



NATIONAL HEADQUARTERS COMPETITION FOR GREAT BRITISH RAILWAYS

Expression of Interest from Coventry

1. Context

- *Describe the location of your application and your proposed headquarters site, Describe the geographical area covered by the application and why it should be considered for hosting the headquarters?*
- *Who else is involved in developing and supporting your application?*
- *Describe the proposed site(s) for the national headquarters*
- *What benefits do you expect your town/city will gain from accommodating the headquarters?*
- *What do you think makes your town/city best suited as the location for Great British Railways' national headquarters?*

Coventry is England's 9th largest city, with a population of 370,000 and skilled labour force of some 190,000. It is at the heart a vibrant economic area in the West Midlands and is already the location of choice for many of the worlds' leading companies, including Jaguar Land Rover, BMW, E.ON, London Electric Vehicle Company (formerly LTC), IBM, Homes England and the Financial Ombudsman. Coventry also has two leading universities (Coventry University and the University of Warwick), which not only offer potential for a large supply of skilled workers (over 50,000 students) but also both offer considerable amounts of Research & Development expertise pertinent to transport and mobility (WMG for example is driving the R&D into the Very Light Rail scheme being pioneered in Coventry). In addition, Network Rail's Training Centre & Leadership Academy is situated in the Westwood area of Coventry.

Coventry would therefore be an ideal location for Great British Railways' new national headquarters, given that it provides a superb central location (accessible by all modes of transport), access to two of the UK's top universities, access to a large rail and wider transport manufacturing supply chains and knowledge base, and a thriving city centre.

Our proposed site is Two Friargate, a new office building at the heart of a mixed-use development, located adjacent to the recently redeveloped and expanded Coventry Railway Station. Two Friargate is currently under construction and will be ready for occupation in Q1 2023. Two Friargate is next to One Friargate (which currently houses Coventry City Council, Homes England, the Financial Ombudsman and

expanding ICT consultancy Kagool) and the Friargate Hotel (construction will start during Spring 2022), and offers 134,000 sq ft of Grade A office space, across 12 storeys (c.11,000 – 12,000 sq ft floor plates).

Specific benefits of Two Friargate include:

- flexible spaces, which can be configured depending on your needs
- open plan floor plates, a clear floor-to-ceiling height of 2.7m and full-height glazing, creating a sense of space
- two outdoor terraces, multiple balconies and a ground floor amenities space
- a secure basement including EV charging bays, cycle storage, showers, changing rooms and lockers
- connectivity – Two Friargate is aiming to achieve a WiredScore Platinum Rating
- sustainability – Two Friargate is targeting BREEAM Excellent Accreditation and EPC “A”
- employee health and wellbeing – Two Friargate is also targeting WELL-Enabled Building Status and an AirScore rating offering excellent air quality.

The development of Two Friargate is a key part of a wider £700m development to create a new business district in the heart of Coventry. It is located directly opposite the newly expanded Coventry Railway Station, which is used by 17,000 passengers daily (prior to the Covid-19 pandemic), and which provides easy access to Birmingham, London and the rest of the country. It is a five-minute walk from Coventry city centre.

The Friargate development will form Coventry’s premier business destination and has the potential to provide employment for up to 15,000 people, as well as providing 400 new homes and extensive retail and leisure opportunities. It will deliver vastly improved public spaces and up to:

- 2,350,000 sq ft of Grade A office space across 14 buildings, including the already completed One Friargate
- 215,000 sq ft of shops, restaurants and bars
- 450,000 of hotel space across two buildings
- 400 new homes
- 110,000 sq ft of leisure space.

Coventry is already a centre for both manufacturing and innovation in transport, making it an ideal location for Great British Railways’ national headquarters. For example, it is pioneering the development of a first-of-its kind Very Light Rail (VLR) network, a rail-based system which will provide a battery powered, high frequency, hop-on-hop-off form of mass transit, at a fraction of the cost of a traditional tram network. It is anticipated that the first route will serve Coventry Station and the Friargate development and could be fully operational by 2025/26.

The city is also a leader in the electrification of our transport systems. It was chosen by the Department for Transport to develop the country’s first all-electric bus fleet, which will be in place by 2025, is already home to the UK Battery Innovation Centre (UKBIC) and is planning to host the West Midlands Gigafactory, making it a major center for research, development and manufacturing of battery technology. Coventry also forms part of the West Midlands Connected Autonomous Vehicles (CAV) Testbed and is currently constructing the worlds’ first ‘urban airport’ - a rapidly deployable vertiport

that is designed to support Electrical Vertical Take-Off and Landing (eVTOL) vehicles for passenger air taxis and/or the use of drones in logistics – on a site adjacent to Friargate Two.

Coventry is therefore at the heart of the UK's mobility innovation ecosystem, with WMG (driving the R&D into the VLR prototype in Coventry), the Manufacturing Technology Centre and National Transport Design Centre at Coventry University all located in the city, plus Quinton Rail Innovation Centre located close by near Stratford-upon-Avon and Birmingham University's Centre for Railway Research and Education within 20 miles. There is also a large and dynamic supply chain that services various elements of transport and mobility (beyond rail) in the region.

As such, Coventry and the West Midlands will be at the forefront of driving the future growth and innovation of the UK's rail sector in the future. It is therefore uniquely placed to offer Great British Railways a headquarters at the heart of where the UK's transport innovation is taking place.

2. Levelling Up

- *Describe how your application will align with and demonstrate Levelling Up, What is your vision for levelling up your local area? What is currently underway to deliver this?*
- *What levelling up opportunities do you believe could be created for your town/city that are linked to the headquarters?*

Locating Great British Railways in Coventry is closely aligned with both the Government's ambitions for Levelling Up, and Coventry City Council's own ambitions. Improving the life chances and living standards of all of Coventry's citizens, and reducing widening regional inequalities, are both at the heart of Coventry City Council's 10 new priority areas for Levelling Up.

Above all, we are acknowledging the need to improve the life chances and living standards of all our residents and ensure that good quality jobs and lifelong skills and training opportunities can be accessed by all. We must reduce poverty levels across the city and ensure that all residents continue to have access to good quality education.

In creating good quality jobs, Coventry has potential to be at the forefront of the UK's sustained economic recovery from the Covid-19 pandemic, notably through building our city's longstanding legacy of innovation through smart mobility, culture and creativity, and modern services. We want our city to be an inclusive place to live, learn and work for all our residents, with economic growth and prosperity at the core of our plan. We want to ensure that all Coventry residents can benefit from new investment and opportunities, no matter where they live in the city, and be proud of our city's achievements. Above all, Coventry needs Levelling Up – indeed Etopia Home's Levelling Up Opportunity Index ranks Coventry 3rd of 34 large UK cities in terms of opportunities to level up.

Locating Great British Railways in Coventry would achieve these strategic aims by creating new good quality jobs directly in Coventry. Furthermore, it would also create additional spin-off impacts in generating further private sector investment and job creation in Coventry city centre, not least by acting as a catalyst for accelerating the development and occupation of further stages of the Friargate scheme and the wider regeneration of the city centre. This would ultimately help to increase employment rates and average earning levels in Coventry, as well as creating good quality training opportunities, which

would address the priorities around Inclusive Growth, as well as Transforming Coventry into a Modern City Centre.

It would also build on the work already underway in Coventry to achieve Levelling Up. We are at the forefront of innovation and growth in transport and smart mobility within the UK. Having secured £136m of Industrial Strategy Challenge Fund monies, we have successfully developed and opened the UKBIC, which will drive the growth of the UK's electric vehicles supply chain. Building on this success, Coventry Airport (adjacent to UKBIC) is the chosen site for the development of the West Midlands Gigafactory, which will further boost battery production capacity and support around 10,000 good quality jobs in the West Midlands (and ultimately UK) automotive supply chain.

Moreover, Coventry will become the UK's first All Electric Bus City, with the city's entire fleet becoming electric by 2025. We are also developing a new patented VLR system. This could halve the costs of urban light rail, compared to tram networks, with the prototype battery-powered vehicle now built, using two-thirds UK components, and track technology in place. It also has potential to create a new manufacturing supply chain for a product that is potentially exportable. Both of these projects have put Coventry at the forefront of pioneering new mobility solutions that will help to achieve net zero, and will provide affordable options to connect residents in our most deprived areas with the city centre and job and training opportunities. They will also stimulate the development and growth of new manufacturing and engineering supply chains in Coventry and the West Midlands.

Finally, Coventry can build on work that is being done to build on unique opportunities presented by the legacies from UK City of Culture 2021, the 2022 Commonwealth Games, Children's Games and 2022 Rugby League World Cup, by using culture as a catalyst for driving economic, social and community prosperity. Working alongside Arts Council England, we are in the process of developing a new National Collections Centre on the site of a former large retail store in close proximity to Two Friargate, within which Transport Innovation is expected to be a major theme. This new nationally significant collections and cultural facility could create numerous new employment and education opportunities, whilst also driving sustainable continued growth of the city's visitor economy. Having Great British Railways located in close proximity would further help achieve agglomeration benefits, particularly through creating a more attractive environment for further investment from the professional service and creative sectors.

3. Connected and easy to get to

- *Describe how your location is well connected to the rest of Great Britain and how people will access your site, How would employees and visitors be able to access the National Headquarters, via rail routes and other sustainable modes?*
- *How connected is your location to and from other nations and regions of Great Britain?*
- *How will your suggested sites be equally accessible to all members of society, in line with Public Sector Equality Duties?*
- *Demonstrate how your location has supported successful collaboration between local authorities, business and other organisations across the UK to further social, economic and transport objectives.*

Coventry is very easy to reach by train. There are four railway stations; the main Coventry station and three smaller, local stations at Canley, Coventry Arena and Tile Hill.

Two Friargate is located directly adjacent to Coventry Station, which is conveniently located on the West Coast Main Line running from London Euston through Coventry to Birmingham New Street. Other major UK cities including Manchester, Glasgow and Edinburgh can all be reached directly by train from Coventry. Coventry also sits at the heart of an extensive local and regional rail network, with regular trains to Nuneaton, Bedworth, Rugby, Leamington Spa and cities in the West Midlands.

Typical journey times to destinations from Coventry station are:

- Birmingham New Street: 25-30 minutes
- Birmingham International (for Birmingham Airport and, in future, the HS2 Interchange Station): 10-15 minutes
- London Euston: 1 hour
- Wolverhampton: 55 minutes
- Rugby: 10 minutes
- Leamington Spa: 10 minutes
- Nuneaton: 22 minutes

Coventry Station has recently been redeveloped through the delivery of an £82 million Masterplan, intended to support the Friargate development and the wider regeneration of the city centre, and to accommodate rising passenger numbers. Prior to the Covid-19 pandemic, these were increasing steadily with the Office of Rail and Road (ORR) estimating that there were more than 9 million entries and exits across the city's 4 stations in 2019/20.

The Coventry Station Masterplan formed a major part of the 'Coventry City Centre First' proposals, a package of transport improvements aimed at improving connectivity between Coventry and UK Central, HS2 and the National Rail Network in order to boost jobs and growth in the city centre. There is a strong emphasis on promoting sustainable modes of transport, with investment in rail being at the heart of the package, which also includes improvements to bus services, cycling and pedestrian routes.

The Coventry Station Masterplan has provided:

- a new station building, providing a second entrance into the station from Warwick Road
- improved public realm, including more attractive and direct pedestrian and cycling routes to the city centre
- a new 633 space Multi-Storey Car Park, creating an additional 152 car parking spaces for rail growth and a further 149 spaces to serve the adjacent Friargate development (332 are replacement rail spaces)
- a new 6 bay bus interchange to the west of Warwick Road, connected directly to the new station building via the new pedestrian access tunnel under Warwick Road, a short walk from the proposed site
- new highway infrastructure including a new north-south link road to connect the bus interchange to the ring road, a new roundabout and realignment of Warwick Road and new road to provide access to the MSCP directly onto Warwick Road
- new taxi rank and drop-off facilities.

Working with National and Regional rail partners several further improvements are also in the pipeline to ensure Coventry has the local and national connectivity required to thrive. This includes:

- improved East-West rail journeys across Warwickshire, achieved by increasing capacity between Coventry, Warwick and Leamington. This will enable better access to Birmingham Airport, doubling the number of services per hour from the Thames Valley and East Midlands, through Coventry
- reinstating direct trains between Coventry and Leicester and looking at options for additional services through Solihull. Initial plans are for two direct trains per hour from Coventry to Leicester, taking less than 40 minutes. This East-West upgrade will increase the number of people in the area who can reach Leicester and Birmingham within an hour, but more importantly brings Coventry within an hour's commuting distance for residents of Leicester and Nottingham
- the construction of a proposed new bay platform at Coventry Station, to support increased national and regional services. This is progressing through the approval phases, currently at GRIP 3
- delivering further improvements to Tile Hill Station, on the West of the city, to establish it as a 'transport hub' with increased car parking, a new bus (and in future VLR) interchange, improved access arrangements for pedestrians and cyclist and additional cycle storage. Funding is currently being sought for these improvements through the City Region Sustainable Transport Settlement (CRSTS)
- exploring the viability of creating up to four further local stations at Coventry South (serving the University of Warwick), Binley and Willenhall, Coundon Road and Foleshill. A West Midlands Rail Executive (WMRE) study is currently underway and is expected to make recommendations on the viability of these potential additional stations later this year.

Coventry City Council has been an enthusiastic supporter of these improvements and has invested to support the delivery of the Coventry Station Masterplan, as well as the development of Coventry Arena Station to the North of the city. It is also the lead agency working with partners to deliver further improvements to services on the NUCKLE line (connecting Coventry and Coventry Arena to Nuneaton, Kenilworth and Leamington), including the development of the additional bay platform at Coventry referred to above.

While the city of Coventry is therefore easily accessible by rail, the Two Friargate building is also designed to be fully accessible in every sense. The designs have due regard for the groups protected by the public sector equality duty, i.e. age, disability, sex, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation.

The building will be fully compliant with Building Regulations and the Equalities Act which means, amongst other key attributes, it will:

- have level access throughout
- have automatic opening doors where needed
- have fully accessible reception counters / lift call panels / security gates etc.

- have inclusive entrance doors, with direct lines of site to concierge in case additional support is needed
- surpass requirements for accessible toilet and welfare facilities, in addition to wheelchair accessible shower & changing spaces
- use colour schemes that take account of those users that require defined boundaries and the like
- provide flexible spaces for those that need them (multi-faith; breast-feeding rooms and the like)
- provide disabled parking bays within the building's footprint
- have corridors and walkways that are appropriately designed for all users
- have switches, outlets and controls at accessible heights.

4. Opportunities for Great British Railways

- *Showcase the opportunities your location offers Great British Railways, How will your location enable Great British Railways to engage with customers, the private sector and wider transport industry?*
- *What opportunities does your location offer for working with the rail supply chain, manufacturing hubs and institutes?*
- *What opportunities exist for collaboration with the retail, economic and environmental sectors? How could Great British Railways benefit from these links?*
- *What opportunities does/do the site(s)/building(s) itself offer Great British Railways to develop as an organisation?*

Two Friargate presents Great British Railways with excellent opportunities to engage with its customers and the rail sector supply chain. As stated previously, Two Friargate is located adjacent to Coventry Railway Station – one of the fastest growing stations in the UK, which saw passenger footfall increase by 39% between 2012/13 and 2017/18.

It would also locate Great British Railways in close proximity to the heart of the rail and other related transport and mobility supply chains. There are 129,000 jobs in the West Midlands in Transport and Logistics, of which 49,000 are linked to Rail. More widely, the West Midlands is responsible for 12% of the overall UK advanced engineering workforce, much of which is in the Automotive sector.

A Coventry location would present Great British Railways with proximity to world class knowledge base assets in the fields of transport and smart mobility, which will ultimately drive the future growth of these sectors. For example, Coventry is home to WMG, which is driving the R&D into the VLR prototype in Coventry, and also houses the National Automotive Innovation Centre and Advanced Propulsion Centre. It is also home to the Manufacturing Technology Centre at Ansty Park, and the National Transport Design Centre at Coventry University. The Quinton Rail Innovation Centre (which is currently heavily involved with testing hydrogen trains), located near Stratford-upon-Avon, and Birmingham University's Centre for Railway Research and Education are also both located nearby. Furthermore, a Coventry location would also enable Great British Railways to be part of and to build on major

innovations that are taking place in low carbon and sustainable transport and mobility locally, including VLR, All Electric Bus City and the UK's first prototype Urban Airport.

Coventry and the West Midlands also has an extensive and dynamic supply chain of mainly small and medium sized firms that have a strong track record of working with the knowledge base and large Original Equipment Manufacturers. This re-enforces Coventry's longstanding tradition of transport innovation, and transport supply chains that have consistently reinvented to adapt to evolving technological developments and new market opportunities.

In terms of the building itself, Two Friargate includes true breakout areas and is targeting Well-enabled status reflecting how health and well-being are central to the design and operation of the building. It is also located five minutes' walk from a busy city centre with a host of amenities and services available. The building itself will be BREEAM Excellent rating and will be connected to Coventry's groundbreaking low carbon district heating system.

Being located within a major regeneration scheme such as Friargate also offers the opportunity for GBR to grow with the surrounding area – taking advantage of the new homes, services and place-making being delivered on the doorstep. It is also worth noting that organisations such as Homes England, Coventry City Council and the Financial Ombudsman Service are also located next door at One Friargate (the first of ten planned commercial buildings that form part of the Friargate development).

Ultimately, this would place Great British Railways at the heart of a growing professional and public services community in the Friargate and city centre area that is not only creating new high value jobs and economic activity, but is also helping to accelerate the physical transformation and reinvention of Coventry city centre. Securing a high profile and prestigious brand such as Great British Railways will also help to accelerate investment and the development of the nearby Coventry City Centre South mixed-use residential and retail regeneration scheme, and could help attract more prestigious retail brands to Coventry city centre, building on those already located in the City Centre close to Two Friargate.

5. Railway heritage & links to the network

- *Demonstrate the location's railway heritage and current network links, Demonstrate your railway heritage and the benefits it offers to Great British Railways.*
- *What links are there with existing rail employment, innovation and sector bodies, such as regional or local offices?*
- *How could you use the headquarters to preserve and enhance your railway heritage?*

In terms of Heritage, Coventry formed part of the original Stephenson Birmingham – London railway, the first intra-city line into London opened in 1838. The station building, opened in 1962, was awarded Grade 2 status by English Heritage in 1995 and this has been incorporated and retained in the redevelopment of the site.

The 1962 station building comprises a two-storey height booking hall linked across an adjoining platform by an overbridge to island platform and a single sided platform. All platforms have long steel framed canopies with deep fascia's protecting single storey platform buildings. The wide overbridge houses staircases and lifts which serve the platform. The roof of the hall cantilevers out from the building and links to the overbridge roof with a continuous fascia. When listed, it was commended for being outstanding architecturally, particularly for its spatial qualities and detailing.

As described in our answers to previous questions, Coventry is also a forward-thinking city, with a local labour market rooted in research and development and advanced engineering. It is actively seeking to be at the forefront of the development of new transport technologies, such as VLR. It is also known as a 'Phoenix City', synonymous with rebirth and new beginnings. It would therefore be an appropriate choice for Great British Railways' headquarters, and the beginning of a new, forward-thinking era for the British rail industry.

Coventry also offers strong links with employers in the rail sector. For example, Network Rail's Training Centre and Leadership Academy is situated in the Westwood area of the city, approximately 4 miles to the southwest of Friargate Two. The centre offers a variety of facilities including:

- training suites
- conference rooms and an auditorium
- bedrooms
- restaurants and bars
- a sports complex with courts, gyms and a swimming pool.

The local rail supply chain includes rolling stock, design and engineering, systems, infrastructure and testing and much of the local university research into light-weighting and battery storage have applications into rail technology. These include:

- DCA Design of Warwick, designers of the Hitachi 800 Class High Speed Train interior, and Transport Design International, specialists in public transport systems whose clients include Bombardier, Siemens and Alstom.
- Transport Design International (TDI): specialists in public transport systems with clients including Bombardier, Siemens and Alstom.
- Rail OEMs - light and very light rolling stock manufacturers CAF Rail, Vivarail and Severn Lamb.
- Rail suppliers – Parker Hannifin, Altrans, Telent, Oleo, IM Kelly and Autins.
- The Quinton Rail Technology Centre (QRTC) Based near Stratford-upon-Avon, QRTC connects to the national network via the Worcester to London line and features engineering workshops, 20km of secure storage, 2.4km rail test track and a cluster of rail specialists. The facilities are used for impact testing, product approval, product development, trade events and training. Rail Live and Light After Dark are annual events at the QRTC showcasing products and services for the rail sector with a focus on best practice, ingenuity, and innovation.

Furthermore, as well as being the location for a cluster of rail specialists, Great British Railways would also benefit from Coventry & Warwickshire's wider track record of excellence in advanced engineering and transport technologies with a skills base rooted in research and development, and access to a supply chain shared with the automotive and aerospace industries.

Other sectors linked to the rail industry include:

- Warwick Manufacturing Group (WMG), based at the University of Warwick, WMG is a key partner in the VLR Innovation Centre, which is working to combine lightweight rolling stock with lightweight rail infrastructure and hybrid powertrain
- The Centre for Mobility and Transport based at modern university of the year Coventry University, the centre brings together multi-disciplinary teams working at the forefront of research in vehicle dynamics, low carbon technologies, cybersecurity and autonomous systems, future vehicle design and human systems integration
- The National Advanced Propulsion Centre, at the University of Warwick is a leader in low carbon technologies and is central to a UK government £1bn advanced propulsion programme, which funds collaboration in low carbon propulsion technologies
- Manufacturing Technology Centre (MTC) Coventry based MTC, develops and proves innovative manufacturing processes and technologies. Members include leading rolling stock companies Alstom, Siemens, Thales and London Underground.

If the Great British Railway's headquarters were located in Coventry, it would therefore be in an ideal position amongst rail providers, manufacturers and centres of rail innovation, and would cement Coventry as a hub for excellence across all aspects of transport and mobility.

6. Value for Money

- *Describe how your location will offer Great British Railways good value for money, How will your location offer financial efficiency to Great British Railways?*
- *How does the proposed site allow Great British Railways to make good use of public money and keep costs down?*
- *How does your location generate public value including economic, social and environmental impacts?*

Two Friargate is being built speculatively using public sector funding. The target rental is c.£26 psqft, which is a significant discount to many other locations – few of which can offer the locational advantages Two Friargate can provide being adjacent to a railway station on the West Coast Main Line, 10 minutes from Birmingham Airport, 20 minutes from central Birmingham and an hour from London. The location would present strong value for money for Great British Railways by providing purpose built modern office space that can be shaped by prospective occupiers. As well as lower rental prices than London and the South East, Coventry can offer a large skilled labour pool that would potentially be of lower cost in comparison with London and the South East, and will still generate strong achievement against the organisation's objectives.

As a new build development, Two Friargate also offers best in class energy and environmental credentials which will help keep running costs and service charges low (targeting BREEAM Excellent, EPC "A" and connected to a district heating system).

Great British Railways will also deliver strong economic and environmental benefits in return on public investment. There are firstly significant environmental savings, given Two Friargate's location adjacent to Coventry Railway Station, on the West Coast Mainline. This will facilitate both journeys by employees, as well as journeys by business partners and clients. It will deliver strong economic value by locating Great British Railways close to the rail supply chain and key innovation assets, as well as close to a growing professional service and public service community, which will deliver agglomeration benefits (including increase potential supply opportunities for local small and medium sized firms).

Great British Railways locating at Two Friargate will also create strong social and inclusive growth benefits, through creating good quality jobs and training opportunities to a city where average earnings and wages are still below the national average, where unemployment exceeds the national average, and 14% of neighbourhoods are within the most deprived 10% nationally. Having such a high-profile brand locate in Coventry will also further boost the city's profile and increase its attractiveness to further investment, not least from transport, manufacturing and engineering sectors and from professional services, as well as further helping to raise aspirations of the local population, with regard to employment/career and training prospects.

7. Public Support

- *Demonstrate how the national headquarters will be welcomed by the local public, Demonstrate the importance of the railways to the local community and your region.*
- *How do your intentions for the national headquarters tie in with the needs of your local communities, your identity and values?*

Coventry City Council's One Coventry Plan sets out an ambition for the city to be "Globally Connected and Locally Committed". Rail connectivity is a vital element of this, and the data suggests that the city has a growing connection to rail, with ORR statistics showing a steady rise in levels of patronage across the city's four railway stations (prior to Covid-19) and with Coventry experiencing some of the largest increases in the UK. Having Great British Railways' new headquarters in the city would therefore be in keeping with the Council's vision and with the growing importance of rail transport to the local community.

Feedback from a recently conducted consultation on Coventry's draft Transport Strategy also shows that there is a strong appetite for more sustainable travel, with respondents ranking "delivering a

Further discussion redacted for being over wordcount