Tram, Granton to Bioquarter consultation

DRAFT Spokes response, October 2025

Introduction

Spokes has the objective of promoting cycling as part of an overall sustainable transport and access strategy. As such, we support a growing tram system for Edinburgh, provided cycling is well catered for in project design and operation.

The aim of the tram is to reduce car traffic, and to head off potential traffic growth in development areas such as Granton and the Bioquarter. If successful, this is a huge benefit to walking and cycling, as well as its benefits in terms of congestion, public health and climate. However, the project should be accompanied by complementary measures to further encourage use of public transport and active travel, for example bus gates and, notably, congestion charging. It is well established that traffic reduction is best achieved by a carrot/stick combination.

The tram project must support and promote active travel as a whole, and cycling in particular, and must not introduce additional dangers without effective mitigation. The Council has ambitious targets to increase cycle use, much of which will come from novice and inexperienced cyclists, as well as visitors and locals using an expanding bike hire scheme. As such it is essential that there is a safe, comprehensive and connected bike network of segregated bike lanes and low-traffic areas, easy and safe to use by anybody, and with any kind of cycles - including cargobikes, adapted bikes, etc. Introducing tram should be seen and planned from the outset as an integrated sustainable transport and place making project, not a tram-only project into which cycling and walking have to be slotted in once all the tramline decisions are taken as happened with tramline 1 and to a considerable though lesser extent in the Newhaven extension.

In this submission, we comment on the current proposals (autumn 2025), noting problems, possible solutions, and opportunities

Decision criteria

In all decisions on the tram project, Spokes considers that the following criteria are crucial.

- Traffic reduction. Traffic reduction is a major factor in positive cycling conditions throughout the city, and a major contributor to desirable outcomes on congestion, public health and climate. Thus decisions, such as in the Bridges corridor, must have traffic reduction as a top objective.
- Improving cycling conditions. Every opportunity should be taken to improve cycling conditions –
 for example, if the Council selects the Roseburn route the project should incorporate a new active
 travel bridge over the mainline railway
- Not worsening cycling conditions. Our biggest concern from the tram proposals is dangers from
 onroad tramlines, with literally hundreds of cyclist injuries, and one death, on the original tram
 route. This is a major concern in the Bridges corridor and the Orchard Brae section. In view of the
 seriousness of the issue, we include below a separate section on bikes and tramlines.

General points relevant to the scheme as a whole, or all areas

- Edinburgh was (and, we think, still is) a pioneer in the UK in catering for **bike carriage on the trams**, albeit this is fairly common in many European and US tram systems. With the planned tram extensions, including eventually over long distances into the Lothians, it is vital that the policy continues and, in particular, that the design of further tram vehicles continues to enable this.
- The consultation materials do not appraise the impact on cycling levels of the proposed tram routes although this is done for motor traffic. Given the Council's ambitions for increased cycle use, this is essential and should be included at the next consultation stage. Tramlines will deter some cyclists, whilst any reduction in the attractiveness of the offroad Roseburn section could have an impact. Conversely, if the tram succeeds in cutting car use, this will benefit cycling.

Tramlines and bikes

Tramline bike crashes are an extremely serious issue, given the ongoing history of injuries (and <u>one death</u>) on Edinburgh's first tramline, and the danger of repeating this in new onroad sections. The design of Edinburgh's initial tramline onroad sections paid minimal attention to cycling (or walking), despite the best efforts of Spokes, including bringing over a Netherlands expert, Hans van der Stok [<u>his report</u>]. That tramline was designed purely from the tram perspective rather than that of an integrated sustainable transport corridor as van der Stok said would be the norm in the Netherlands.

The result was many tramline crashes and injuries, with substantial compensation costs to the Council, pain and anguish for the individuals concerned, lost productivity for employers and a costly Council blackspot remediation programme occupying several years and much officer time. Whilst crashes have reduced significantly, they continue (particularly as many crashes are not at blackspots). However, the Council did learn from this, and the subsequent extension to Newhaven, whilst far from perfect, incorporated segregated bike paths on Leith Walk. To the best of our knowledge, there have been zero tramline crashes on Leith Walk (apart from one at the complex Foot of the Walk junction where cycle provision is poor).

Spokes operates an <u>online reporting page</u> for tramline crashes, which currently has just over 70 responses. Obviously, given that there have been literally hundreds of A&E tramline-crash visits, our survey is only capturing a small percentage of victims. Nonetheless, the 72 responses are sufficient to provide some myth-busting data which are relevant in thinking about tramline design. In particular...

- 64% of cyclists experiencing a tramline crash were intending to continue in the same direction as
 the tramlines, rather than (36%) to cross the tramlines to the other side or at a junction. [In many
 cases the crash was due to traffic pressures, in others due to layout]
- 36% happened when there was "very little or no traffic"
- However, 47% said that traffic pressures or worries about nearby traffic contributed to their crash
- 38% were caused by skidding, 21% by skidding followed by wheel-trapping, and only 31% by wheel-trapping alone
- 71% of crashes were in daylight, 29% in lighting-up time
- 85% of victims said they were "reasonably or very" confident cycling in traffic
- 56% said they regularly used the route in question, 35% occasionally, and for only 10% was it the first time they had encountered these tramlines

What can be done to reduce tramline crashes?

- Physical separation of cycling from tramlines is without question the best solution
- Both tramlines on one side of the road with a bidirectional cycleroute on the other side provides
 full separation, and additionally means that most tramline crossings can be near 90 degrees.
 However this solution would need careful consideration where there are many side roads, meaning
 extra complexity for some bike journeys.
- Single-track running (whether central or on one side of the road) provides considerable extra width, which can be used for segregated cycling, or at least greater separation from tramlines, as well as for wider footways. Bus gates do not provide separation, but could greatly reduce traffic pressures, which our stats suggest contribute to around 50% of tramline crashes
- Alternative routes on parallel roads will assist some cyclists, but where the tram route is significantly more convenient, due to directness, gradients, or other reasons, many or most cyclists will continue to use it, as is clearly seen in Princes Street. This likelihood is further reinforced by our data showing that a high proportion of tramline crash victims consider themselves to be confident cyclists (and presumably were not expecting to crash)
- At the time of the early tramline crashes, TIE spent some time investigating tramline fillers, and concluded there were none which worked in the type of onroad tramline rails used in Edinburgh. We doubt that the position has changed, though fillers and/or rail types could be re-investigated. If so, it is essential to note our above data suggesting that skidding is a bigger contributor to tramline crashes than is wheel-trapping, so any fillers would need to be carefully investigated as to whether they worsened or ameliorated skidding.

Commentary on individual route sections

Granton to Crewe Toll

Top Issues

• Between Granton and Ferry Road / Crewe Toll the tram would run off road alongside existing roads, rather than onroad, which would avoid most tramline problems, although careful consideration is needed at the crossing points that will be necessary. This will include a short section on West Harbour Road - a very popular leisure cycling route. This may present an opportunity to introduce cycle segregation here. The position at Crewe Toll is unclear, particularly if the Orchard Brae option is used. It is essential that the continuity of the segregated offroad path, including the Red Bridge, is maintained, whilst safety and route continuity must also be a priority for cyclists at road level, notably at Ferry Road roundabout. The detailed design stage must clarify all these points.

Crewe Toll to City Centre, via Roseburn corridor

Top issues

- North of Roseburn the Council is to be congratulated on modifying the project north of Roseburn bridge to single track, and with battery running, enabling a 3m+ active travel path (with one identified pinch point at Telford Road see below). This follows the instruction to the tram team by councillors at the 1.2.24 Transport Committee for which we again thank all members and others who contacted councillors at that time.
- South of Roseburn the connection from Roseburn to the superb new path to the Canal lacks clarity, and indeed there are contradictions in the consultation materials see these clarifications from the tram team, the Roseburn bridge cross section, the path cross section, the artist impression and the map view. Furthermore, some of these materials talk of 2m width, which is clearly substandard. We do appreciate that there are engineering challenges here, but challenges are there to be met. Secondly, the consultation does not mention the massive opportunity to implement the Mobility Plan project [Mobility Plan, Active Travel Delivery, page 43] to connect the two paths with a bridge over the mainline railway, meaning no need to descend to road level and up again. Both these issues would raise costs but would be a very minor element of total project costs, the benefits to active travel of the level connection would be massive, and not to include the bridge if the tram uses Roseburn would render it unlikely for the foreseeable future. In summary, the Council must seek to include this connection between the two routes, with the requisite engineering studies and costings complete before the next consultation. Ideally the connection would be the 4m width of the new Canal link, but certainly no less than 3m, and with no pinch points.
- Ambience and nature value Strava heatmaps and cycle counts by Sustrans indicate that the Roseburn Path is one of the most used off-road cycle paths in Edinburgh. Paths like Roseburn are particularly helpful for those who value a quiet semi-natural environment or who fear the roads. Jacobs note: "The Roseburn Path is a location that is expected to be particularly contentious and require policy trade-offs between active travel and tram". If the tram uses Roseburn, every effort must be made in this "trade-off" to preserve these conditions as far as possible.

Other and more detailed issues

• **South of the A8** – As mentioned above there is lack of clarity here. Indeed, in the aerial map, the path leaves the embankment pushing cyclists onto a road before swinging round through a newly built tunnel into Russell Road. Clearly good connections will be needed, from the path, down to the A8, CCWEL and Russell Road, but do not replace the necessity of a continuous high-level path.

- Impact on cycling levels. As mentioned in 'general points' above, no appraisal has been made of the impact of the tram on cycling numbers in any section, during or after construction. As regards the Roseburn path option, negative and positive factors to consider in an appraisal should include: i) the shift from the path as a quiet, attractive green space to a multi-modal corridor; ii) increased time to transit through the Roseburn Path due to wait times to cross tram tracks; iii) increased conflict associated with identified pinch points; iv) increased surveillance during dark evenings; v) the impact on numbers of a bridge over the mainline railway, should that be included.
- Telford Road pinch point Cycling by Design guidance indicates that a path of at least 3m width is required here. We also note that 5m was considered in the 'do max' option of the Jacobs Steer ESST Phase 2 report, although this is only required for 300 peak-hour trips in each direction, and would have entailed replacing the structure. If the Cycling by Design guidance cannot be followed, then a Design Review is required, with answers to the 7 bullet points at the foot of page 43 of CbD (section 2.8) and this must be included at the next consultation stage.
- Segregation between tramlines and cycle route We strongly support the proposed buffer zone and fence separating cyclists and walkers from the tramlines for most of the route. We note a cyclist death in Cambridge where kerb-only separation was used https://www.bbc.co.uk/news/uk-england-cambridgeshire-59119571). The barrier must be of sufficient height and width to meet HSE requirements.
- Tramline crossings Crossings are essential, notably at access points. Detailed design should encourage cyclist crossing at 90 degrees, to prevent wheel-trapping and to reduce skid risk. Particular design care is needed for pedestrians, given the September 2018 pedestrian death at Saughton and the findings of FAI Determination: https://www.copfs.gov.uk/about-copfs/news/fai-determination-published-following-pedestrian-s-tram-death/#:~:text=The%2053%2Dyear%2Dold%20pedestrian,his%20way%20home%20from%20work.
 Furthermore, measures to prevent children and dogs from straying onto the tramlines at crossings, where the fence will presumably have to end, must be included in the detailed design. In summary, crossings can be unacceptably dangerous and it is essential to follow all relevant design guidance.
- Loss of greenspace impacting on attractiveness for cycling the documents make clear there will be a permanent reduction in green space and habitat, and this will reduce one of the attractions of the route to users, as well as being a biodiversity loss. Full details should be included in the next consultation materials, including assurance that Network Rail's Lineside Vegetation Management Manual has been appropriately considered.
- *Craigleith interchange* this is a key node / meeting point of the various connecting paths, which will now have a tramline passing through, risking losses in terms of people, place and onwards connection. However, it is also an opportunity to create a well considered 'place' for enhanced use and connections to and from the surrounding residential and retail area.
- Crewe Toll to Craigleith There are several places where cycling provision would be on active travel paths separated from the tramway (for example cross-sections 7, 9,10,11,7). In particular, between Telford Road and Easter Drylaw Park, according to cross-section 9, a new cycleway through the adjacent Easter Drylaw Park, separated from pedestrians and the tram. Thought should be given to whether cyclists may be more vulnerable to anti-social behaviour at such locations, given that there are occasional, albeit infrequent, attacks on users of the existing path.

Crewe Toll to City Centre, via Orchard Brae

Top issues

- The onroad tramlines, combined with traffic pressures, including at several junctions and narrow sections, present a major hazard to cyclists, given the absence of segregated provision. Indeed, the current proposals actually remove existing segregation on Queensferry Road and Crewe Road South, presenting a situation similar to the first tramline. The Council needs to provide detailed plans of how these dangers will be mitigated.
- That said, should the Orchard Brae alignment be chosen for the tram, the popular **Roseburn Path** would remain unchanged, avoiding any compromises (or improvements) which might result from a tram route on that alignment.

Other and detailed issues

- Spokes would welcome CEC investigating single-tracking on **Dean Bridg**e rather than stating "cross-section prohibits segregated cycle provision" given a longer section is being proposed (>1km vs 200m) on the Roseburn route alignment option.
- This route joins the current tram network at the **West End junction** where there have been many injuries, and the tragic death of Zhi Mon Soh. The opportunity must be taken to make the junction safe for cycling and to link up safely and effectively with the Lothian Road Boulevard Project, whichever project comes first.

City Centre to Bioquarter

Top issues

- The section through North and South Bridges is of extreme concern to Spokes, with no cycle
 provision, new tramlines and continued through traffic on a road where width is at a premium. This
 is making cycling provision worse than the current bus lane provision. The project should include a
 bus gate / modal filter (as was planned, though never implemented, as part of the Spaces for People proposals) potentially single track sections (like at Roseburn) and fully segregated cycle
 provision.
- Whilst alternative north-south routes for cycles are proposed in the consultation, these would not suit all journeys, with many cyclists using the Bridges to travel between South Edinburgh and Leith given the more suitable gradient than the Mound. And whilst there is a brief reference to the proposed Meadows to George Street route on the west side of the Bridges, there is no reference to the east side, where the Mobility Plan suggestS a new active travel bridge connecting from the Old Town to Leith Walk. Such projects must be an integral part of the tram project provision including during the construction phase providing a permanent legacy of improved provision once finished.
- The North Bridge tram stop is inappropriate for a range of reasons, and should be replaced by two stops: one on Princes Street near the Balmoral hotel and one near the Royal Mile. Details below.

Other and detailed issues

- Old Town tram stop The residents and major institutions in the Old Town are key tram users, and key cycle trip generators and destinations. No tram stop provision in close proximity to the Royal Mile means the tram just runs through the Old Town rather than serving it. A tram stop should be included here, with full bus and cycle interchange designed in. If the stop was at the North Bridge Arcade there could be lifts to/from Market Street for Waverley Train Station, in addition to the well-known Scotsman steps or ramped access via Cockburn St.
- Waverley Steps tram stop A stop here on Princes Street would be in close proximity to the existing
 Waverley stepped, lift and ramped access routes, and would serve local Princes Street users better
 than having to walk up along North Bridge or to St Andrew Sq to access the tram. Indeed, being on
 Princes Street and close to George Street it provides a much better opportunity than does North
 Bridge for an integrated tram/rail/bus/bike interchange.
- North Bridge tram stop Spokes believes the proposed stop should be dropped and replaced by the two above, for a whole range of reasons, including those above. Whilst this stop would serve Waverley, so would the two alternatives both of which would additionally provide steps as well as a lift, with the Waverley Steps stop also enabling ramped access to the station this is a far more flexible and resilient solution than lift only. Secondly, many of the tram users would be accessing the Old Town or Princes Street, rather than Waverley. There is no indication of the size and numbers of lifts that would be provided A stop on North Bridge would mean all these people having to negotiate the crowded and convoluted North Bridge pavements to reach their destinations below.

Finally, a tram stop on North Bridge with platforms on either side rather than a central platform, would compel cyclists to cross tramlines at a dangerous angle in order to pass the platforms – rather like the original Haymarket layout which resulted in many crashes. As our tramline data (above) shows, the majority of tramline crashes are to cyclists wishing to travel in the same direction as the tramlines, and therefore likely to encounter the tramlines at a dangerous angle.

• **Bridges to Nicolson Square** Spokes is concerned that the section at the Tron Kirk would be especially hazardous to cycles given the lack of safe cycle provision and would suggest single track operation from here to Nicholson Square would be safer for cycle users.



Image of single track urban bidirectional tram on Utrectsestraat in Amsterdam, Google Streetview

- Spokes is also very concerned over the complete removal of the uphill (southbound) advisory cycle
 lane provision in the proposals. This is being removed for loading bay / bus stop provision. Again
 this will force cycles to travel in parallel to the tram tracks which is known to cause danger to
 cyclists in the existing tram network where this occurs.
- Nicholson Square to St Patrick Square Through Newington again cycling provision is non-existent
 with clearly no lesson learned from Tram phase 1 from Haymarket to York Place. Space for cycle
 provision is instead replaced by SUDS planters and lanes for continued motor vehicle traffic.
- Nicholson Street, Clerk Street & Newington Road:
 The 'Newington' stop platforms are again proposed as kerb adjacent stops which will force on road cycle users to cross tram tracks
- Minto Street & Craigmillar Park The existing Travelling Safely unidirectional cycle lanes are lost and instead no cycle provision is proposed along Craigmillar Park and Minto Street. Spokes strongly objects to this loss of provision and urges the council to reconsider.
 Spokes notes the proposed 'Mayfield Gardens' tram stop position at the bridge over the South Suburban rail line meaning there could be potential for easy interchange if ever reopened for passenger use. Spokes would encourage integration of cycle hire provision into the design of this stop from the start.
- Cameron Toll At Lady Road there is no active travel provision in the proposals linking the existing
 "Travelling Safely Scheme" to the proposed Cameron Toll Bioquarter cycle route. This is clearly a
 retrograde step for cycling and CEC have missed the opportunity to improve rather than remove
 cycle provision along this key route. Spokes urges CEC to fundamentally reconsider active travel
 along this section of the tram route proposals.
- Cameron Toll the tram route has been adjusted for the drive thru McDonalds but hasn't been
 adjusted to allow for safe cycling provision which aptly sums up where we think CEC are in planning
 for active travel in the on street sections of the tram proposals.

 Cameron Toll to Bioquarter The proposal from Cameron Toll to BioQuarter follows roughly the same route for most of its route as the <u>existing active travel route proposal</u> consulted on in 2019. However at The Inch park entrance the route is inferior to the existing proposal. Spokes would seek the existing alignment along the primary route be retained. See comparison of the proposals below;



2019 (left) vs 2025 (right) active travel route proposal at Inch Park / Bridge End Farm

- Old Dalkeith Road Spokes agrees with the principle of a bidirectional cycle route on the west side of the route giving easier access to residents of The Inch to / from the cycle route in either direction. However the location of the 'The Inch' tram stop seems too far south and very close to the proposed 'Royal Infirmary' tram stop. A stop position further north could provide easier access for residents of Craigmillar if using the existing active travel paths through Craigmillar Castle Park.
- **Royal Infirmary** Spokes is pleased to see the link to the existing active travel routes around the Royal Infirmary and Sick Kids hospitals. However, how staff and patients get to and from the tram stop needs careful consideration given how it is integrated into the existing 'bus hub' given that is on the opposite side of the site.
 - It is worth noting that Nottingham's QMC hospital is served by a tram that runs through the site with dedicated covered walkways to enable easy access to the hospital for patients and staff.
- **Bioquarter** Spokes is concerned that the tram route is shown where the QuietRoute 61 route was built south of Little France Drive. There is currently no active travel replacement provided in the proposals. This is very concerning to Spokes and we would suggest the tram route needs to be repositioned onto the carriageway of Little France Drive instead.



QuietRoute 61 south of Little France Drive 2022 (Edinburgh Reporter)

Bioquarter to Midlothian and East Lothian

Issues

- QMU via Newcraighall or Shawfair are indicated as potential destinations beyond the BioQuarter. Active travel should be provided parallel to any route alignment proposed. This will also act as a service vehicle route if needed for tram access and maintenance.
- The Wisp and Fort Kinnaird currently provide considerable barriers to anyone other than the most confident of road cyclists so Spokes would welcome segregated cycle provision along any tram route proposal to QMU via Newcraighall.
- Given the hostile nature of **Sheriffhall Junction** it forms a considerable barrier for active travel and therefore Spokes would welcome segregated cycle provision along any alignment to Shawfair and onwards to Dalkeith if deemed feasible.