

Making moves on the Edinburgh South Sub

Engineering students from Heriot-Watt University are calling for the reopening of the Edinburgh South Sub rail route that last served neighbourhoods in the south of Edinburgh more than 60 years ago.

The six-strong team of civil engineers, all based in Edinburgh, have set up [an online petition](#) urging policymakers to integrate Edinburgh's South Suburban Line into the city's existing tram network. This would create a new off street transport corridor in the capital and would be the answer for those who have been campaigning for its reinstatement for many years.

In addition to the petition, which has already gathered almost 1,500 signatures since it was set up, the students have conducted a public survey. This revealed significant support for their proposals from local communities and potential passengers.

The Edinburgh South Sub was opened in 1884, but the line then closed to timetabled passenger services in 1962.

Spanning 12.3km, the line runs west to east between Scottish Gas Murrayfield stadium to Portobello, passing through key neighbourhoods of Craiglockhart, Morningside, Newington, Cameron Toll, Craigmillar, Fort Kinnaird and Brunstane. The

line currently has six platforms lining the route which the students acknowledge would require some renovation work. Their plans also propose a further four new platforms at Portobello, Fort Kinnaird, Niddrie Bingham and Cameron Toll.

While the line is maintained by Network Rail and used today for freight transport, the students argue that it is an underused asset. It would not only benefit passengers but would also assist The City of Edinburgh Council in meeting its targets to reduce car miles travelled by 30% by 2030.

Corey Boyle, one of the final year MEng students who has conducted the research told us the idea was initially his for a final year project for himself and others studying Civil Engineering at Heriot-Watt. He lives nearby so it was an obvious topic for the project which had to built on some sort of infrastructure. He had previously been in contact with local MSP, Daniel Johnson, and also Ian Murray MP about the South Sub so he felt they would have a head start knowing what the issues were.

Corey said: "There have been past studies focused purely on heavy rail, and there has been no feasibility study conducted since the tram opened in 2014. We believe tram trains are a new viable option to reinstate passenger services.

"A tram train walks like a tram, talks like a tram but is not a tram. It has to be sturdier than a tram, it has to also run on a railway. But Corey said it would look like an Edinburgh tram and would carry the same number of people. The difference between an Edinburgh tram and a train is the wheel profile."

Corey continued: "Because it is a heavy rail, and trams operate on light rail, you have to have different wheel profiles."

He also said: "The system we propose is called discontinued electrification. That's an alternative to a full route electrification like we see used on the Edinburgh Trams. As

they're battery electric vehicles, they can run on sections using battery alone and then switch to overhead lines at certain points. This way, it helps keep costs down and gets round any potential obstacles, such as low bridges that might otherwise prevent a tram train from receiving power.

"It is a low-carbon and viable transport option that would see greater connections between homes in the south of the city with the city centre and beyond."

The group of students say their proposal will help reduce capacity concerns at Edinburgh's two busiest railway stations, Waverley and Haymarket.

Corey, continued: "Ultimately, we want our work to result in the commissioning of a new feasibility study which looks into reopening the South sub. The last one was in 2008, which was before the trams were even opened and it never looked into the use of tram trains. Since then, there's been a lot of new developments and there's a strong case for a new feasibility study to be carried out."

Caitlin Cummings worked on the project as part of her fifth year coursework in Civil Engineering. She explained they visited a pilot project in Sheffield. She said: "Breathing new life into Edinburgh's South Suburban Railway will make travel easier for all and encourage people to leave their cars at home in favour of this transport link.

"We do have a second phase to this project that would see a separate line extend from Portobello to Leith using a disused railway line. This would also reduce public disruption by preventing roads from being dug up and minimise impact to business and the environment while helping encourage people onto public transport."

Efforts to reopen the Sub line have been discussed previously but dismissed due to high costs related to increasing rail passenger capacity at the stations. But Edinburgh's increasing

population is placing greater demands on existing public transport services, and the students believe they have found a “practical and cost-effective” solution. The likelihood of any extension to the tram network – even to the north of the city where there is already statutory consent – has to be calculated as around ten years away according to councillors we have spoken to.

After months of research using the knowledge gained during their studies, the students have tabled a proposal to introduce Scotland’s first battery-electric tram-train network. Tram-trains have been in use in Europe for decades and already operate in Sheffield with more planned elsewhere in the UK.

It is a proposal the campaign group hope will trigger interest from The Scottish Government, Edinburgh City Council and Network Rail.

Edinburgh City Council’s Transport and Environmental Convener, Cllr Stephen Jenkinson thanked the students for organising the petition and supported calls for Edinburgh to have an interconnected public transport system.

He said: “The South Suburban Railway network has been an issue that has appeared many times over the years and represents a potential future opportunity for development.

“Edinburgh requires an efficient, innovative and interconnected public transport system to allow us to deal with projected population growth, fulfil our climate responsibilities, drive economic growth, and accelerate developments to respond to our housing emergency.

“I’ve been clear that the North-South tram route is a key part of this and I’m looking forward to seeing the final Strategic Business Case when it is ultimately presented to committee. In addition, we are working with partners on how a North-South tram route can connect with other public transport options

across the city and the surrounding local authorities and South Suburban Railway is part of this.

“We’ll continue to keep Edinburgh moving and encourage all our residents and visitors to use public transport wherever possible.”

[Change.org petition set up by students is here](#)

These are plans for the reinstatement of passenger rail services on the Edinburgh South Sub which runs through Morningside. An event on Monday evening will be an opportunity for the students behind it to present more information

[\[image or embed\]](#)

– The Edinburgh Reporter ([@edinreporter.bsky.social](#)) [16 March 2025 at 19:33](#)

Edinburgh South Sub

The Edinburgh South Sub as an entity has had its [own social media presence](#) for a few years now, and the individuals behind it have made many efforts to bring the idea of bringing the line back to life with comments on social media.

A spokesperson for [Edinburgh South Sub](#) said: “In a time of financial constraints it makes sense to utilise existing infrastructure as much as possible. Given the likely high cost (funding, time, disruption and CO₂) of a new tram line via the Bridges and to the Royal Infirmary the South Sub proposal needs to be seriously evaluated in comparison of cost and benefit.

“Using “battery” tram trains may be pushing technology limits as surely proper electrification in the long term would be

best for the sustainable use of the line especially for freight trains. But it does seem like a viable proposition.

“The idea to connect the TramTrain back to the Newhaven line via Seafield is a great one and we fully support that with new housing it could make the development low car/car free. @EdSouthSub will be here on the sidelines supporting.”

[The Edinburgh South Sub's petition has gathered almost 5,500 signatures](#) in the five years since it was set up.

The statement running alongside the petition reads: “The City of Edinburgh Council (CEC) has launched a consultation on the [draft City Mobility Plan 2030](#). Within this document CEC have ruled out reopening stations on the [Edinburgh Suburban and Southside Junction Railway](#) sometimes affectionately known as the “Ed South Sub”. This petition is to provide a voice for the line’s potential users and quantify the support for full feasibility study and business case to be prepared for reopening the stations. This study would assist in identifying routes for connections to either the Scotrail / National Rail and/or [Edinburgh Trams](#) network, maximising the impact of the [City Centre Transformation](#) and Net Zero Carbon 2030 objectives.

“This decision by CEC comes with a backdrop of decreasing budgets and trying to reduce [city centre congestion](#), implementing a “[to not through](#)” transport policy and reducing car use.

“The [#EdSouthSub](#) provides an existing cross city route avoiding the city centre for some journeys, as the route passes several shopping, education, healthcare and residential destinations. This double track route is currently only open for freight and the occasional empty passenger services. The line was opened in 1884, with passenger services withdrawn in 1962 but is still maintained to this day by [Network Rail Scotland](#), therefore if the stations were reopening or new ones

constructed it could be utilised by services provided by either;

- “TramTrains that join the [Edinburgh Trams](#) network from Haymarket providing routes to the Airport or Newhaven to South Edinburgh as well an east/west link across Edinburgh.
- [Scotrail](#) Trains to connect South Edinburgh to the wider National Rail network and recent [EGIP improvements](#). Speeding journeys elsewhere, thus reducing congestion on the A720/M8 whilst also providing east/west cross city journeys.
- or a combination of both?

“By using either Trains and TramTrains this route could still be used by the infrequent freight services that bypass Waverley Station. The TramTrain technology has been proven for decades in [Karlsruhe, Germany](#) and is already being used by Network Rail for the [Sheffield to Rotherham TramTrain](#) service. There is so much potential for joined up journeys that are off-street, reducing congestion, faster and allow more local connections to either the Edinburgh Trams or National Rail network.

“The fact that this line passes through one of only 6 Scottish UK Parliament Constituencies without a railway stations indicates something isn’t right, especially as this is an urban not island / rural constituencies. It means for Edinburgh South residents all journeys by rail are extended with bus connections to the city centre and less convenient than using a car.

“All it would need is for CEC, [Transport Scotland](#), [Network Rail Scotland](#) / [Scotland’s Railway](#), [Transport for Edinburgh](#) & [SESTran](#) to work together as seen with the [Borders Railway](#) reopening project. With the aim of providing a cost effective solution for low CO₂ public transport with less









disruption by simply reopening stations on an existing rail line. This could complement new on street tram lines in the city centre and elsewhere to east and south of Edinburgh and the Lothians in the longer term.

“Taking into account CEC’s [City Centre Transformation](#), [proposed electrification](#) of the line planned by Network Rail Scotland in coming years and not least the Climate Emergency declared by Edinburgh, Scottish & UK governments in 2019, it seems this project would be a great opportunity to put these words into action.”



Corey Boyle with two other members of the Heriot-Watt group

1. Gorgie
2. Craiglockhart
3. Morningside
4. Blackford Hill
5. Newington
6. Cameron Toll
7. Craigmillar
8. Bingham/Niddrie
9. Fort Kinnaird
10. Brunstane
11. Portobello

-  : Existing Station (Closed 1962)
-  : New Station
-  : Train Station
-  : Rail Network
-  : Edinburgh Tram Network
-  : Proposed North-South Tram Extension
-  : Phase 1 - South Sub Tram-Train
-  : Phase 2 - Tram-Train Extension Leith via Seafield



A visual of wha the Edinburgh South Sub could look like

