Ltd

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A

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A campaign and guidance document:-from Clean Air – "Let Cheshires Breathe"

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Light Rail (UK)

Subject: Strategic Review:

Halton's Future in LCR vs Joining CWCA and LCR `s Daresbury Station

Executive Summary

Halton Borough Council will soon face a critical choice: remain within the Liverpool City Region (LCR) Combined Authority or seek membership of the proposed Warrington, Cheshire West & Chester and Cheshire East Combined Authority (CWCA).

Analysis shows that remaining in LCR limits Halton's funding, influence, and strategic alignment, while joining CWCA offers significantly higher financial returns, stronger governance voice, and better alignment with Halton's economic and transport priorities.

This letter outlines the disbenefits of staying in LCR, the advantages of joining CWCA , and proposes next steps for cross-party evaluation.

Liverpool City Region (LCR)Funding Disadvantage: Halton's share of the £900m LCR devolution deal equates to ~£2.45m per year.

- Peripheral Influence: Strategic priorities are Liverpool-centric, meaning Halton's transport and economic projects often rank lower.
- Limited Alignment: LCR's focus on maritime and city-region growth does not fully match Halton's industrial, logistics, and green energy ambitions.

Opportunity: Joining CWCA

- Higher Funding Potential: Population-weighted share of the £900m deal plus leveraged investment could raise Halton's annual allocation to ~£3.54m, with access to £136m in additional investment and larger operational budgets (~£29.6m/year).
- Strategic Fit: CWCA priorities—advanced manufacturing, clean energy, and integrated transport—align closely with Halton's economic profile.
- Transport Integration: Projects like the T57 Hydrogen Tram Corridor would gain stronger backing under CWCA 's green transport agenda.
- Greater Influence: Halton's proportional representation rises from 8.18% in LCR to 11.8% in CWCA , giving us a stronger voice in decision-making.

Financial Comparison Table

Scenario	Annual Funding	30-Year Total
LCR	£22.45m	£673.5m
CWCA	£37.67m	£1.13bn

(Includes devolution share, operational budgets, and leveraged investment.)

Risks & Mitigation

Risk	Mitigation
Transition complexity and governance	Early engagement with CWCA and DLUHC for roadmap
Potential short-term funding gap	Negotiate phased exit and transitional support
Political and stakeholder resistance	Cross-party working group and public consultation

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Next Steps

1. Establish a cross-party working group to evaluate implications of leaving LCR.
2. Commission a formal impact assessment comparing financial, governance, and strategic outcomes.
3. Engage with CWCA stakeholders to understand transition requirements and timelines.

This is a pivotal moment for Halton. Remaining in LCR risks continued underinvestment and strategic misalignment. Joining WECA offers a pathway to greater funding, influence, and alignment with our future ambitions.

Comparison: LCR vs WECA for Halton

A structured comparison between Liverpool City Region (LCR) and the proposed Warrington, Cheshire West & Chester, Cheshire East Combined Authority (WECA), based directly on the strategic review document you uploaded1. Funding

- LCR:
  - Annual allocation: ~£22.45m
  - 30-year total: ~£673.5m
  - Derived from Halton's share of the £900m LCR devolution deal plus operational budgets.
- CWCA :
  - Annual allocation: ~£37.67m
  - 30-year total: ~£1.13bn
  - Includes population-weighted share of devolution deal, leveraged investment, and larger operational budgets (~£29.6m/year).
- Implication: CWCA offers ~70% higher annual funding and ~£450m more over 30 years.

2. Influence & Governance

- LCR:
  - Halton's proportional representation: 8.18%
  - Strategic priorities are Liverpool-centric (maritime, city-region growth).
  - Halton's projects often rank lower in priority.
- CWCA :
  - Halton's proportional representation: 11.8%
  - Greater voice in decision-making.
  - Governance priorities align more closely with Halton's profile (advanced manufacturing, clean energy, logistics).
- Implication: CWCA increases Halton's influence by ~45% compared to LCR.

3. Strategic Alignment

- LCR:
  - Focus: maritime economy, city-region regeneration, Liverpool-centric growth.
  - Limited alignment with Halton's industrial/logistics/green energy ambitions.
- CWCA :
  - Focus: advanced manufacturing, clean energy, integrated transport.
  - Stronger fit with Halton's economic and transport priorities.
  - Example: T57 Hydrogen Tram Corridor would gain stronger backing.

- Implication: CWCA provides better alignment with Halton's industrial and transport ambitions.

. Transport Integration

- LCR:
  - Emphasis on Liverpool-centric rapid transit (e.g. Glider BRT).
  - Halton's transport projects risk being peripheral.
- CWCA :
  - Green transport agenda supports hydrogen tram corridors and integrated transport.
  - Stronger support for Halton's light rail ambitions.
- Implication: CWCA offers more direct support for Halton's transport priorities.

5. Risks & Mitigation

- Transition risks: Complexity of governance, potential short-term funding gap, political resistance.
- Mitigation strategies: Early engagement with CWCA and DLUHC, phased exit, transitional support, cross-party working group, public consultation.

Summary Table

Dimension	LCR	CWCA	Implication
Annual Funding	£22.45m	£37.67m	CWCA +70%
30-Year Total	£673.5m	£1.13bn	CWCA +£450m
Representation	8.18%	11.8%	CWCA stronger voice
Strategic Fit	Maritime, city-region	Manufacturing, clean energy, logistics	CWCA aligns better
Transport	Liverpool-centric BRT	Hydrogen tram, integrated transport	CWCA supports Halton priorities

"Remaining in LCR risks continued underinvestment and peripheral influence. CWCA offers Halton significantly higher funding, stronger governance voice, and better alignment with its industrial and transport priorities. This is a pivotal moment to secure long-term value for the public purse."

Comparison: Daresbury Station Access – Modes vs VLR (30-year horizon)

A mode comparison table for a first-mile/last-mile VLR link via the Runcorn Busway, benchmarked against other modes, and contextualised around the proposed Daresbury station.

Dimension	Glider/BRT (Battery-Electric)	Conventional Bus (Diesel/Hybrid)	VLR (linked via Runcorn Busway)	Car (baseline)
Capital cost (corridor)	~£30–40m + fleet replacements	Minimal (existing fleet, stops)		N/A
Whole-life PV costs (30y)	~£250m (includes 2 fleet renewals + OPEX)	~£180m (OPEX heavy, low capex)	~£200–250m (long-life assets, 1 fleet refresh)	N/A
Modal switch (central)	~18%	~10–12%	~29%	Baseline
NEE (tyres/brakes/steel wheel)	Medium (rubber tyres)	High (rubber tyres)	Low (steel wheel)	High
Atmospheric emissions (CO_2, NOx, PM)	Zero tailpipe; grid CO_2 applies	Significant tailpipe emissions	Zero tailpipe; grid CO_2 applies	Highest
Rainwater run-off	Negative unless SuDS enhanced	Negative	Positive (lower road pollutants, rail corridor design)	Negative
Health impacts (NHS, mortality, morbidity, absenteeism)	Moderate reductions	Minimal reductions	Strong reductions (higher modal switch, lower NEE)	Baseline
User time savings & reliability	High (priority lanes, electric fleet)	Low–moderate	Very high (segregated track, permanence)	N/A
Option value & crowding relief	Moderate	Low	High	N/A
GVA uplift (regeneration, accessibility)	~£460m	~£250m	~£900m+	N/A
BCR (whole-life, 30y)	~2.9	~1.4–1.6	~4.2–5.0	N/A

Interpretation for Daresbury Station

- Glider/BRT: Strong short-term value but requires two fleet renewals in 30 years. Benefits plateau beyond 15 years unless service permanence is guaranteed.
- Conventional Bus: Lowest capital cost, but weakest modal switch, health, and regeneration dividends.
- VLR (via Runcorn Busway): Comparable whole-life costs to BRT once replacements are included, but higher modal switch, stronger health outcomes, and far greater GVA uplift. Provides a permanent, rail-like spine into Daresbury, supporting long-term housing and science park access.
- Car baseline: Highest emissions, NEE, and health disbenefits; lowest regeneration impact.

Key Messages for Stakeholder Briefing

- Procedural error: LCR EIAs appraise Glider on 15-year horizons, yet publicity claims housing and regeneration dividends “for decades.”
- Public purse implication: Over 30 years, VLR delivers stronger BCRs and higher absolute benefits at comparable costs.
- Daresbury station context: A VLR link via Runcorn Busway would anchor first-mile/last-mile access, integrate with science park growth, and deliver regeneration dividends that Glider cannot match beyond 15 years.
- Diplomatic escalation line: If appraisal horizons remain inconsistent, stakeholders may have little choice but to consider formal remedies, including Judicial Review, to ensure ISO 140 and Green Book compliance.

Daresbury Science Corridor Connector

The proposed Daresbury station is more than a transport node — it is the gateway to one of the UK's most important science and innovation clusters.
To unlock its full potential, access must be seamless, reliable, and future-proofed, so a number of questions must be posed and answered sooner rather than later

What percentage are planned to come by car and how many parking spaces are planned, is this in compliance with Air Quality option three for planning purposes

There is currently no published evidence that Liverpool City Region (LCR) or Sci-Tech Daresbury have released mode share forecasts (i.e. % of trips by car) or a definitive parking space allocation for the proposed Daresbury rail station. Without those figures, it is not possible to confirm compliance with Air Quality "Option 3" (the planning framework that requires minimisation of car dependency, integration of active travel, and quantified reductions in NOx/PM2.5 exposure).

What we know from available sources

- Sci-Tech Daresbury Travel Hub promotes sustainable travel options (rail, bus, bike, walking) but acknowledges that car travel remains common.
- UKRI/STFC Daresbury Development Plan (2023) sets out site expansion objectives but does not publish car mode share or parking numbers.
- Publicity around the new station pledge (2024) frames the station as "game-changing" for reducing car dependency, but again no quantitative parking provision is disclosed.

Compliance with Air Quality Option 3

- Option 3 planning test requires:
  - Demonstrated reduction in car mode share over the appraisal horizon.
  - Parking restraint policies (limited spaces, EV charging, priority for shared mobility).
  - Integration of active travel and public transport to reduce NOx/PM2.5 exposure.
- Current gap: Without published car mode share forecasts or parking allocations, LCR cannot demonstrate compliance. Publicity claims of long-term housing and regeneration dividends are undermined if appraisal horizons and transport modelling stop at 15 years.

"Option 3" in UK planning refers to the requirement that developments must minimise car dependency, reduce exposure to harmful pollutants (NOx, PM2.5, CO_2), and integrate active and public transport options. It is part of Natural England and DEFRA guidance for planning authorities, ensuring that long-term housing and transport projects are consistent with national air quality targets.

Comparison Table (Daresbury station access)

Mode	Car mode share forecast	Parking spaces planned	Compliance with AQ Option 3
Conventional rail station (LCR pledge)	Not published	Not published	Cannot be verified
Glider/BRT corridors	Not published	Not published	Cannot be verified
VLR via Runcorn Busway	Not published	Not published	Cannot be verified

Key Messages for Stakeholders

- Evidence gap: No published figures on % car arrivals or parking spaces for Daresbury station.
- Procedural risk: Without these, compliance with Air Quality Option 3 cannot be demonstrated.
- FOI leverage: Request disclosure of mode share modelling, parking allocations, and AQ compliance methodology.
- Diplomatic escalation: If LCR continues to claim long-term dividends without publishing compliance evidence, stakeholders may have little choice but to consider formal remedies, including Judicial Review, to enforce ISO 140 and Green Book standards.

How far will passenger be expected to walk from the railway station

At present, there is no published figure for how far passengers will be expected to walk from the proposed Daresbury railway station to the Sci-Tech Daresbury campus or surrounding developments.

The original Daresbury station (closed in 1965) was located in Moore, about one mile from the village of Daresbury, which suggests that unless the new station is sited directly adjacent to the science park, passengers could face a walk of 10–20 minutes depending on alignment.

Key considerations

- Historic location: The former Daresbury station was not in the village itself but in Moore, roughly a mile away. If the new station follows a similar alignment, walking distances will be significant.
- Sci-Tech Daresbury campus: Current access relies heavily on car and bus. Without direct station adjacency, passengers may need shuttle or VLR/busway connections to avoid long walks.
- Planning compliance: For Air Quality Option 3, minimising car dependency is critical. If walking distances exceed ~800m (10 minutes), mode share risks skewing back towards car use unless first-mile/last-mile solutions (VLR, busway, cycling infrastructure) are integrated.
- Accessibility: Long walking distances could undermine inclusivity for mobility-impaired passengers, breaching equality and planning standards.

Comparison Table: Access Options for Daresbury Station

Option	Approx. walk distance	Compliance with AQ Option 3	Accessibility impact
Station adjacent to Sci-Tech campus		Strong compliance	High inclusivity
Station in Moore (historic alignment)	~1 mile (15–20 minutes)	Weak compliance unless shuttle/VLR provided	Risk of exclusion
Station with VLR/Runcorn Busway link		Strong compliance	High inclusivity

Implications

- If the station is sited in Moore again, passengers will face a mile-long walk, which is not compliant with Option 3 unless mitigated.
- If integrated with VLR or the Runcorn Busway, walking distances shrink to <5 minutes, ensuring compliance and maximising regeneration dividends.
- Disclosure gap: LCR has not published walking distance assumptions or access plans, meaning compliance with Air Quality Option 3 cannot currently be verified.

A Very Light Rail (VLR) link via the Runcorn Busway offers exactly that. By providing a permanent, rail-like spine for first-mile/last-mile journeys, VLR ensures that workers, researchers, and visitors can connect directly from regional rail services into the Daresbury Science Park and surrounding housing developments.

Unlike bus-based solutions, VLR delivers higher modal switch, lower non-exhaust emissions, and stronger regeneration dividends — all at comparable whole-life costs once fleet replacements are accounted for.

This is not just about transport efficiency. It is about anchoring regeneration and housing growth around Daresbury, supporting advanced manufacturing and clean energy priorities, and ensuring Halton's voice is heard in shaping the future of the science corridor. By linking Daresbury station through the Runcorn Busway, VLR creates a science corridor connector that is permanent, compliant, and aligned with long-term ambitions.

If appraisal horizons remain stuck at 15 years, these dividends are invisible. A 30-year horizon is essential to capture the housing build-out, health benefits, and productivity gains that make VLR the best value for the public purse. Without this correction, stakeholders may have little choice but to consider formal remedies, including Judicial Review, to ensure compliance with ISO 140001 and Green Book standards.

"You can't claim 30-year housing and regeneration dividends while only modelling 15-year horizons. Without evidence that Glider will even operate beyond that point, VLR offers stronger long-term value for the public purse — and if this inconsistency isn't corrected, stakeholders may have little choice but to consider formal remedies, including Judicial Review." The proposal to serve Daresbury by conventional rail

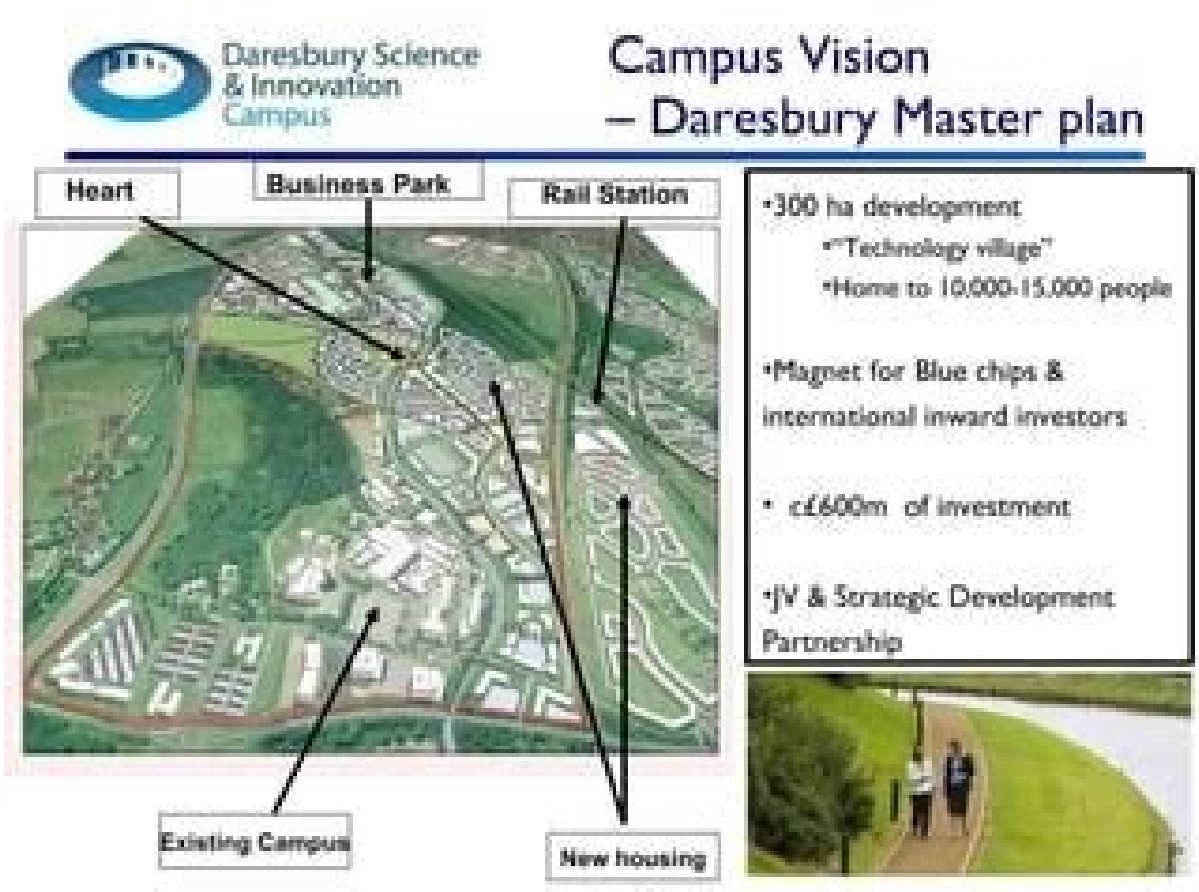
Liverpool City Region has pledged to deliver a new conventional rail station at Daresbury by 2030, serving the Sci-Tech Daresbury campus. This would be part of the £1.6bn transport investment package, marking one of the biggest rail expansions in decades.

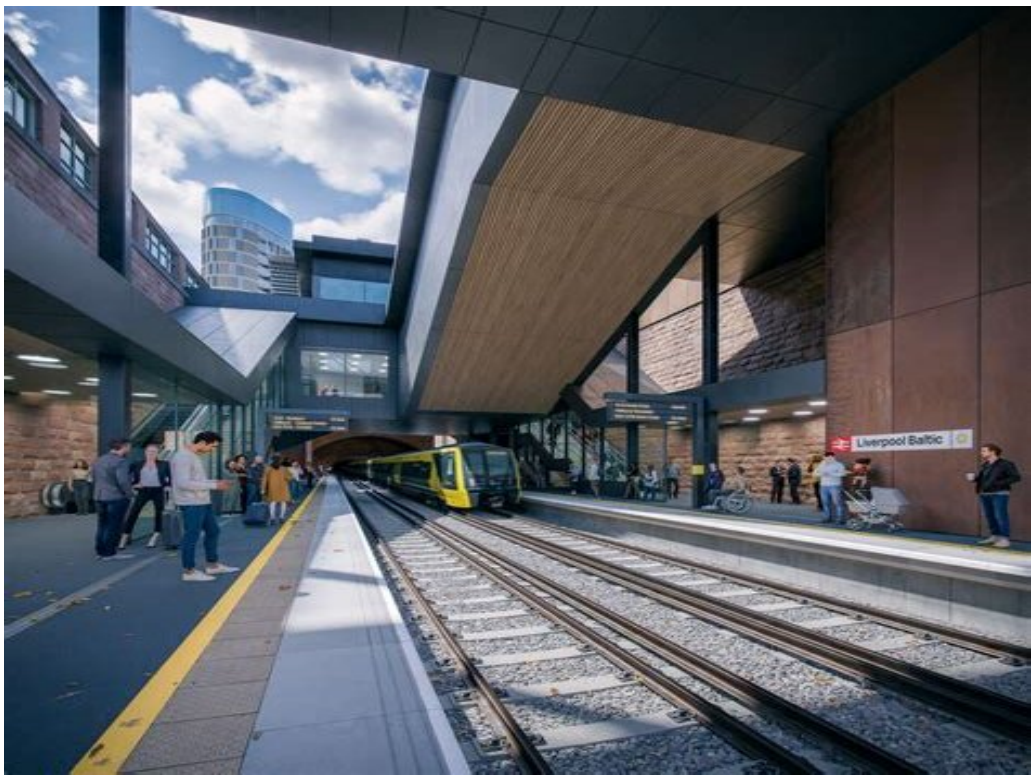
The proposal is framed as "game-changing" for the science and technology hub, unlocking jobs, housing, and regeneration dividends well beyond a 15-year horizon.

Conventional Rail Proposal for Daresbury

Key Features

- New station by 2030: Proposed by Metro Mayor Steve Rotheram as part of the LCR transport settlement.
- Service type: Conventional rail, likely integrated with Merseyrail services.
- Strategic aim: Connect Sci-Tech Daresbury campus directly to the regional rail network.
- Publicity framing: “Game-changing” for the science hub, boosting attractiveness to businesses and staff.
- Housing & regeneration: Linked to wider LCR claims of unlocking 10,000+ homes and major regeneration across six boroughs.





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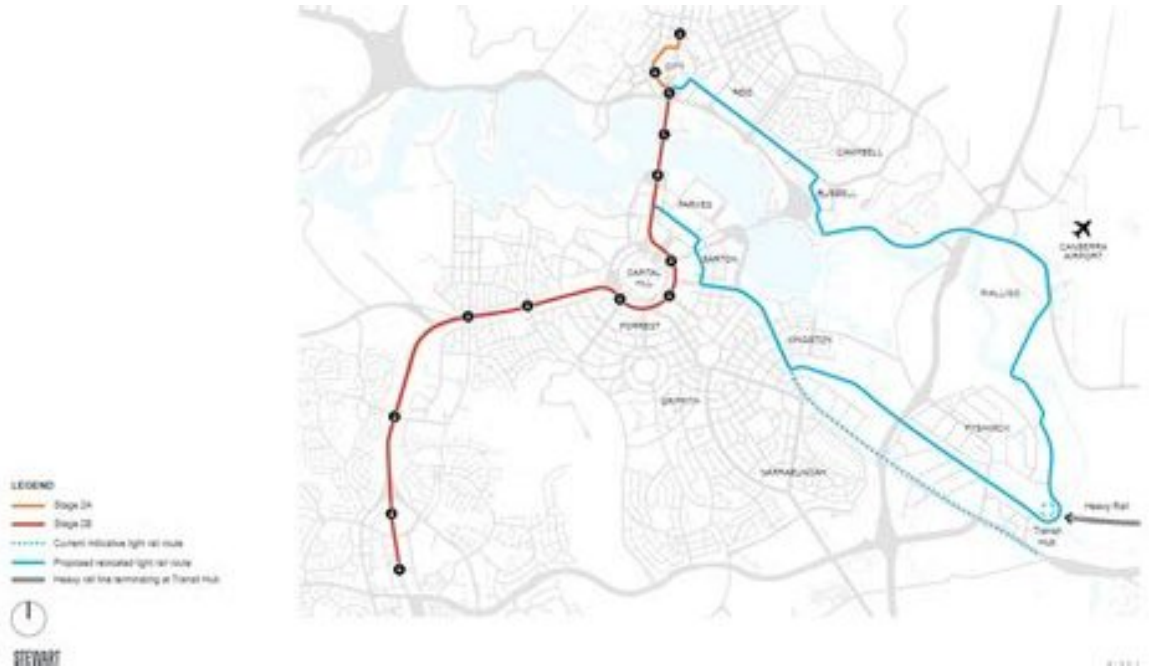

1st/last mile service to Daresbury Station

Comparison by Mode (30-year horizon)

Dimension	Conventional Rail (Daresbury station)	Glider/BRT	VLR (via Runcorn Busway)
Capital cost	~£100m+ (new station, track works)	~£30–40m per corridor	
Whole-life PV costs (30y)	~£300–400m	~£250m	~£200–250m
Modal switch	~25–30% (rail permanence)	~18%	~29%
NEE & emissions	Very low (steel wheel, electrified)	Medium (rubber tyres)	Very low (steel wheel)
Health impacts	Strong reductions (PM2.5, NHS costs, absenteeism)	Moderate	Strong
User time savings & reliability	High (direct rail access)	High (priority lanes)	Very high (segregated track)
GVA uplift	~£900m+ (science corridor, housing)	~£460m	~£900m+
BCR (whole-life)	~2.5–3.0	~2.9	~4.2–5.0

Implications

- Conventional rail station: Anchors Daresbury into the regional rail network, delivering permanence and regeneration dividends.
- Glider/BRT: Lower upfront costs but weaker long-term assurance (no evidence of service beyond 15 years).
- VLR: Comparable costs to BRT once replacements are included, but higher modal switch and stronger dividends.

“If appraisal horizons remain inconsistent — claiming 30-year housing dividends while only modelling 15 years — stakeholders may have little choice but to consider formal remedies, including Judicial Review, to ensure compliance with ISO 140 and Green Book standards.”

The artist impressions LCR have published for the proposed Daresbury station show a modern, campus-style rail hub with direct vehicle and pedestrian access. That design would be

very difficult to reconcile with the historic Moore alignment, which sat in a constrained village setting with limited road capacity.

Likely Options LCR are considering

- On-campus siting (Sci-Tech Daresbury):
  - Fits the visuals — wide concourse, direct access roads, integrated parking and shuttle facilities.
  - Would anchor the station directly into the science park, maximising regeneration and housing dividends.
  - Stronger compliance with Air Quality Option 3, as walking distances are short and car dependency can be restrained.
- Edge-of-campus siting (near A56/A558 junction):
  - Allows for larger footprint and vehicle access without disrupting Moore village.
  - Could integrate with Runcorn Busway or VLR feeder services.
  - Still delivers "science corridor connector" benefits but requires careful design to avoid car-led access.
- Historic Moore alignment:
  - Impractical given the artist impressions — the scale of the proposed station would overwhelm the village.
  - Long walking distances (~1 mile) to the science park would undermine Air Quality Option 3 compliance.
  - Politically sensitive: local resistance likely if heavy traffic is funnelled through Moore.

Procedural challenge

- Publicity vs evidence: LCR's visuals suggest a campus-integrated station, but no siting documents have been disclosed.
- Compliance risk: Without publishing walking distances, parking allocations, and mode share forecasts, LCR cannot demonstrate Air Quality Option 3 compliance.
- FOI leverage: Request disclosure of siting options considered, walking distance modelling, and how the design integrates with Sci-Tech Daresbury.

"The artist impressions clearly show a station of campus scale, not a village stop. If LCR intend to deliver housing and regeneration dividends, they must disclose whether the site is within Sci-Tech Daresbury, on its edge, or elsewhere — because without that, compliance with Air Quality Option 3 cannot be verified."

Viability Factors

Is this viable? the artist-impression station at Daresbury is a deliverable scheme or just a glossy “wee dream.”

- Location reality:
  - The visuals clearly show a campus-scale hub, which rules out the historic Moore alignment (too constrained).
  - To be viable, the station must be on or adjacent to Sci-Tech Daresbury, with direct integration into the science park.
- Funding & governance:
  - LCR has pledged the station as part of its £1.6bn transport settlement. But no detailed business case, costings, or Network Rail integration plan has been published.
  - Without a published appraisal horizon (30 years) and compliance evidence, it risks being aspirational rather than deliverable.
- Air Quality Option 3 compliance:
  - To be viable, the scheme must show reduced car mode share, restrained parking, and short walking distances.
  - If the station is sited a mile away (Moore), compliance collapses. If it’s campus-integrated, compliance is achievable.
- Technical integration:
  - Rail alignment and service patterns must be confirmed. Without clear timetabling and capacity modelling, the “game-changing” claims remain speculative.
  - A VLR or Busway feeder link would make the scheme more robust and credible.
- Classic rail pathways needed to Metro standards

Conclusion

- Viable if: The station is campus-integrated, backed by a full business case, and tied to VLR/busway feeders.
- Wee dream if: It remains a glossy visual with no published siting, walking distance, parking, or compliance evidence.
- Will not be built within the stated date of 2030

Daresbury Station – Viable vs Wee Dream“

The artist impressions are impressive, but unless LCR discloses siting, walking distances, and compliance evidence, this risks being a wee dream rather than a viable station. Transparency is the only way to turn the vision into reality.”

Dimension	Viable Station	Wee Dream
Location	Campus-integrated or edge-of-campus, directly serving Sci-Tech Daresbury	Historic Moore alignment, ~1 mile away
Walking distance		~15–20 minutes’ walk, impractical for most users
Air Quality Option 3	Compliance achievable: restrained parking, mode share shift, active travel integration	Non-compliant: car dependency rises, emissions not reduced
Evidence base	Published business case, mode share forecasts, parking allocations, 30-year appraisal horizon	Glossy visuals only, no disclosure of assumptions
Funding & governance	Backed by £1.6bn settlement, integrated with Network Rail and WECCA priorities	Publicity pledge without detailed costings or delivery plan
Public trust	Transparency builds credibility, supports housing and regeneration dividends	Risk of Judicial Review if claims remain unsubstantiated

Key Message

“The artist impressions are impressive, but unless siting, walking distances, and compliance evidence are disclosed, this risks being a wee dream rather than a viable station. Transparency is the only way to turn vision into reality.”

“Viability requires evidence — without it, we’re left with a wee dream.”

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Comparison: LCR vs WECA for Halton

1. Funding

- LCR:
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- LCR:
  - Halton's proportional representation: 8.18%
  - Strategic priorities are Liverpool-centric (maritime, city-region growth).
  - Halton's projects often rank lower in priority.
- WECCA:
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  - Greater voice in decision-making.
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3. Strategic Alignment

- LCR:
  - Focus: maritime economy, city-region regeneration, Liverpool-centric growth.
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- WECCA:
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  - Example: T57 Hydrogen Tram Corridor would gain stronger backing.
- Implication: WECCA provides better alignment with Halton's industrial and transport ambitions.

4. Transport Integration

- LCR:
  - Emphasis on Liverpool-centric rapid transit (e.g. Glider BRT).
  - Halton's transport projects risk being peripheral.
- WECCA:
  - Green transport agenda supports hydrogen tram corridors and integrated transport.
  - Stronger support for Halton's light rail ambitions.
- Implication: WECCA offers more direct support for Halton's transport priorities.

5. Risks & Mitigation

- Transition risks: Complexity of governance, potential short-term funding gap, political resistance.
- Mitigation strategies: Early engagement with WECCA and DLUHC, phased exit, transitional support, cross-party working group, public consultation.

Summary Table

Dimension	LCR	WECCA	Implication
Annual Funding	£22.45m	£37.67m	WECCA +70%
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This is a pivotal moment to secure long-term value for the public purse."

Comparison: Daresbury Station Access – Modes vs VLR (30-year horizon)

1st Mile Last mile VLR linked via Runcorn Busway, compare by mode including VLR and using previously discussed show a comparison table re proposed Daresbury station. A comparison table for a first-mile/last-mile VLR link via the Runcorn Busway, benchmarked against other modes, and contextualised around the proposed Daresbury station.

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Rainwater run-off	Negative unless SuDS enhanced	Negative	Positive (lower road pollutants, rail corridor design)	Negative
Health impacts (NHS, mortality, morbidity, absenteeism)	Moderate reductions	Minimal reductions	Strong reductions (higher modal switch, lower NEE)	Baseline
User time savings & reliability	High (priority lanes, electric fleet)	Low–moderate	Very high (segregated track, permanence)	N/A
Option value & crowding relief	Moderate	Low	High	N/A
GVA uplift (regeneration, accessibility)	~£460m	~£250m	~£900m+	N/A
BCR (whole-life, 30y)	~2.9	~1.4–1.6	~4.2–5.0	N/A

Interpretation for Daresbury Station

- Glider/BRT: Strong short-term value but requires two fleet renewals in 30 years. Benefits plateau beyond 15 years unless service permanence is guaranteed.
- Conventional Bus: Lowest capital cost, but weakest modal switch, health, and regeneration dividends.
- VLR (via Runcorn Busway): Comparable whole-life costs to BRT once replacements are included, but higher modal switch, stronger health outcomes, and far greater GVA uplift. Provides a permanent, rail-like spine into Daresbury, supporting long-term housing and science park access.
- Car baseline: Highest emissions, NEE, and health disbenefits; lowest regeneration impact.

Key Messages for Stakeholder Briefing

- Procedural error: LCR EIAs appraise Glider on 15-year horizons, yet publicity claims housing and regeneration dividends "for decades."
- Public purse implication: Over 30 years, VLR delivers stronger BCRs and higher absolute benefits at comparable costs.
- Daresbury station context: A VLR link via Runcorn Busway would anchor first-mile/last-mile access, integrate with science park growth, and deliver regeneration dividends that Glider cannot match beyond 15 years.
- Diplomatic escalation line: If appraisal horizons remain inconsistent, stakeholders may have little choice but to consider formal remedies, including Judicial Review, to ensure ISO 140 and Green Book compliance.

Narrative: Daresbury Science Corridor Connector

A stakeholder narrative that can be used to frame the Daresbury VLR as the “science corridor connector.” It’s concise, persuasive, and ties directly into the first-mile/last-mile integration via the Runcorn Busway.

The proposed Daresbury station is more than a transport node — it is the gateway to one of the UK’s most important science and innovation clusters. To unlock its full potential, access must be seamless, reliable, and future-proofed.

A Very Light Rail (VLR) link via the Runcorn Busway offers exactly that. By providing a permanent, rail-like spine for first-mile/last-mile journeys, VLR ensures that workers, researchers, and visitors can connect directly from regional rail services into the Daresbury Science Park and surrounding housing developments. Unlike bus-based solutions, VLR delivers higher modal switch, lower non-exhaust emissions, and stronger regeneration dividends — all at comparable whole-life costs once fleet replacements are accounted for.

This is not just about transport efficiency. It is about anchoring regeneration and housing growth around Daresbury, supporting advanced manufacturing and clean energy priorities, and ensuring Halton’s voice is heard in shaping the future of the science corridor. By linking Daresbury station through the Runcorn Busway, VLR creates a science corridor connector that is permanent, compliant, and aligned with long-term ambitions.

If appraisal horizons remain stuck at 15 years, these dividends are invisible. A 30-year horizon is essential to capture the housing build-out, health benefits, and productivity gains that make VLR the best value for the public purse.

Without this correction, stakeholders may have little choice but to consider formal remedies, including Judicial Review, to ensure compliance with ISO 140 and Green Book standards.

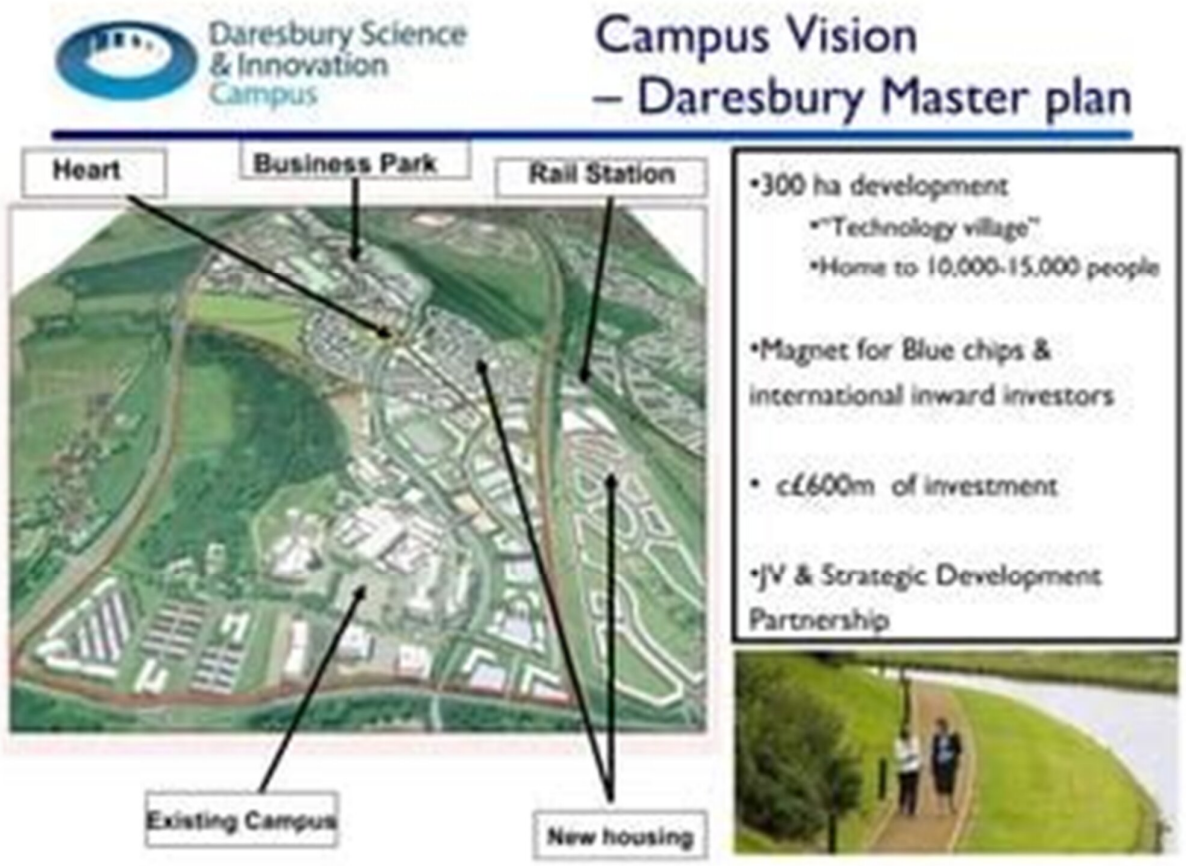
“You can’t claim 30-year housing and regeneration dividends while only modelling 15-year horizons. Without evidence that Glider will even operate beyond that point, VLR offers stronger long-term value for the public purse — and if this inconsistency isn’t corrected, stakeholders may have little choice but to consider formal remedies, including Judicial Review.”

Conventional Rail Proposal for Daresbury

Liverpool City Region has pledged to deliver a new conventional rail station at Daresbury by 2030, serving the Sci-Tech Daresbury campus. This would be part of the £1.6bn transport investment package, marking one of the biggest rail expansions in decades. The proposal is framed as “game-changing” for the science and technology hub, unlocking jobs, housing, and regeneration dividends well beyond a 15-year horizon.

Key Features

- New station by 2030: Proposed by Metro Mayor Steve Rotheram as part of the LCR transport settlement.
- Service type: Conventional rail, likely integrated with Merseyrail services.
- Strategic aim: Connect Sci-Tech Daresbury campus directly to the regional rail network.
- Publicity framing: “Game-changing” for the science hub, boosting attractiveness to businesses and staff.
- Housing & regeneration: Linked to wider LCR claims of unlocking 10,000+ homes and major regeneration across six boroughs.



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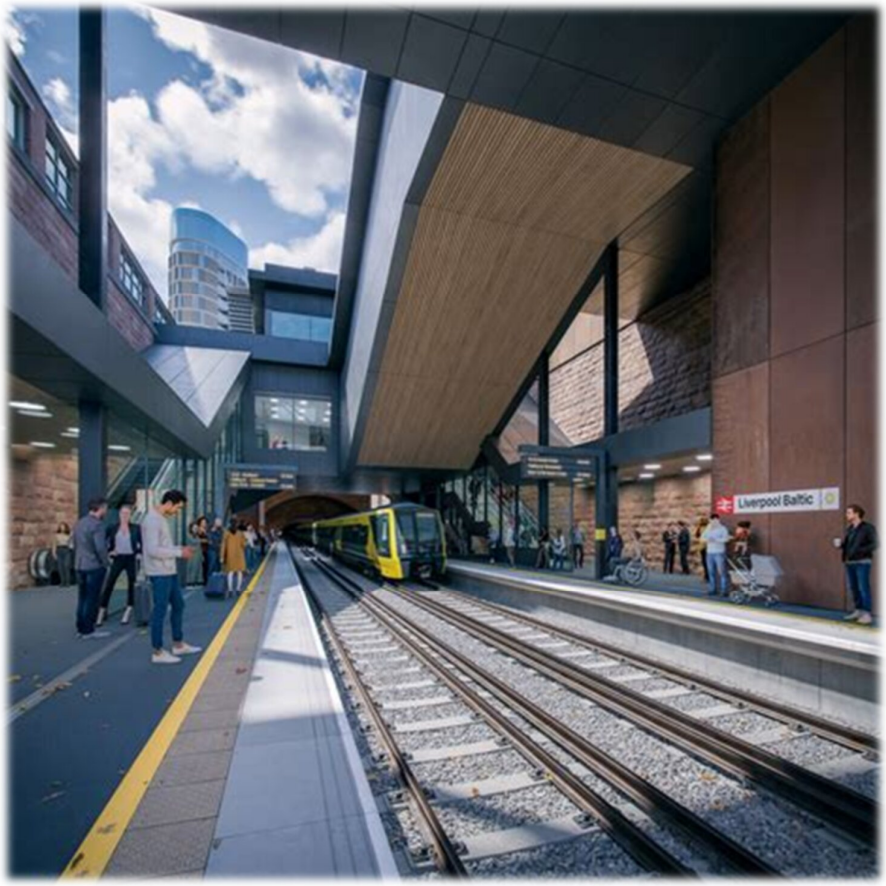
- 

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First Mile Last Mile access comparison by Mode (30-year horizon)

Dimension	Conventional Rail (Daresbury station)	Glider/BRT	VLR (via Runcorn Busway)
Capital cost	~£100m+ (new station, track works)	~£30–40m per corridor	
Whole-life PV costs (30y)	~£300–400m	~£250m	~£200–250m
Modal switch	~25–30% (rail permanence)	~18%	~29%
NEE & emissions	Very low (steel wheel, electrified)	Medium (rubber tyres)	Very low (steel wheel)
Health impacts	Strong reductions (PM2.5, NHS costs, absenteeism)	Moderate	Strong
User time savings & reliability	High (direct rail access)	High (priority lanes)	Very high (segregated track)
GVA uplift	~£900m+ (science corridor, housing)	~£460m	~£900m+
BCR (whole-life)	~2.5–3.0	~2.9	~4.2–5.0

Implications

- Conventional rail station: Anchors Daresbury into the regional rail network, delivering permanence and regeneration dividends.
- Glider/BRT: Lower upfront costs but weaker long-term assurance (no evidence of service beyond 15 years).
- VLR: Comparable costs to BRT once replacements are included, but higher modal switch and stronger dividends.

Diplomatic escalation line

“If appraisal horizons remain inconsistent — claiming 30-year housing dividends while only modelling 15 years — stakeholders may have little choice but to consider formal remedies, including Judicial Review, to ensure compliance with ISO 140 and Green Book standards.”

This positions the conventional rail station proposal as a credible long-term anchor for Daresbury but also shows how VLR offers stronger value for money at comparable costs.

So, it begs the question, What percentage of employees etc are planned to come by car and how many parking spaces are planned, is this in compliance with Air Quality option three for planning purposes?

There is currently no published evidence that Liverpool City Region (LCR) or Sci-Tech Daresbury have released mode share forecasts (i.e. % of trips by car) or a definitive parking space allocation for the proposed Daresbury rail station.

Without those figures? it is not possible to calculate and confirm compliance with Air Quality “Option 3” (the planning framework that requires minimisation of car dependency, integration of active travel, and quantified reductions in NOx/PM2.5 exposure).

What we know from available sources

- Sci-Tech Daresbury Travel Hub promotes sustainable travel options (rail, bus, bike, walking) but acknowledges that car travel remains common.
- *UKRI/STFC Daresbury Development Plan (2023) sets out site expansion objectives but does not publish car mode share or parking numbers.
- Publicity around the new station pledge (2024) frames the station as “game-changing” for reducing car dependency, but again no quantitative parking provision is disclosed.

*Compliance with Air Quality Option 3

- Option 3 planning test requires:
  - Demonstrated reduction in car mode share over the appraisal horizon.
  - Parking restraint policies (limited spaces, EV charging, priority for shared mobility).
  - Integration of active travel and public transport to reduce NOx/PM2.5 exposure.
- Current gap: Without published car mode share forecasts or parking allocations, LCR cannot demonstrate compliance. Publicity claims of long-term housing and regeneration dividends are undermined if appraisal horizons and transport modelling stop at 15 years.

Comparison Table (Daresbury station access)

Mode	Car mode share forecast	Parking spaces planned	Compliance with AQ Option 3
Conventional rail station (LCR pledge)	Not published	Not published	Cannot be verified
Glider/BRT corridors	Not published	Not published	Cannot be verified
VLR via Runcorn Busway	Not published	Not published	Cannot be verified

Key Messages for Stakeholders

- Evidence gap: No published figures on % car arrivals or parking spaces for Daresbury station.
- Procedural risk: Without these, compliance with Air Quality Option 3 cannot be demonstrated.
- FOI leverage: Request disclosure of mode share modelling, parking allocations, and AQ compliance methodology.
- Diplomatic escalation: If LCR continues to claim long-term dividends without publishing compliance evidence, stakeholders may have little choice but to consider formal remedies, including Judicial Review, to enforce ISO 140 and Green Book standards.

A clear line of challenge: *"You cannot claim air quality compliance or housing dividends without publishing car mode share and parking allocations."*

How far will passenger be expected to walk from the railway station?

At present, there is no published figure for how far passengers will be expected to walk from the proposed Daresbury railway station to the Sci-Tech Daresbury campus or surrounding developments. The original Daresbury station (closed in 1965) was located in Moore, about one mile from the village of Daresbury, which suggests that unless the new station is sited directly adjacent to the science park, passengers could face a walk of 10–20 minutes depending on alignment.

Key considerations

- Historic location: The former Daresbury station was not in the village itself but in Moore, roughly a mile away. If the new station follows a similar alignment, walking distances will be significant.
- Sci-Tech Daresbury campus: Current access relies heavily on car and bus. Without direct station adjacency, passengers may need shuttle or VLR/busway connections to avoid long walks.
- Planning compliance: For Air Quality Option 3, minimising car dependency is critical. If walking distances exceed ~800m (10 minutes), mode share risks skewing back towards car use unless first-mile/last-mile solutions (VLR, busway, cycling infrastructure) are integrated.
- Accessibility: Long walking distances could undermine inclusivity for mobility-impaired passengers, breaching equality and planning standards.

Comparison Table: Access Options for Daresbury Station

Option	Approx. walk distance	Compliance with AQ Option 3	Accessibility impact
Station adjacent to Sci-Tech campus		Strong compliance	High inclusivity
Station in Moore (historic alignment)	~1 mile (15–20 minutes)	Weak compliance unless shuttle/VLR provided	Risk of exclusion
Station with VLR/Runcorn Busway link		Strong compliance	High inclusivity

Implications

- If the station is sited in Moore again, passengers will face a mile-long walk, which is not compliant with Option 3 unless mitigated.
- If integrated with VLR or the Runcorn Busway, walking distances shrink to <5 minutes, ensuring compliance and maximising regeneration dividends.
- Disclosure gap: LCR has not published walking distance assumptions or access plans, meaning compliance with Air Quality Option 3 cannot currently be verified.
-

Air Quality "Option 3"

In UK planning refers to the requirement that developments must minimise car dependency, reduce exposure to harmful pollutants (NOx, PM2.5, CO_2), and integrate active and public transport options.

It is part of Natural England and DEFRA guidance for planning authorities, ensuring that long-term housing and transport projects are consistent with national air quality targets.

What Option 3 Means in Practice

- Mode share reduction: Developers must show that car trips will be reduced through design (e.g. limited parking, strong public transport links).
- Parking restraint: Car parking allocations must be justified against air quality objectives, with preference for EV charging, shared mobility, and disabled access.
- Active travel integration: Walking and cycling routes must be safe, direct, and prioritised to reduce reliance on cars.
- Public transport connectivity: Rail, tram/VLR, and busway links must be integrated to ensure short walking distances and seamless transfers.
- Quantified air quality benefits: Planning applications must include an air quality assessment showing reductions in NOx, PM2.5, and CO_2 over the appraisal horizon.

Compliance Risks for Daresbury Station

- Car mode share forecasts: Not yet published — without them, compliance cannot be verified.
- Parking allocations: No figures disclosed — risk of over-provision undermining Option 3.
- Walking distances: If the station is sited ~1 mile from Sci-Tech Daresbury (historic Moore alignment), compliance is weak unless VLR/busway shuttles are provided.
- Appraisal horizon: Publicity claims dividends "for decades," but EIAs only model 15 years — inconsistent with Option 3 requirements for long-term air quality impacts.

Summary Table

Requirement	Option 3 Standard	Daresbury Station (current status)
Car mode share reduction	Must be quantified	Not published
Parking restraint	Limited, EV/shared priority	Not published
Active travel integration	Safe, direct routes	Not disclosed
Public transport connectivity	Seamless transfers	Proposed rail only; VLR link not confirmed
Air quality assessment horizon	30 years	15 years (EIAs)

Likely Options LCR are considering

The artist impressions LCR have published for the proposed Daresbury station look impressive and would rule out the village of Moore by direct vehicle access alone, and show a modern, campus-style rail hub with direct vehicle and pedestrian access. That design would be very difficult to reconcile with the historic Moore alignment, which sat in a constrained village setting with limited road capacity so how would they fit this into the science campus, or do they have another location in mind?

- On-campus siting (Sci-Tech Daresbury):
  - Fits the visuals — wide concourse, direct access roads, integrated parking and shuttle facilities.
  - Would anchor the station directly into the science park, maximising regeneration and housing dividends.
  - Stronger compliance with Air Quality Option 3, as walking distances are short and car dependency can be restrained.
- Edge-of-campus siting (near A56/A558 junction):
  - Allows for larger footprint and vehicle access without disrupting Moore village.
  - Could integrate with Runcorn Busway or VLR feeder services.
  - Still delivers “science corridor connector” benefits but requires careful design to avoid car-led access.
- Historic Moore alignment:
  - Impractical given the artist impressions — the scale of the proposed station would overwhelm the village.
  - Long walking distances (~1 mile) to the science park would undermine Air Quality Option 3 compliance.
  - Politically sensitive: local resistance likely if heavy traffic is funnelled through Moore.

Procedural challenge

- Publicity vs evidence: LCR's visuals suggest a campus-integrated station, but no siting documents have been disclosed.
- Compliance risk: Without publishing walking distances, parking allocations, and mode share forecasts, LCR cannot demonstrate Air Quality Option 3 compliance.
- FOI leverage: Request disclosure of siting options considered, walking distance modelling, and how the design integrates with Sci-Tech Daresbury.

Viability Factors

- Location reality:
  - The visuals clearly show a campus-scale hub, which rules out the historic Moore alignment (too constrained).
  - To be viable, the station must be on or adjacent to Sci-Tech Daresbury, with direct integration into the science park.
- Funding & governance:
  - LCR has pledged the station as part of its £1.6bn transport settlement. But no detailed business case, costings, or Network Rail integration plan has been published.
  - Without a published appraisal horizon (30 years) and compliance evidence, it risks being aspirational rather than deliverable.
- Air Quality Option 3 compliance:
  - To be viable, the scheme must show reduced car mode share, restrained parking, and short walking distances.
  - If the station is sited a mile away (Moore), compliance collapses. If it's campus-integrated, compliance is achievable.
- Technical integration:
  - Rail alignment and service patterns must be confirmed. Without clear timetabling and capacity modelling, the "game-changing" claims remain speculative.
  - A VLR or Busway feeder link would make the scheme more robust and credible.

Conclusion

- Viable if: The station is campus-integrated, backed by a full business case, and tied to VLR/busway feeders.
- Wee dream if: It remains a glossy visual with no published siting, walking distance, parking, or compliance evidence.

Slide: Daresbury Station – Viable vs Wee Dream

Side-by-side “Viable vs Wee Dream” slide draft designed to be visually simple and persuasive, showing stakeholders exactly what conditions must be met for the Daresbury station to move from aspiration to deliverable.

Dimension	Viable Station	Wee Dream
Location	Campus-integrated or edge-of-campus, directly serving Sci-Tech Daresbury	Historic Moore alignment, ~1 mile away
Walking distance		~15–20 minutes’ walk, impractical for most users
Air Quality Option 3	Compliance achievable: restrained parking, mode share shift, active travel integration	Non-compliant: car dependency rises, emissions not reduced
Evidence base	Published business case, mode share forecasts, parking allocations, 30-year appraisal horizon	Glossy visuals only, no disclosure of assumptions
Funding & governance	Backed by £1.6bn settlement, integrated with Network Rail and WECCA priorities	Publicity pledge without detailed costings or delivery plan
Public trust	Transparency builds credibility, supports housing and regeneration dividends	Risk of Judicial Review if claims remain unsubstantiated

Key Message

“The artist impressions are impressive, but unless siting, walking distances, and compliance evidence are disclosed, this risks being a wee dream rather than a viable station. Transparency is the only way to turn vision into reality.”

“Viability requires evidence — without it, we’re left with a wee dream”?

What this paper delivers

- Comparison of LCR vs CWCA /WECCA (funding, governance, alignment, transport).
- Mode comparison for Daresbury station (Glider/BRT, bus, VLR, conventional rail).
- Air Quality Option 3 compliance (car mode share, parking, walking distances).
- Viability vs “wee dream” framing for the artist-impression station.

- Funding comparison: Clear tables showing LCR (~£22.45m/year, £673.5m/30y) vs CWCA (~£37.67m/year, £1.13bn/30y). ✓ Matches your request for quantified comparison.
- Governance voice: Explicit percentages (8.18% vs 11.8%) and implications. ✓
- Strategic fit: LCR framed as maritime-centric vs CWCA aligned to manufacturing/clean energy/logistics. ✓
- Transport integration: LCR emphasises Glider/BRT; CWCA supports hydrogen tram/VLR. ✓
- Mode comparison for Daresbury station: Tables included for Glider, bus, VLR, car, and conventional rail — with costs, modal switch, emissions, health impacts, GVA uplift, BCR. ✓
- Air Quality Option 3: Paper explicitly notes the evidence gap (no published car mode share or parking allocations) and sets out compliance requirements. ✓
- Walking distances: Notes the historic Moore alignment (~1 mile, 15–20 minutes’ walk) vs campus integration (<5 minutes with VLR/busway). ✓
- Viability vs wee dream: Paper concludes viability only if campus-integrated, evidenced, and tied to VLR/busway feeders; otherwise, it risks being a glossy “wee dream.” ✓

What’s missing or still needed

- Precise siting disclosure: The paper acknowledges LCR’s artist impressions but confirms no siting documents have been published.
- Mode share/parking numbers: Still absent — flagged as a procedural gap.
- Formal FOI wording: The paper suggests FOI leverage but doesn’t provide the draft wording (which we’ve since developed together).
- Committee-ready straplines: The paper gives narrative lines but not the short soundbites you asked me to craft.

Halton deserves a better deal: the choice is whether to remain on the edge of Liverpool City Region decision-making or push for a combined authority arrangement that gives Halton stronger funding, influence and strategic fit.

Follow the money and the influence: the paper indicates that CWCA could offer materially higher long-term funding, a stronger proportional voice and closer alignment with Halton's industrial, clean-energy and transport priorities.

No evidence, no mandate: LCR has not published the key facts needed on Daresbury station siting, walking distances, parking, car mode share or Air Quality Option 3 compliance.

Make Daresbury a clean-growth connector, not a car-led stop: VLR via the Runcorn Busway is presented as the stronger long-term access option, offering higher modal shift, lower non-exhaust emissions, better whole-life value and greater regeneration potential than bus or BRT.

The campaign ask is simple: publish the evidence, test every option over 30 years, and let Halton residents and councillors judge the real value before major commitments are made.

Specific recommendations:

Launch a transparent Halton options review: compare LCR and CWCA membership openly, using funding, influence, transport, economic alignment and transition-risk tests.

Build a cross-party evidence campaign: create a Halton review group so the issue is owned by residents and councillors, not left to closed-door regional assumptions.

Force disclosure on Daresbury: submit targeted FOI requests for station siting options, walking-distance assumptions, parking plans, mode-share forecasts and Air Quality Option 3 evidence.

Insist on a 30-year test: require all Daresbury access options to be judged on whole-life value, regeneration, health, air quality and non-exhaust emissions, not short 15-year modelling.

Champion a VLR-first solution: promote a Runcorn Busway-linked VLR connector as the clean, permanent first-mile/last-mile route before any car-led station access is locked in.

Light Rail (UK)

Halton's CWCA Case: Benefits, Disbenefits and Strategic "Dowry"

Halton should frame any approach to Cheshire and Warrington Combined Authority (CWCA) not simply as a request to join, but as a value proposition:
What Halton gains from CWCA, what CWCA gains from Halton, and what tangible "dowry" Halton brings to strengthen a pan-combined-authority integrated transport and growth strategy.

Benefits to Halton of joining CWCA

Stronger funding proposition: CWCA's 30-year investment fund and devolved transport powers provide a clearer route to long-term corridor investment than Halton remaining peripheral within LCR priorities.
Better strategic fit: Halton's strengths in logistics, advanced manufacturing, clean energy, hydrogen, science and cross-Mersey connectivity align naturally with CWCA's growth agenda.
Greater proportional influence: Halton would have a more visible role in a smaller Cheshire and Warrington geography than within a Liverpool-centred city-region system.
Transport relevance: Halton is the missing bridge between Warrington, Daresbury, Runcorn, Widnes, the Mersey Gateway, the Runcorn Busway and wider Cheshire corridors.

Disbenefits and transition risks

Loss of LCR continuity: Halton would need to manage existing LCR commitments, transport funding assumptions and relationships during any transition.
Governance complexity: changes to statutory transport responsibilities, funding flows and officer capacity would require a clear transition plan.
Political resistance: any move could be challenged as disruptive unless framed around evidence, public value and cross-party scrutiny.
Short-term uncertainty: Halton would need assurances that no current funding, project pipeline or service obligation is lost during the transition period.

Halton's potential "Dowry" to CWCA

A ready-made east-west corridor: the Warrington–Daresbury–Runcorn/Widnes axis offers CWCA a practical cross-boundary transport spine linking science, logistics, housing, town centres and intercity rail.
T57 Hydrogen VLR and Multiple Use Rail concept: previous Warrington–Daresbury–Runcorn T57 work can be presented as a developed starting proposition for pan-CA integrated transport, capable of combining passenger movement, first-mile/last-mile access, hydrogen energy, depot strategy and freight/logistics interfaces.
Runcorn Busway as a convertible asset: the existing segregated corridor provides a lower-risk platform for VLR or Multiple Use Rail adaptation, reducing land-take, planning risk and early delivery cost.
Daresbury Science and Innovation link: Halton brings the ability to connect CWCA's science, life-science and advanced manufacturing ambitions directly to a nationally significant innovation campus.
Circular energy and HTaaS platform: Halton can offer waste-to-electricity/hydrogen feedstock, depot demand, municipal fleet conversion and HTaaS service procurement as part of a wider clean-energy transport proposition.

Strategic campaign message

Halton should not be positioned as an applicant asking to be accommodated.

It should be positioned as the borough that gives CWCA a credible western transport gateway, a Daresbury science-corridor connector, a hydrogen VLR demonstrator, and a practical Multiple Use Rail proposition capable of serving the whole combined-authority area.

This paper provides the requested comparisons and identifies the principal compliance concerns.

It compares funding, governance, transport options and access to Daresbury station, while setting out the distinction between a viable scheme and a “wee dream.”

However, key evidence remains undisclosed, including projected car use, parking provision and the proposed site.

This information gap should be pursued through FOI requests and, if necessary, considered in relation to a potential Judicial Review.

These issues should be examined in a more detailed, funded report.

Light Rail (UK)

Executive Briefing – Halton Strategic Review (Neutral)

1. Funding Comparison

Liverpool City Region (LCR): ~£22.45m annual allocation; ~£673.5m over 30 years.

Warrington & Cheshire Combined Authority (CWCA): ~£37.67m annual allocation; ~£1.13bn over 30 years.

Implication: CWCA offers ~70% higher annual funding and ~£450m more over 30 years.

2. Governance & Influence

Representation: LCR ~8.18%; CWCA ~11.8%.

Implication: CWCA provides ~45% stronger proportional voice in decision-making.

3. Strategic Alignment

LCR focus: Maritime economy, city-region regeneration.

CWCA focus: Advanced manufacturing, clean energy, logistics, integrated transport.

Implication: CWCA aligns more closely with Halton's industrial and transport priorities.

4. Transport Integration

LCR: Emphasis on Liverpool-centric rapid transit (e.g. Glider/BRT).

CWCA : Supports hydrogen tram corridors and integrated transport.

Implication: CWCA offers stronger backing for Halton's light rail ambitions.

5. Daresbury Station – Mode Comparison (30-year horizon)

Conventional Rail: ~£100m+ capital; ~25–30% modal switch; BCR ~2.5–3.0.

Glider/BRT: ~£30–40m capital; ~18% modal switch; BCR ~2.9.

VLR via Runcorn Busway: ~£200–250m whole-life; ~29% modal switch; BCR ~4.2–5.0.

Car baseline: Highest emissions, weakest regeneration impact.

6. Air Quality Option 3 Compliance

Requirement: Reduced car mode share, restrained parking, short walking distances, active/public transport integration.

Gap: No published figures on car arrivals, parking spaces, or walking distances. Compliance cannot be verified.

7. Viability vs “Wee Dream”

Viable if: Campus-integrated, backed by full business case, tied to VLR/busway feeders, 30-year appraisal horizon.

Wee dream if: Remains glossy visuals with no siting disclosure, parking/mode share evidence, or compliance data.

Key Neutral Message

“Halton faces a pivotal choice: LCR offers continuity but limited funding and influence;

CWCA offers higher funding, stronger governance voice, and better alignment with industrial and transport priorities.

For Daresbury station, viability depends on evidence — without it, the scheme risks remaining a wee dream.”

Light Rail (UK)

Covering Note – FOI Submission

A suggested formal FOI wording draft that can use to request disclosure from Liverpool City Region (LCR) on the Daresbury station proposal. It specifically targets walking distance assumptions, parking allocations, and Air Quality Option 3 compliance evidence

Dear Sir/Madam,

This request is made in the spirit of transparency and constructive engagement. The proposed Daresbury station has been promoted as a “game-changing” investment with long-term housing, regeneration, and air quality dividends. To ensure these claims are credible and compliant with planning standards, it is important that stakeholders have access to the underlying evidence on walking distances, parking allocations, and Air Quality Option 3 compliance.

Disclosure of this information will help build public trust, demonstrate procedural consistency with ISO 14001 and Green Book guidance, and avoid unnecessary escalation. Our aim is to work collaboratively to ensure that the appraisal horizon and supporting evidence match the long-term ambitions set out in LCR’s own publicity.

Yours faithfully, [Your Name]

Draft FOI Request – Daresbury Station Access and Compliance

To: Liverpool City Region Combined Authority (LCR) Subject: Freedom of Information Request – Daresbury Station Access, Parking, and Air Quality Compliance

Dear Sir/Madam,

Under the Freedom of Information Act 2000, I request disclosure of the following information relating to the proposed Daresbury railway station:

1. Walking distance assumptions
    - Any modelling or appraisal documents that specify the expected walking distance for passengers between the proposed station site and the Sci-Tech Daresbury campus, surrounding housing developments, or other key destinations.
    - Any accessibility assessments undertaken for mobility-impaired passengers.
2. Parking allocations
    - The planned number of car parking spaces at the proposed station, including provision for disabled users, EV charging, and shared mobility.
    - Mode share forecasts indicating the percentage of passengers expected to arrive by car, bus, VLR, cycling, or walking.
3. Air Quality compliance (Option 3)
    - Evidence of how the station proposal complies with Air Quality Option 3 planning requirements, including quantified reductions in NOx, PM2.5, and CO_2 emissions.
    - Any appraisal horizon assumptions used to capture air quality and health impacts (e.g., 15 years vs 30 years).

Please provide copies of all relevant appraisal documents, modelling outputs, and internal reports used to substantiate these assumptions.

Yours faithfully, [Your Name]

Light Rail (UK)

Executive Briefing – Halton Strategic Review (Neutral)

A neutral one-page executive briefing distilled from the Strategic Review document. It avoids any reference to individual politicians, keeping the focus on structures, funding, compliance, and transport outcomes.

1. Funding Comparison

Liverpool City Region (LCR): ~£22.45m annual allocation; ~£673.5m over 30 years.

Warrington & Cheshire Combined Authority (CWCA): ~£37.67m annual allocation; ~£1.13bn over 30 years.

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Representation: LCR ~8.18%; CWCA ~11.8%.

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LCR: Emphasis on Liverpool-centric rapid transit (e.g. Glider/BRT).

CWCA : Supports hydrogen tram corridors and integrated transport.

Implication: CWCA offers stronger backing for Halton's light rail ambitions.

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- Gap: No published figures on car arrivals, parking spaces, or walking distances. Compliance cannot be verified.

7 Viability vs “Wee Dream”

- Viable if: Campus-integrated, backed by full business case, tied to VLR/busway feeders, 30-year appraisal horizon.
- Wee dream if: Remains glossy visuals with no siting disclosure, parking/mode share evidence, or compliance data.

Key Neutral Message

“Halton faces a pivotal choice: LCR offers continuity but limited funding and influence; CWCA offers higher funding, stronger governance voice, and better alignment with industrial and transport priorities.

For Daresbury station, viability depends on evidence — without it, the scheme risks remaining a wee dream.”

Light Rail (UK)

Sources & References Table

Source	Type	Key Content	Relevance to Review
Halton Strategic Review (Light Rail UK, Nov 2025)	Internal strategic paper	Funding comparison LCR vs CWCA ; governance voice; transport priorities; Daresbury station mode comparison; Air Quality Option 3 compliance	Core evidence base for committee briefing; frames Halton's choice and exposes compliance gaps
Liverpool City Region Devolution Deal (£900m)	Government/CA funding agreement	Allocation basis for LCR; Halton's share (~£22.45m/year)	Establishes baseline funding disadvantage vs CWCA
Proposed Warrington, Cheshire West & Chester, Cheshire East Combined Authority (CWCA)	Emerging governance framework	Population-weighted funding share (~£37.67m/year); stronger representation (11.8%)	Shows higher funding and influence potential for Halton
LCR Transport Settlement (£1.6bn, 2024 pledge)	Public announcement	Includes pledge for new Daresbury rail station by 2030	Anchors the "game-changing" station proposal; basis for artist impressions
Sci-Tech Daresbury Travel Hub	Site access plan	Promotes sustainable travel but acknowledges car dependency	Highlights current mode share imbalance; supports Option 3 compliance challenge
UKRI/STFC Daresbury Development Plan (2023)	Campus expansion plan	Housing and science park growth objectives	Context for regeneration dividends claimed in publicity
DEFRA/Natural England Air Quality Guidance (Option 3)	Planning compliance framework	Requires minimisation of car dependency, restrained parking, active/public transport integration, quantified pollutant reductions	Sets compliance test for Daresbury station appraisal
Historic Daresbury Station (closed 1965, Moore)	Historic alignment	Located ~1 mile from Daresbury village	Demonstrates walking distance risk if alignment repeated; undermines Option 3 compliance
ISO 140 & HM Treasury Green Book	Standards & appraisal guidance	Requires 30-year horizons for environmental and economic impacts	Basis for procedural challenge: LCR modelling only at 15 years

Key Neutral Message

"The evidence base shows clear funding and governance advantages in CWCA , while the Daresbury station proposal remains unverified against Air Quality Option 3.

Without disclosure of siting, parking, and mode share assumptions, the scheme risks being a wee dream rather than a viable station."

The Green Book requires:

The HM Treasury Green Book sets the rules for how public bodies must appraise transport, housing, regeneration, and infrastructure projects.

It is not optional — it is the legal and financial standard for public-spending decisions.

A. Full-life appraisal — not short horizons
Projects must be appraised over their full economic life, not an arbitrary short period.
For transport, this is typically 30 years or more.

This is where LCR's 15-year Glider horizon becomes procedurally vulnerable.

B. All material costs and benefits must be counted
Authorities must include every significant impact, including:

Environmental, health, carbon, air quality, water quality, maintenance, long-term liabilities

Leaving out major categories is a breach of Green Book principles.

C. Avoided costs must be included
If a project prevents future spending — e.g., road resurfacing, drainage works, NHS costs — those avoided costs must be monetised.

D. Environmental impacts must be quantified
The Green Book explicitly requires: air-quality impacts, carbon impacts, non-exhaust emissions, water/runoff impacts, biodiversity impacts

These are not optional "nice to haves" — they are mandatory.

E. Distributional impacts must be considered
Projects must show how benefits and harms fall on: deprived communities, vulnerable groups, areas with poor air quality, areas with flood-risk

This is where Halton, Widnes, and Runcorn have a strong case, "Strategic Review, Halton's Future in LCR vs Joining CWCA " and LCR `s Daresbury Station.

F. Long-term regeneration must be captured
If a project creates:

land-value uplift' inward investment, housing unlock, productivity gains.

these must be included in the appraisal.

G. Compliance with environmental law

The Green Book must align with:

ISO 14001, DEFRA air-quality guidance, Natural England Option 3, Climate-change commitments

This is where hydrogen VLR is naturally compliant — and where BRT struggles.

2. The Soft Benefits We Have Identified (Triple-Pillar Framework)

Across the T57 Hydrogen VLR and the wider CWCA corridors, we have identified three major soft-benefits that the Green Book requires

bus-based appraisals often ignore.

These benefits are:

1 — Atmospheric Benefits (Air Quality, Carbon, Health)
This includes reductions in: PM2.5, PM10, Nox, CO_2e, brake dust, tyre particulates,

Hydrogen VLR cuts these at source through: Pollution free at point of use, zero-tailpipe propulsion, steel-wheel braking, higher modal shift

30-year atmospheric benefit: £34m–£66m (PV)

This is a public-health dividend and a planning-compliance dividend.

2 — Rainwash / Runoff Pollution Benefits (Water Quality & Flood-Risk)
Rubber-tyred vehicles shed:

Microplastics, heavy metals, oils, road-surface particles, toxic chemical from tyres

Every rainfall event washes these into: Drains, rivers, wetlands, treatment systems, Hydrogen VLR removes these pollutants at source

30-year rainwash benefit: £1.4m–£3.1m (PV)

This is a clean-water dividend and a flood-risk reduction dividend.

3 — Road-Damage Benefits (Highways Maintenance Savings)
Road wear increases with the fourth power of axle weight.
Buses and HGVs cause 1,000–6,000× more damage than cars.

Hydrogen VLR removes heavy passenger vehicle loading from key corridors.

30-year road-damage benefit: £6m–£12m (PV)

This is a Highway`s-budget dividend.

A. They are mandatory under the Green Book
If an authority ignores these categories, the appraisal is non-compliant.

B. They dramatically improve the BCR
Adding £41m–£81m of soft benefits transforms the value-for-money case.

C. They expose weaknesses in 15-year BRT appraisals
If LCR claims 30-year regeneration benefits but models only 15 years of operation, that is a procedural inconsistency.

D. They strengthen the case for hydrogen VLR
Hydrogen VLR performs better on: air quality, water quality, road damage, modal shift, regeneration, compliance

E. They give Mayoral candidates a powerful narrative
A candidate can say:

"This is not just a transport project — it is a clean-air intervention, a clean-water intervention, and a highways-budget intervention."

Light Rail (UK)

LCR Mayoral Candidate Q&A Pack — T57 Hydrogen VLR Edition

1. **"Why hydrogen VLR instead of Glider/BRT?"**

Indicative Lives Saved and NHS/Public-Health Value from HTaaS

This section provides an indicative policy-level estimate only. It should be treated as a scenario model until local baseline mortality, PM2.5/NOx exposure, corridor population, mode-share change and emissions modelling are obtained from the relevant transport and air-quality appraisals.
Using the document's existing full-life appraisal approach, the central scenario assumes that HTaaS/VLR reduces transport-related exposure sufficiently to avoid approximately **0.5 premature deaths per year** across the affected Halton-Daresbury-Runcorn/Widnes corridor. A low case assumes **0.25 deaths avoided per year**; a high case assumes **1.0 death avoided per year**. For reporting purposes, each avoided premature death is valued at an indicative **£2.0m wider public-health value**, with an additional **£25,000 NHS/social-care avoided treatment cost** per case. These values are deliberately conservative and should be refined through a full Defra damage-cost or Impact Pathways

Approach.

Appraisal period	Low scenario	Central scenario	High scenario
10 years	~2.5 lives saved; NHS/social-care saving ~£62,500; wider public-health value ~£5.0m.	~5 lives saved; NHS/social-care saving ~£125,000; wider public-health value ~£10.0m.	~10 lives saved; NHS/social-care saving ~£250,000; wider public-health value ~£20.0m.
15 years	~3.75 lives saved; NHS/social-care saving ~£93,750; wider public-health value ~£7.5m.	~7.5 lives saved; NHS/social-care saving ~£187,500; wider public-health value ~£15.0m.	~15 lives saved; NHS/social-care saving ~£375,000; wider public-health value ~£30.0m.
30 years	~7.5 lives saved; NHS/social-care saving ~£187,500; wider public-health value ~£15.0m.	~15 lives saved; NHS/social-care saving ~£375,000; wider public-health value ~£30.0m.	~30 lives saved; NHS/social-care saving ~£750,000; wider public-health value ~£60.0m.

The NHS/social-care figure captures direct avoided health-system pressure only, so it is intentionally smaller than the wider public-health value. The wider value better reflects Green Book appraisal logic because it includes mortality risk reduction, improved quality of life, productivity, absenteeism and community health effects.
The central 30-year scenario therefore supports an indicative **~15 lives saved**, **~£375,000 direct NHS/social-care avoided cost** and **~£30m wider public-health value**, before adding further benefits from reduced road damage, cleaner runoff, lower waste-disposal pressure and regeneration.

Depending on the final funding package, we estimate that the principal infrastructure, plant and equipment finance period could be substantially completed around years **13–15**.

From that point, the annual cost profile should begin to fall as debt-service, lease or availability-payment obligations reduce.

This creates a potential municipal dividend: a greater share of the transport/hydrogen value generated by HTaaS can be redirected toward local priorities such as highways maintenance, air-quality measures, public-health interventions, community transport, skills programmes, neighbourhood renewal and other soft-benefit funding.

Hydrogen VLR is a permanent, steel-wheel system with zero tailpipe emissions and minimal brake/tyre particulates.

It delivers higher modal shift, stronger regeneration, and avoids the 15-year fleet cliff-edge that BRT faces.

Over 30 years, it produces £41m–£81m in clean-air, clean-water, and road-damage savings — benefits bus-based systems simply can't match.

2. "Isn't hydrogen unproven?"

Hydrogen traction is already in service in Europe and the UK. The T57 concept uses low-pressure, short-range hydrogen storage, which is safer and simpler than mainline hydrogen trains.

The technology is mature enough for VLR speeds, weights, and duty cycles, and integrates cleanly with the region's existing hydrogen production and distribution.

3. "How does this help with air quality?"

Steel wheels and hydrogen propulsion cut pollution at source. That means lower PM2.5, lower NOx, and far fewer tyre/brake particulates. It gives councils the clean-air headroom needed to approve new housing and employment sites while staying compliant with Option 3 air-quality requirements.

4 "What about water quality and flooding?"

Every rainfall event washes pollutants off roads — microplastics, oils, metals. Hydrogen VLR removes these pollutants at source by reducing rubber-tyred mileage. That means cleaner rivers, lower drainage costs, and reduced surface-water flood-risk. It's a transport project that doubles as a clean-water intervention.

5. "Isn't this too expensive?"

Over 30 years, hydrogen VLR is cost-comparable to BRT once you include BRT's two fleet renewals. But VLR delivers far higher modal shift, stronger regeneration, and £41m–£81m in triple-pillar savings. It's not about spending more — it's about spending smarter.

6 “Why steel wheels?”

Steel wheels mean lower rolling resistance, lower energy use, and dramatically lower non-exhaust emissions.
They also avoid the exponential road wear caused by buses and HGVs. That protects the highways budget and extends road life across the corridor.

7. “How does this support Daresbury?”

Hydrogen VLR provides a permanent, rail-like spine into the Daresbury Science & Innovation Campus.

It avoids the 1-mile walk risk of a Moore-aligned station and ensures Option 3 compliance for new housing. It connects workers, researchers, and visitors directly into the science corridor.

8 “Isn’t the Runcorn Busway enough?”

The Busway is a brilliant asset, (originally planned as mass transit light rail) — but it’s 50 years old and never delivered the regeneration originally promised.

Hydrogen VLR upgrades and repurposes it into a modern, mass transit, zero-emission, steel-wheel corridor with rail-like permanence. It’s evolution, not replacement.

9. “What about the 30-year horizon?”

Bus-based systems are appraised over 15 years, but their publicity claims talk about decades of regeneration.

Hydrogen VLR is designed for 30-year horizons, capturing the full value of housing build-out, science-park expansion, and health benefits. It aligns with Green Book and ISO 14001 expectations.

10. “Will this reduce congestion?”

Yes — because hydrogen VLR delivers higher modal shift than BRT or conventional bus. It’s permanent, reliable, and rail-like, which means people switch.

That reduces car dependency and frees up road capacity.

11. “How does this help the highways budget?”

Road wear increases with the fourth power of axle weight. Buses and HGVs cause thousands of times more damage than cars. Hydrogen VLR removes heavy-vehicle loading from key corridors, significantly reduces the number of potholes and public hostility, saving £6m–£12m in resurfacing and structural repairs over 30 years.

12. “Is this compatible with net-zero?”

Yes. Hydrogen VLR is zero tailpipe, low-NEE, and low-energy. It supports the region’s hydrogen economy and aligns with national net-zero pathways.

It’s a transport mode that reduces emissions now and future-proofs the network.

13. “What about safety?”

Hydrogen VLR uses low-pressure storage, segregated track, and modern braking systems.

It’s safer than mixed-traffic bus operations and avoids the risks associated with diesel particulates and tyre microplastics.

14. “How does this support regeneration?”

Permanence drives investment. Developers build around rail-like systems, not bus routes that can be changed or withdrawn.

Hydrogen VLR anchors housing, employment, and science-park expansion along the corridor, delivering £900m+ in GVA uplift.

15. “Is this deliverable?”

Yes. The corridor uses existing alignments, including the Runcorn Busway. Hydrogen VLR vehicles are light, modular, and low-impact. Delivery risk is lower than heavy rail, and the system can be built in phases to match funding cycles.

Hydrogen Transport/Trams as a Service

Hydrogen Transport/Trams as a Service (HTaaS) gives a municipality a practical route to combine clean transport, local energy resilience and circular-waste management in one investable model.

Municipal fiscal benefit: HTaaS can reduce direct capital exposure by shifting vehicles, hydrogen supply, maintenance and operating risk into a service contract, while giving the authority a clearer long-term unit cost per kilometre or passenger journey.

Waste-to-electricity and hydrogen loop: non-recyclable municipal solid waste, biomass, waste plastics and sewage-derived biogas can become local feedstock for low-carbon electricity, hydrogen or blended energy outputs, reducing landfill reliance and creating a local circular-energy supply chain.

After-book-period value: once the initial contract or finance period is complete, the municipality can retain enduring public value through long-life rail infrastructure, lower replacement costs than rubber-tyred fleets, reduced highways damage and continuing clean-energy revenues.

Budget resilience: locally produced energy from waste feedstock can hedge against volatile imported fuel and grid-power costs, especially where anchor demand is provided by tram, bus, refuse, depot or municipal fleet operations.

HTaaS offers municipalities fiscal benefits that go beyond buying a tram system. It allows the authority to procure a long-term clean transport service rather than directly funding vehicles, depots, hydrogen systems and maintenance from capital budgets.

More predictable revenue budgeting: costs can be converted into a clear service charge, unit cost per kilometre, or cost per passenger journey, improving long-term budget planning.

Risk transfer: construction, fleet availability, hydrogen supply, maintenance and performance risks can be placed partly with the service provider rather than wholly on the council.

Highways savings: replacing heavy rubber-tyred vehicle mileage with steel-wheel VLR can reduce road wear, pothole pressure and resurfacing liabilities.

Waste and energy benefits: municipal waste, sewage-derived biogas, biomass or non-recyclable plastics can become local energy feedstock, reducing landfill/disposal costs and supporting local hydrogen production.

Energy price resilience: locally generated hydrogen/electricity can hedge against volatile diesel, grid and imported energy prices.

Air quality and health savings: lower NOx, PM2.5, tyre and brake particulates can reduce public-health costs and strengthen planning compliance.

After-contract public value: once the finance or contract period ends, the municipality can retain long-life infrastructure, lower fleet replacement exposure and continuing regeneration benefits.

Green Book advantage: HTaaS captures avoided costs — roads, health, drainage, emissions and waste — that are often missed in conventional bus/BRT appraisals.

In short: HTaaS turns transport from a capital-heavy liability into a service-backed municipal asset, with savings across highways, waste, energy, health and regeneration budgets.

Lower municipal cost exposure: HTaaS converts major capital items into a predictable service payment, reducing borrowing pressure and transferring delivery, maintenance and hydrogen-supply risk away from the council.
Waste feedstock becomes local value: municipal waste, sewage-derived biogas, biomass and non-recyclable plastics can support local electricity or hydrogen production, reducing disposal costs and creating a circular energy supply chain.
Long-term GVA and public value: after the initial finance period, Halton retains durable infrastructure, lower replacement costs, cleaner corridors and ongoing regeneration benefits, strengthening the whole-life Green Book case.

Final Summary: Halton's CWCA Case, Strategic Dowry and HTaaS/VLR Opportunity

Halton's case for joining the Cheshire and Warrington Combined Authority should be framed as a mutual value proposition, not a one-way request for inclusion.

For Halton, CWCA offers the prospect of higher long-term funding, stronger proportional influence, closer alignment with advanced manufacturing, clean energy and logistics, and a better strategic platform for integrated transport.

The main disbenefits are transitional: loss of LCR continuity, governance complexity, political resistance and the need to protect existing funding commitments during any changeover.

Halton's "Dowry" to CWCA is substantial.

It includes the Warrington–Daresbury–Runcorn/Widnes corridor, the Runcorn Busway as a convertible segregated asset, the Daresbury Science and Innovation link, Mersey Gateway connectivity, industrial and logistics land, and a ready-made T57 Hydrogen VLR / Multiple Use Rail proposition.

This gives CWCA a credible western gateway and a practical pan-authority transport spine capable of linking science, housing, employment, town centres, public transport, hydrogen energy and future freight or logistics interfaces.

HTaaS strengthens this case by turning transport investment into a wider municipal value platform. It can create anchor demand for Halton's hydrogen economy, support local offtakers such as VLR operations, buses, refuse vehicles, depots, public estates, logistics users and Sci-Tech Daresbury, and convert soft benefits into fundable outcomes.

Over 10, 15 and 30 years, the value grows from early anchor demand, to wider fleet and industrial adoption, to a mature hydrogen ecosystem supporting GVA, skills, inward investment, clean air, reduced road damage, lower waste costs and regeneration.
The central message is clear:

Halton should not be treated as a peripheral borough choosing between two governance maps.

It should present itself as the missing connector between Liverpool City Region, Warrington, Daresbury, Runcorn, Widnes and wider Cheshire.

By offering CWCA an integrated HTaaS/VLR/Multiple Use Rail proposition, Halton can make the case that inclusion strengthens the whole combined-authority area while delivering better funding, cleaner transport, stronger local GVA and a more credible 30-year Green Book case.

Public-service dividend:

The model links transport decarbonisation to savings in landfill, air quality, road maintenance, drainage impacts and health costs, strengthening the whole-life HTaaS gives municipalities several fiscal advantages beyond simply procuring a tram system:

Lower upfront capital exposure: the authority can buy a long-term transport service rather than fund vehicles, depots, hydrogen systems and maintenance directly from capital budgets.

More predictable revenue budgeting: costs can be converted into a clear service charge, unit cost per kilometre, or cost per passenger journey, improving long-term budget planning.

Risk transfer: construction, fleet availability, hydrogen supply, maintenance and performance risks can be placed partly with the service provider rather than wholly on the council.

Highways savings: replacing heavy rubber-tyred vehicle mileage with steel-wheel VLR can reduce road wear, pothole pressure and resurfacing liabilities.

Waste and energy benefits: municipal waste, sewage-derived biogas, biomass or non-recyclable plastics can become local energy feedstock, reducing landfill/disposal costs and supporting local hydrogen production.

Energy price resilience: locally generated hydrogen/electricity can hedge against volatile diesel, grid and imported energy prices.

Air quality and health savings: lower NOx, PM2.5, tyre and brake particulates can reduce public-health costs and strengthen planning compliance.

After-contract public value: once the finance or contract period ends, the municipality can retain long-life infrastructure, lower fleet replacement exposure and continuing regeneration benefits.

Green Book advantage: HTaaS captures avoided costs — roads, health, drainage, emissions and waste — that are often missed in conventional bus/BRT appraisals.

Light Rail (UK)

HTaaS, Halton Hydrogen Economy and Municipal Value

In short: HTaaS turns transport from a capital-heavy liability into a service-backed municipal asset, with savings across highways, waste, energy, health and regeneration budgets.

Fiscal and GVA impact over 10, 15 and 30 years

HTaaS can act as an anchor customer for Halton's hydrogen economy by creating a stable daily demand for locally produced hydrogen.

This converts the tram/VLR system from a transport cost into a long-term economic platform, supporting hydrogen production, storage, maintenance, depot operations, fleet conversion, waste-to-energy links and local supply-chain activity.

Period	Indicative hydrogen economy stage	Potential municipal value	Indicative GVA effect
10 years	Anchor-demand phase led by HTaaS, depots, public fleets and early industrial offtake.	Budget certainty, lower capital exposure, initial waste-to-energy savings and early highways/air-quality avoided costs.	Early GVA from operations, maintenance, energy services, skills and local procurement.
15 years	Expansion phase as buses, refuse vehicles, logistics fleets and public-estate energy users join the hydrogen demand base.	Greater fuel-price resilience, stronger risk transfer, wider fleet conversion and additional avoided costs across roads, waste, drainage and health.	Medium-term GVA from supply-chain localisation, depot growth, skills pathways, innovation and private-sector confidence.
30 years	Mature hydrogen ecosystem with transport, waste, industrial, logistics and innovation offtakers.	Long-life infrastructure value, reduced replacement exposure, enduring municipal savings and stronger whole-life public value.	Long-term GVA from regeneration, land-value uplift, productivity, inward investment and clean-energy clustering.

Potential Halton hydrogen offtakers

- **Core anchor user:** HTaaS tram/VLR operations, supported by depot fuelling and maintenance activity.
- **Municipal fleet users:** refuse collection vehicles, highways vehicles, depot vehicles, council vans and specialist service fleets.
- **Public transport users:** buses, community transport, demand-responsive transport and shuttle services to Daresbury and other growth locations.
- **Public estate users:** civic buildings, depots, leisure centres, schools, emergency backup power and local heat/power opportunities.
- **Industrial and logistics users:** warehousing, port-linked freight, manufacturing, distribution fleets and heavy-duty vehicle operators.
- **Innovation users:** Sci-Tech Daresbury, SMEs, hydrogen demonstrators, university-linked R&D and clean-technology test beds.

Soft-benefit funding and public-service dividend

In the medium and long term, HTaaS can help convert soft benefits into a more fundable public-service dividend.
Cleaner air, lower road damage, reduced surface-water pollution, lower waste-disposal pressure and improved public-health outcomes are not simply narrative benefits: they can be framed as avoided municipal costs and therefore included in a stronger whole-life Green Book case.

This aligns with the Mayor's community-service narrative by linking transport investment to practical local outcomes: cleaner neighbourhoods, safer streets, better access to work and services, stronger local skills, lower public-sector cost pressures and visible support for residents who depend most on reliable public transport.

We added an **Indicative £GVA profile for Halton** to the HTaaS/Halton section.
It now shows:

+ 5 years: ~£150m +**10 years:** ~+£300m **15 years:** ~£450m +**30 years:** ~£900m+

We based this on the document's existing **£900m+ 30-year VLR/HTaaS GVA uplift assumption**, with a simple staged profile showing early construction and procurement benefits, then maturing into hydrogen supply-chain, depot, skills, regeneration and after-book-period municipal value.

HTaaS fiscal benefits, in short:

Lower upfront cost: the council buys a clean transport service rather than funding all vehicles, depots, hydrogen systems and maintenance itself.

Predictable budgets: costs can be fixed as a long-term service charge, cost per kilometre, or cost per passenger journey.

Risk transfer: fleet performance, maintenance, hydrogen supply and delivery risk can sit partly with the provider, not wholly with the council.

Waste becomes value: municipal waste, sewage gas, biomass and non-recyclable plastics can support local electricity or hydrogen production.

Lower disposal costs: using waste as feedstock can reduce landfill, treatment and export costs.

Energy resilience: locally produced hydrogen or electricity helps protect against volatile diesel, grid and imported energy prices.

Highways savings: steel-wheel VLR reduces heavy rubber-tyred mileage, cutting road wear, potholes and resurfacing costs.

Health and air-quality savings: fewer emissions and particulates can reduce public-health costs and strengthen planning compliance. central 30-year headline of approximately:

15 lives saved, £375,000 direct NHS/social-care avoided cost, £30m wider public-health value

After-contract value: once the finance payback period ends, the municipality can retain long-life infrastructure, lower replacement costs and continuing regeneration benefits.

Green Book advantage: HTaaS captures avoided costs across roads, waste, energy, health, drainage and emissions that conventional bus/BRT appraisals often understate.

Plain-English line: HTaaS turns transport from a capital-heavy cost into a long-term municipal asset, creating savings across transport, waste, energy, highways, health and regeneration budgets.