



A-Level Geography

7073/C: Independent Investigation (NEA)

Principal Moderators Report

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Summary

Introduction

This report offers insights into the accuracy of assessment judgements made by centres in relation to the Non-Exam Assessment (NEA). It highlights effective practices, while also drawing attention to areas where assessment requirements have been misunderstood. Its aim is to provide clear, constructive guidance to centres on how to meet criteria for achieving higher levels across the four areas of the mark scheme.

Moderation of centre-assessed work serves to verify the consistency and reliability of internal assessment judgements made by teachers. Centres are encouraged to refer to their individual feedback reports issued alongside results. Taken together, this overall summary and the centre-specific feedback should assist centres in refining their internal assessment and moderation practices for future assessment cycles.

Areas where students excelled

- Research design: most students posed clear, focused questions and sub-questions, with hypotheses and frameworks linked closely to the specification content.
- Sampling strategies: there was greater clarity and appropriate use of systematic, stratified, and pragmatic methods, with thoughtful choices regarding location and timing.
- Data presentation: a wide range of data presentation methods were used, from simple graphs to advanced GIS techniques, showing growing confidence in spatial analysis.
- Statistical techniques: more students used significance testing where appropriate, applying it to representative sample sizes with relevant interpretation.
- Logical structure: investigations were well organised around sub-questions, leading to consistent and focused methodologies, analysis, and conclusions.
- Analytical interpretation: students moved beyond description, using multiple datasets and data manipulation to produce deeper, more insightful analysis.
- Ethical considerations: ethical reflection was more informed and integrated, moving away from superficial risk assessments toward meaningful engagement with responsible research practice.
- Independence: most student submissions were rooted in local contexts, reflecting the ethos of the independent investigation.

Areas where students struggled

- Scope of titles: some projects were overly ambitious or lacked baseline data, especially in temporal studies. Titles should be realistic and within specification limits.
- Limited fieldwork time: inadequate time for data collection weakened sample representativeness and restricted opportunities for deeper analysis.
- Contextual variety: overuse of common fieldwork sites led to similar investigations across some cohorts. Greater support is needed to encourage originality.

- Literature use: many relied on general sources like Wikipedia, failing to engage with relevant theory. Stronger conceptual grounding is needed to support analysis.
- Methodological coherence: scattergun data collection from limited sites often lacked relevance or alignment with research aims. More appropriate, in-depth techniques remain underused.
- Overconfident conclusions: students sometimes drew strong conclusions from limited data, without acknowledging its limitations. A more measured approach would improve analytical credibility.
- Evaluation depth: evaluation often focused narrowly on methodology. It should critically reflect on scope, data reliability, sample validity, and ethical implications to strengthen overall rigour.
- Student administration: students should number pages correctly, use consistent figure and table references, and include only relevant materials in appendices.

The strongest investigations featured clear research questions supported by geographical theory, applied within practical, manageable settings. This reflected genuine enthusiasm and a strong commitment to enquiry.

Centres that encouraged personalised, student-led investigations often saw thoughtful, meaningful outcomes. While not all students achieved the same level, even mid-tier submissions demonstrated care, focus, and engagement.

Conversely, centres that adopted a more prescriptive framework tended to yield more uniform and less distinctive investigations. These submissions frequently showed limited creativity in both written expression and choice of methods, lacking the originality and personal investment evident in the strongest reports.

Quality of assessment

This year's moderation process was consistent with centres demonstrating strong assessment accuracy and sound administrative practice. Most centres conducted thorough internal standardisation and provided supporting documentation that enabled efficient moderation. Teachers are to be commended for the accuracy of assessment and the rigour demonstrated in administrative procedures.

The shift to digital submission was largely successful, although the additional workload for centres is recognised. Moderators benefited from instant access to samples and improved accuracy checks, unhindered by postal delays.

In general, centres applied the mark scheme effectively, differentiating accurately between levels and using the full mark range where justified. Detailed, mark-related annotations on Candidate Record Forms and student work significantly improved transparency. Such commentary is invaluable to the moderation process and centres are strongly encouraged to maintain and extend this practice to support informed moderation outcomes.

Generous marking, where it occurred, was most evident in areas 2 and 3. Level 4 was occasionally awarded, despite limited sampling, weak replicability, and basic analysis lacking statistical rigour or theoretical context. In some instances, marks were adjusted upward where initial judgements were deemed too harsh.

Excessive report length remains a concern, with some extending beyond 10,000 words and 100 pages, compromising clarity and precision. Centres should guide students to keep work concise and focused, supported by early-stage discussions around manageability of the study and title development.

Overall, the moderation team commends the high standard of submissions and accurate marking, reflecting strong engagement from both students and Geography Departments. Sincere thanks are extended for the professionalism and care demonstrated throughout the NEA process.

Administration

Most centres efficiently met administrative requirements, submitting documentation accurately and on time, which supported a smooth moderation process. The transition to digital script uploading was managed well overall, though a minority experienced issues due to incomplete procedures, causing delays.

Centres are reminded that all moderated scripts must be accompanied by a signed Centre Declaration Sheet and Candidate Record Forms, with teacher approval and formative feedback documented before data collection begins.

Moderators occasionally encountered missing forms, absent signatures, inconsistent candidate details, and mismatched scores. Centres should carefully check all documentation and submissions prior to upload.

While digital uploading was successful for most, some centres missed deadlines or uploaded incomplete, poorly formatted PDFs. A small number of files were submitted via memory sticks or uploaded without finalising the submission. Centres should clearly label PDFs using candidate numbers and ensure submissions are fully completed.

Students should organise investigations clearly, using consistent page numbering and reference codes for figures and tables. Full sets of data collection sheets are not required. One example of each method is sufficient.

Some appendices were overly lengthy and added little analytical value. Centres should help students include only essential, relevant supplementary material to support their findings.

Independence

Most centres met NEA requirements effectively, balancing collaboration with independent investigation. Many students produced high-quality original investigations with strong theoretical application and clear personal ownership, often achieving top-band marks for focused, innovative work and the strength of their truly independent enquiry.

However, a few centres did not fully support individual enquiry, with multiple students selecting near-identical titles or themes, often linked to shared fieldwork experiences like sand dune succession or place perception in a limited area. While some collaboration is acceptable, teacher-led outcomes and uniform investigations fall outside NEA expectations.

Most centres managed shared data collection sensibly, but in some cases, overreliance on group data and late topic selection compromised the independence and clarity of submissions, making moderation more difficult.

To promote independence and diversity, centres are encouraged to use residential fieldwork for training and exposure, rather than as the main site for NEA topics. Investigations conducted post-fieldwork in familiar local settings often result in more original and personally meaningful work.

Malpractice and the use of Artificial Intelligence (AI)

In general, centres met NEA guidelines well across both research and submission stages, with very few errors or misinterpretations. Teachers showed a strong understanding of the boundary between general guidance and independent student work, with minimal evidence of inappropriate guidance or feedback.

Some centres raised concerns about students using Artificial Intelligence in their submissions. [JCO guidance](#) clearly states that unacknowledged or inappropriate use of generative AI is considered plagiarism and a breach of academic integrity.

Teachers must ensure they can verify that it is the student's original work. If AI is used for example, to assist with planning or generating ideas, it must be openly declared within the submission, with clear referencing and attribution.

Students are expected to document how they used AI, including the prompt(s), tool name and version, and date of access. This supports transparency and upholds ethical standards.

If teachers suspect AI misuse or plagiarism, they must not authenticate the work and should investigate further. Any concerns must be reported to AQA and may lead to formal sanctions if misconduct is confirmed.

Themes selected

Across the entry, candidates engaged with a wide spectrum of themes outlined in the specification, reflecting the breadth of fieldwork opportunities available. The majority chose to investigate topics derived from Changing Places, Contemporary Urban Environments, Coastal Systems and Landscapes, and Water and carbon. A relatively small proportion selected investigations based on local ecosystems, globalisation and resource security.

A considerable number of students undertook comparative studies exploring disparities in quality of life, environmental conditions, and sense of place between two contrasting locations, often selecting areas characterised by marked social or economic diversity. Analyses frequently contrasted media representations with lived experience and explored the dynamics of insider versus outsider perspectives. Several studies made use of the Great Places Model as the theoretical basis of investigation. Enquiries addressing environmental or socio-economic inequalities were also prevalent. The success of regeneration schemes in urban areas was again a popular theme, as were clone/hometown assessments. More unusual topics this year included studies of waste management and sustainability, air quality and health, green spaces and wellbeing, street art and urban identity, often blending physical and human elements and focusing on relatable, local issues.

Some of the more popular physical geography topics were linked to coastal erosion and management, investigating how human interventions affect natural coastal processes. Several studies looked at flood risk and management, assessing the effectiveness of flood defences in a local catchment. Ecological investigations examining plant succession and species diversity—typically conducted within sand dune systems or salt marsh environments—remained a popular theme. Increasingly, investigations of biodiversity and conservation have become more prevalent, studying the effects of land use or invasive species on local habitats. Studies centred on urban microclimates and carbon sequestration within woodland ecosystems exhibited a notable increase compared to previous years, perhaps because of the

potential for collecting large amounts of useful quantitative data. As always, enquiries involving infiltration measurements as part of water cycle assessments were popular.

Some centres have a narrow range of topics - variants on a similar theme - perhaps changing some locations or some aspects of the data collection. Thus, there may be some different streets in an urban setting or different transects on a beach, but the resulting reports appear very similar. This is not within the spirit of the NEA.

There were very few reports of investigation themes that were not connected to specification content. A small number of Bradshaw model investigations slipped through, adversely affecting the marks awarded for Area 1 of the mark scheme. Some investigation titles reflected an outdated conceptual foundation, with students relying exclusively on legacy urban models such as Burgess or Hoyt to frame 21st-century geographical enquiries. Similarly, topics exploring the impacts of climate change or shifts in consumer behaviour due to online shopping proved methodologically challenging, often due to limited availability or accessibility of reliable data sources.

Titles

Most research titles were suitably scaled for small investigations, though vague phrases like “to explore” or “to find out” often lacked clarity and limited analytical focus. Stronger titles included a clear location and linked to a relevant concept or process. While some aimed to assess change over time, the absence of historical data often restricted analysis to a single snapshot. Regeneration studies sometimes lacked measurable criteria, weakening evaluative depth, and students frequently missed opportunities to fully address prompts like “to what extent.”

Broad titles covering large areas or abstract concepts, such as globalisation or city-wide economic change, were difficult to manage. Others relied on inaccessible or hard-to-measure data, making effective analysis challenging. Overly complex or speculative titles (e.g. climate change impacts in 50 years) are best avoided, as they depend heavily on secondary sources and long-term trends unsuitable for fieldwork.

A few projects leaned too heavily on secondary data, resembling an Extended Project Qualification (EPQ). While secondary sources add context, the NEA prioritises original fieldwork, which is key to its academic value and integrity.

Candidate Record Forms (CRFs)

Centres are reminded that AQA offers an advisory service for teachers to contact their advisor for any queries relating to the delivery of this NEA. This offers teachers the chance to gain input from senior advisers on the suitability of proposals, as well as obtaining guidance on other aspects of the NEA.

Well-developed CRFs often led to stronger final investigations. Proposals should be seen as flexible guides, allowing for small, reasonable changes without needing resubmission, as long as the core focus stays consistent.

Most student proposals were well-structured, with clear titles, focused questions, suitable locations, and appropriate methods. However, CRFs showed variation in submission quality and teacher feedback. In some cases, broad or impractical titles and vague aims were not addressed early enough, limiting student outcomes. Timely, constructive teacher input at approval is vital, yet many CRFs lacked comments or were completed retrospectively.

Figure 1: Exemplar Candidate Record Form (CRF)

Investigation title	To what extent are inequalities present between the wards of Chiswick Homefields and Feltham North within the London Borough of Hounslow.
How the title links to the specification content 3.2.3.2 Urban forms Spatial patterns of land use, economic inequality, social segregation and cultural diversity in contrasting urban areas, and the factors that influence them. My investigation will focus on patterns of inequality in two areas with contrasting areas of wealth, within a borough. It will focus on economic, social and environmental inequalities. 3.2.3.7 Other contemporary urban environmental issues Environmental problems in contrasting urban areas: atmospheric pollution, water pollution and dereliction. By focussing on environmental inequalities, it will consider the varying pollution between the contrasting areas of wealth	
Planned investigation hypothesis or question/sub-questions My planned sub-questions are 1. How does housing quality vary between Chiswick Homefields and Feltham North? 2. How does crime vary between Chiswick Homefields and Feltham North? 3. How does pollution vary between Chiswick Homefields and Feltham North?	
Investigation focus – indication of how the enquiry will enable the candidate to address the investigation title and explore the theme in relation to the chosen geographical area Inequality refers to how different people experience different standards of living. This could be in an economic context where people may have differing wealth and incomes, it could be in a social context where people have varying access to services and also safety, as well as in an environmental context where different areas may experience different levels of environmental degradation. All of these aspects affect people's standard of living and therefore my study will focus on all three of these to assess the extent of which inequalities exist within the wards of Chiswick Homefields and Feltham North.	
Planned methodology – indication of qualitative and/or quantitative techniques including primary and, if relevant, secondary data collection techniques. Indication of the planned sampling strategy or strategies Sub-question 1. Housing quality will be investigated using a Housing Quality Index which is a form of primary data collection. A grid will be placed over each ward and systematic sampling will be used to sample 5 houses. Moreover, using secondary data collection, I will look up these houses on RightMove and find an average price as well as study the interior and compare these between the wards. Sub-question 2. The level of crime will be investigated by using a bi-polar survey to assess how susceptible an area is to crime. The areas will be chosen using the grid which is placed over the ward and the location will be decided by systematic sampling. Moreover, a questionnaire will take place to find out the general fear of crime in the area. Sub-question 3. Air pollution will be measured by using sticky tape on a tree and assessing the level of soot and debris collected. Sound pollution will be measured by measuring the sound level in decibels and finding an average. Smell pollution will be measured using a smellscape. All three of these will take place over a range of locations, using the grid method and systematic sampling to determine exactly where.	
Teacher approval for the investigation or details of any necessary amendments that need to be made before approval can be given An interesting title and sub questions that are achievable and manageable. The locations of the investigation have been included. The research aims are based on the title and you will be able to respond to them. The title and area of investigation is clearly linked to the specification. You have given a range of appropriate methods that will allow you to respond to the research questions and you consider your sampling strategies. You should also consider whether the data collected is quantitative or qualitative. You should also begin to think about the data presentation and analysis techniques that you could use once you have collected your data, and how this would allow you to effectively respond to your research questions and title. You should also consider what risks there could be in the data collection and how you could mitigate against them.	

Figure 1 shows an exemplar CRF, which includes a clearly evaluative title rooted in theory and location, three connected sub-hypotheses, matched methods, and detailed sampling. Teacher notes offered helpful planning advice.

The written report

The written report should follow the mark scheme closely, starting with the Candidate Record Form (CRF) and clearly addressing all four assessed areas. Some students only partially covered these areas or grouped several sections under one heading, which reduced clarity and depth. In some cases, presentation and analysis were placed in appendices, or key elements like ethics or interpretation were missing or merged into conclusions. The strongest reports had a clear and consistent enquiry, maintained analytical focus throughout, and remained rooted in relevant geographical theory.

Area 1 - Introduction and preliminary research

Commentary

The highest performing investigations showed clear links to the specification and were grounded in strong theoretical and comparative frameworks. Students used GIS mapping at various scales to justify location choices and enhance spatial relevance. Stronger reports included relevant literature throughout, cited credible sources with systems like Harvard, and started with clear, concise introductions outlining the concept and direction of the study.

In weaker submissions often copied large sections of the specification without explaining their relevance. Backgrounds lacked critical thinking and offered generic descriptions, with little reference to theory or context. Literature reviews were included in almost all studies but varied in quality; many relied on basic online sources, weakening credibility. Some students gave good locational detail but used little theory, which lowered marks in later sections. Others unnecessarily compared two locations.

Many students still need to explain how their sub-questions connect to theory and support their main research aim. Comparative context should refer to findings from other relevant studies, not direct comparisons between sites. This year, some students used AI tools to find sources. While many cited them correctly, some didn't engage critically, using material they hadn't fully read, which weakened their reviews. Some centres gave high marks for reviews with no proper references or links to the written work.

Figure 2: Research questions which underpin field investigations.

Aims and Hypotheses:

My overall aim is to investigate "To what extent are Hanger Hill Park, Fox Wood and Hanger Hill Wood important urban green spaces for the quality of life for local people?". I am splitting this overall enquiry into the 3 hypotheses below:

1. Hanger Hill Park, Fox Wood and Hanger Hill Wood are all significantly important for both the physical and mental wellbeing of local residents.
2. Air pollution (both particulate and non-particulate) will have the highest levels closest to the A406 and its levels will decrease as distance from the A406 increases through the surrounding urban green spaces.
3. Noise pollution will have the highest levels (ie. loudest) closest to the A406 and its levels will decrease as distance from the A406 increases through the surrounding urban green spaces.

How the title links to the specification:

- 3.3.2.4 Urban climate: Air quality: particulate and photo-chemical pollution.
 - Particulate and non-particulate matter levels will be measured in relation to distance from the North Circular.
- 3.3.2.7 Other contemporary urban environmental issues: atmospheric pollution
 - The environmental importance of urban green spaces will be investigated through examining their ability to reduce air and noise pollution and the knock-on benefits of this on local people.
- 3.3.2.8 Sustainable urban development: Concept of liveability.
 - I will determine whether the urban green spaces contribute to an enhanced mental and physical well-being of those using them. The investigation will consider how urban green spaces can improve the liveability and thus the quality of life of locals in urban areas.

My research will improve my understanding of these topics by allowing me to see their application in a familiar, local context on a different (smaller) scale to those used in the theory.

Figure 2 demonstrates an evaluative research question with clear conceptual and locational context, includes three linked sub-hypotheses, and references specification content with justifications. The example shows how the links to the specification can cut across several themes. The connections are fully referenced, meeting the requirements for Level 4 of the mark scheme, as the student comments clearly on each one, focusing on specific links for each sub question.

Figure 3: Research questions which underpin field investigations.

Links to the specification

My investigation is linked to **Ecosystems under stress (3.1.6)** with a main focus on **3.1.6.2 Ecosystems and processes** as my main question relates to the **inter-connections between climate, vegetation and soil** and I aim to investigate if these are affected by the type of farming used. My project is based upon the comparison of different characteristics of the soil such as pH and soil moisture which are largely determined by **mineral nutrient recycling** and so I will investigate how this varies between arable and pastoral fields. Similarly, I will focus on the flows within an ecosystem including **biomass, energy** (such as light) and the **transfer of materials** as well as how these processes may be affected by human activity relating to **factors influencing the changing of ecosystems, including human exploitation of the global environment**.

My second key question relates to **3.1.1.2 The water cycle** as it discusses the relationship between water and soil and the theory behind the **flows and transfers** of water which will play a large role in understanding the results I collect and how I interpret them. My project also links to **3.1.1.3 The carbon cycle** as the soil is dependent on constant nutrient cycling in order to remain in optimum condition for maximum yield in both arable and pastoral farming. Furthermore, both the water cycle and the carbon cycle tie to how **human impacts such as farming practices** affect the natural cycles which relates to how the use of fertiliser and irrigation affects the land and soil.

My third key question is research into the effect of the type of farming on plant diversity and so in order to form a hypothesis and to analyse the data collected I will explore the **concept of succession** and how this would differ due to the different farming techniques. This key question is most strongly linked to **3.1.6.1 Ecosystems and sustainability** as it discusses **causes and impacts of declining biodiversity and human population's role in ecosystem development**.

Furthermore, there are also links to **3.1.6.6 Local ecosystems** because it is based on how **flora and fauna** respond to the **soil and soil moisture budget** and the impacts of these changing. Additionally, the main question has strong links to **local factors in ecological development and change (such as agriculture)**.

Figure 3 shows how the links to the specification can cut across several themes. The connections are fully referenced, meeting the requirements for Level 4 of the mark scheme, as the student comments clearly on each one, focusing on specific links for each sub question.

Figure 4: Relevant literature sources and theoretical and comparative contexts.

To what extent is a managed forest better at storing carbon than a non-managed forest?

Linked to spec.
but not explained

3.1.1.3 The carbon cycle

Global distribution, and size of major stores of carbon – lithosphere, hydrosphere, cryosphere biosphere, atmosphere.

Factors driving change in the magnitude of these stores over time and space, including flows and transfers at the plant, sere and continental scales. Photosynthesis, respiration, decomposition, combustion, carbon sequestration in oceans and sediments, weathering.

Changes in the carbon cycle over time, include natural variation (including wildfires, and volcanic activity) and human impact (including hydrocarbon fuel extraction and burning, farming practices, deforestation, and land use changes).

The carbon budget and the impact of the carbon cycle upon land, ocean and atmosphere, including global climate.

3.1.1.5 Quantitative and qualitative skills

Students must engage with a range of quantitative and relevant qualitative skills, within the theme of water and carbon cycles. Students must specifically understand simple mass balance, unit conversions and the analysis and presentation of field data.

Hypothesis 1 – The rate of infiltration will be greater in the managed forest

Hypothesis 2 – The managed forest will have a wider range of species

Hypothesis 3 – The amount of carbon stored in the trees within the two forests will be greater in the managed forest

No effective title

In contrast, this study (figure 4) links the investigation to broad areas of the specification but fails to highlight the most relevant sections or provide any justification for their inclusion. Links to the specification are imprecise (Level 2).

Figure 5: Relevant literature sources and theoretical and comparative contexts.

Literature review

Succession is the term used to signify the changes in the composition of a community of plants and animals over time. These changes result in an increase in the complexity of the structure and species in a community. Plants will invade an area when the conditions are right for them and die off when the succession leads to unfavourable conditions. This means there is a change in the dominant plant species with time. Lithosere succession is the succession that starts on a newly exposed bare rocky surface. (Skinner, M et al., 2016)

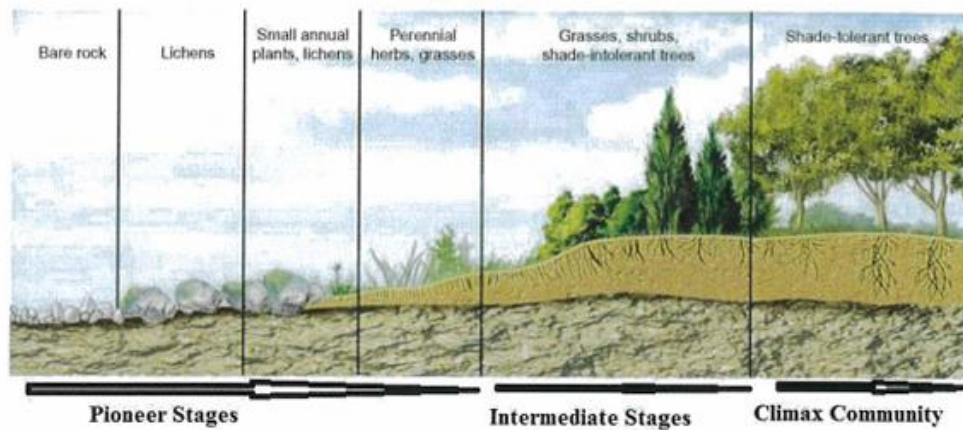


Figure 2, Succession of a lithosere in the UK (Vedantu, 2024)

How does plant type and height change over the succession of a lithosere?

- As outlined in Figure 2, the succession of a lithosere starts with bare rock that is initially colonised by bacteria **lichens** that can survive on few nutrients and get most of their energy from the sun. (Skinner, M et al., 2016) Overtime they break down the rock to create soil which helps make a more hospitable environment which allows for more complex plants to grow. (Lisa Wheeler et al., 2015) As the lichens die, they decompose and add humus to the uneven surface. Moss spores then get carried in and **moss** starts growing in the damp soil and humus left by the lichens. These increase soil fertility as they are rich in both organic and inorganic compounds which gets added to the soil which increases its soil fertility. Grass seeds then begin to germinate in the nutrient rich soil provided by the mosses and **grass** starts to grow. These have long roots that help with sub surface weathering of the parent rock. Leaf litter and dead grasses add more humus to the soil which allows for species diversity such as small flowering plants. **Small shrubs** then start to colonise, and examples of these are ferns, small bushes and brambles. **Large shrubs** such as hawthorn and birch start to grow which deepens and enriches the soil enough to start growing trees such as oak and ash. **Woodlands** then develop and because there is no more environmental changes, this is the climax stage which means there is a state of equilibrium in the area. (Jaques Cartwright, 2018)

How does soil water availability change over the succession of a lithosere?

In the pioneer stage, there is very little water availability as it consists of a barren rock that is made up of a solid surface. As lichens begin to colonise the area, they decompose and add humus which starts the soil formation. Lichens are also able to retain more water which would then increase the water availability and their dead remains are decomposed to humus which when mixed with soil particles can help build substratum which improves the soil moisture even more. As more complex vegetation grows such as grasses and small flowering plants, there is more invertebrates living in the soil which increases organic matter as well as the ability to hold more water. As large plants such as ferns start to colonise the area, there is more shading which reduces the amount of evaporation and maintains the soil moisture. The soil moisture continues to increase as the vegetation becomes more complex and more decomposition occurs to form humus. (Nitu Borah, 2017)

f5

My chosen location

The location that I have picked for this is Sutton Park and there is no research done there about the succession of a lithosere so my investigation will be able to fill a gap in the geographical knowledge of the lithosere in that area.

There has been some research on the succession of a lithosere in Norwegian Lapland by Nicholas Polunin in 1937 and he was investigating the change in vegetation type. As seen by Polunin and shown in Figure 3, he found that "It starts with the colonisation of bare rock surfaces by small and generally slow growing, primitive plants such as Cyanophyceae or crustaceous lichens, continuing progressively through higher lichen and moss stages to herbs, shrubs and finally to the climax woodland with ground-shrubs subdominant (1937)." I will be hoping to help fill the gaps in his research by also investigating the change in soil water availability and vegetation height as well as validating his research on how vegetation type changes in the succession of a lithosere.

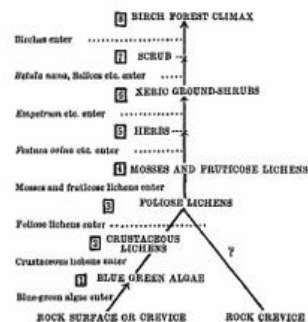


Figure 3, Flow diagram of the change in vegetation type in a lithosere succession in Norwegian Lapland (Nicholas Polunin 1937)

This study has a separate literature review with five sources mentioned in the text (figure 5). The review starts with a theoretical model which is explained and forms the basis of the investigation. The report makes reference to a comparative study which was carried out previously. Elsewhere in the report the student provides a justification for the 3 sub hypotheses which are measurable and testable, relating to vegetation height and type, and soil water availability.

Figure 6:
Relevant literature sources and theoretical and comparative contexts.

1.3 – Associated theory and literature review

The 'Great Places Model' was created by the Project for Public Spaces to "help communities evaluate places"¹. It can act as criteria to determine whether a place is successful. The inner ring represents the key attributes a place should have, the middle ring is its intangible qualities, and the outer ring is ways to measure those things.



Figure 1 - The Great Places Model by the Project for Public Spaces <https://www.pps.org/article/greatplaces>

Theory associated with sub question 1: To what extent is Battersea Power Station accessible and inclusive?

The accessibility of a place is vital to its success. According to the model, a place should have qualities such as being walkable and accessible, which can be achieved through features like signposting, pedestrianisation, and parking. A successful place should also have "good public transport connections"². The regeneration of Battersea included an expansion of the transport network; but despite this, the development may still have led to the "exclusion"³ of some people. It is very important for a public space to be accessible for a "diversity of users" in a

¹ (Skinner, et al., 2016, p. 344)
² (Martí Casanovas & Roca Blanch, 2017)
³ (Hall, 2020)

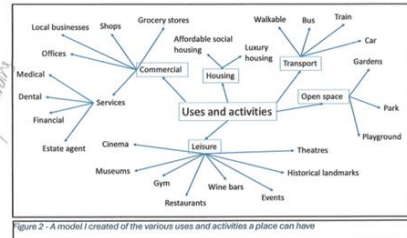


Figure 2 - A model created of the various uses and activities a place can have

Literature review

In 1930 Battersea Power Station was running and producing "a fifth of London's power"¹² at its peak. However, when London began to deindustrialise, the power station closed down in 1983 and it inevitably became a derelict brownfield site. Deindustrialisation can lead to the "de-multiplier effect"¹³ which causes high levels of deprivation. However, in 2012 it was purchased by five Malaysian shareholders who began work to redevelop the site: "SP Setia Berhad, Sime Darby Property, The Employees Provident Fund, and Permodalan Nasional Berhad"¹⁴.

Garvin has proposed criteria for what makes a great city which closely aligns with those outlined in Figure 1. He stated that a place should be 'open to anybody'¹⁵ and include various forms of transport. It should therefore be accessible and inclusive, which is one of the key components in Figure 1 that I am examining. Additionally, he emphasised that people should feel 'safe and comfortable' in a place, and there should be 'something for everybody'. These are the other components of Figure 1 that I will be considering. Moreover, Barrera, Reyes-Paecke, and Banzhaf have proposed that 'public green spaces contribute significantly to well-being'¹⁶ in deprived areas, and that there is a positive correlation between 'the amount of green space and household income'. This highlights the importance of Battersea's regeneration in creating successful public areas. These green spaces must be created with 'accessibility' and 'quality' in mind, meaning they should be inclusive to everyone and be of a

¹² (Battersea Power Station, n.d.)
¹³ (Skinner, et al., 2016, p. 389)
¹⁴ (Battersea Power Station, n.d.)
¹⁵ (Garvin, 2016)
¹⁶ (Barrera, et al., 2016)

"diversity of ways"⁴. I will be assessing the extent to which this is present at Battersea. Regeneration involves the redevelopment of a place to "reverse urban decline and create sustainable communities"⁵. It significantly changes the character of a place, as does the influx of outsiders. Therefore, the development should be inclusive, meeting the needs of both locals and visitors. I aim to look at this in my investigation.

Theory associated with sub question 2: To what extent does Battersea Power Station provide a comfortable space which has a good image?

According to the model, a place should have qualities such as being safe, clean, attractive, and historical. Battersea was once the "largest power station in the UK"⁶ and a major producer of electricity in the 1950s, therefore it has a very significant historical context. I will assess whether this historical element has been preserved and adds value to the new development. The qualities outlined in Figure 1 shape the "place experience"⁷ that people have, therefore influencing their overall sense of place. While people have different needs, there are "common threads"⁸ between people and places that are essential in making a 'great place'. For example, seating, low crime rates, and visual appeal. Additionally, urbanisation has led to 'increased traffic in cities'⁹ which can damage a place's image and reduce enjoyment for visitors and locals. Therefore, I will look at traffic levels around the area to help answer this sub question.

Theory associated with sub question 3: To what extent does Battersea Power Station provide a wide range of uses and activities?

One aspect of the Great Places Model is the uses and activities that a place should offer. They are described as the "building blocks"¹⁰ of a great place. As Battersea is a mixed-use development, I have created a model (below) of the activities and uses I would expect it to have, based on Figure 1 and my own research. I will be comparing Battersea to these criteria. Moreover, regeneration is expected to cause businesses and services to emerge. These should be catered towards the locals, whilst also attracting visitors. There should be a balance in the facilities a place offers, considering factors such as age, number of people, and interests. According to the Positive Energy report that Battersea Power Station published, there is a "great mix"¹¹ of different "leisure facilities". I will assess the extent to which this is true.

⁴ (Surico, 2023)
⁵ (Skinner, et al., 2016, p. 351)
⁶ (Anon., 2019)
⁷ (Skinner, et al., 2016, p. 350)
⁸ (Peinhardt, 2023)
⁹ (Skinner, et al., 2016, p. 384)
¹⁰ (Peinhardt, 2023)
¹¹ (Battersea Power Development Company, 2021)

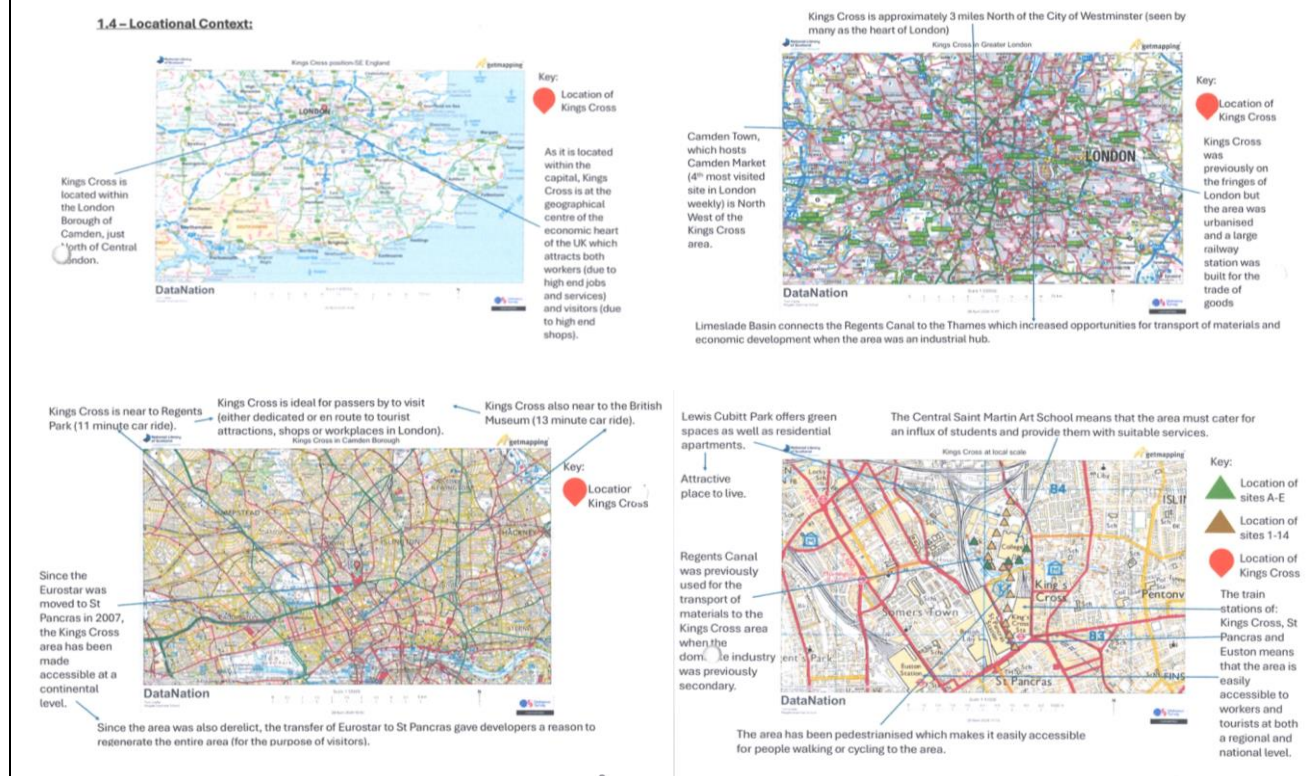
high standard – i.e., well-maintained. Battersea, although being a built-up urban area, should have a sufficient amount of green public space, which I will look at in my investigation.

This topic of creating successful places is important because of urbanisation. 4.4 billion people¹⁷ live in cities around the world. This number is expected to increase because of the advantages that living in urban areas provides: more employment opportunities, better education, and access to facilities like healthcare. It is therefore vital that cities fulfil their potential.

The Battersea regeneration can be compared to the Olympic Park regeneration in Stratford. This area in East London was "one of the most deprived areas in the UK"¹⁸. It was previously a brownfield site, like Battersea, but has transformed into a "vibrant new community"¹⁹. It resulted in benefits such as 2,818 new homes and new transport infrastructure being built²⁰. This effective regeneration project provides me with an insight into what I can expect from the Battersea development. Moreover, the LAPIS project in Mexico heavily involved local children in the 'placemaking process'²¹ and this resulted in the creation of spaces that met the community's needs. When investigating Battersea, I will consider whether the uses and activities provided fit the local population. Furthermore, the regeneration of Liverpool through the Liverpool Waterfront Transformation Project²² is also comparable to Battersea. Liverpool One, a multi-use shopping complex with public spaces, shops, and restaurants, was created to combat the deprivation in Liverpool. It boosted the local economy by 24%²³, however the rebrand of Liverpool as a whole had unevenly distributed benefits. Economic inequality has meant that Liverpool is the 'third most deprived local authority in England'²⁴, and the regeneration also caused community displacement. This shows the negative effects of regeneration, and I can compare the success of Battersea against Liverpool.

Figure 6 shows an alternative approach, integrating part of the literature review into the rationale for each hypothesis. Relevant sources are indicated as footnotes, and a clear theoretical context is stated, based on the Great Places model. Note the comparative context provided at the end of the literature review. It matches the Level 4 descriptor, being well-supported by thorough use of relevant literature sources. Theoretical and comparative contexts are well-understood and well-stated.

Figure 7: Approaches to spatial context in Geography.



Spatial context remains an area for potential improvement within student submissions. It is essential that investigations demonstrate a clearly defined locational focus, integral to the setting of the enquiry. This can be effectively achieved through the inclusion of appropriate cartographic resources. For instance, regional maps accompanied by Ordnance Survey extracts, where data collection sites are accurately annotated. Similarly, urban investigations could incorporate detailed street maps indicating the precise locations of survey activity or questionnaire sites. Figure 7 illustrates one way of showing locational context, with some analytical comment, using maps at different scales.

Area 1 – Summary

Area 1a Aims and research questions

Students tended to perform well when their investigations were clearly linked to the specification, supported by well-reasoned justifications. Investigations that featured independently chosen titles, reflecting genuine interest and viable fieldwork potential, along with focused research questions and up to four related hypotheses, often stood out. A clear understanding of both locational and theoretical contexts, paired with flexible site selection and the opportunity for repeated data collection, further enhanced the quality of their work.

On the other hand, students were less successful when connections to the specification were vague or weakly justified. Broad, untestable, or disjointed hypotheses, coupled with titles that lacked originality or leaned too heavily on methodology, limited the scope of enquiry. Submissions that relied mainly on secondary sources with minimal fieldwork also tended to lack depth and personal engagement.

Area 1b Literature review/theoretical context

Students tended to excel when their work drew on a small number of carefully chosen, clearly connected sources, properly cited with footnotes and bibliographies. Strong submissions also incorporated relevant quotations alongside original analysis, explored comparative fieldwork contexts, and established a well-defined locational framework.

In contrast, weaker reports relied on uncited or irrelevant sources, included copied material without critical engagement, and were weighed down by excessive or unfocused background information. Limited engagement with theory, absence of comparative perspectives, and unclear spatial context further undermined their effectiveness.

Area 2 - Methods of field investigation

Commentary

Student data collection varied widely. Some investigations included too much data, in some cases up to ten methods, while others relied heavily on secondary data with minimal primary data input. Every data method should be justified and clearly linked to a hypothesis or sub-question, with an emphasis on collecting primary data in the field.

Many students showed weaknesses in the amount and quality of data collected. Fieldwork during winter months often resulted in incomplete datasets due to poor weather and short daylight hours. Questionnaires done at unsuitable times of day, week, or season, especially when scheduled by the centre instead of students, also led to poor results. Data collected as late as March or April 2025 raised concerns about planning.

While sampling technique knowledge has improved, some students listed methods without showing understanding. Sampling strategies such as random, systematic, stratified, or opportunistic should be clearly explained and justified. For example, random sampling must be correctly defined and not confused with arbitrary choices. Online surveys often lacked awareness of selection bias, with students wrongly assuming their samples were representative.

Many students gave well-organised methodological accounts, clearly stating dates, times, locations, and sample sizes. Strong projects detailed the content of surveys and variables measured, helping ensure reliability. However, weaker submissions lacked clear descriptions, forcing readers to guess their methods. Poor table design also reduced clarity, and some datasets were unused or lacked clear origin.

Students should critically evaluate whether their data is sufficient. For example, they should question whether one transect, or simple survey will provide enough insight. Thoughtful design and adequate volume are key to meaningful geographical analysis.

Figure 8: Methods of investigation.

Data collection technique:	Type of data and sampling strategy:	Location and timing of sampling	Description of method:	Justification of method	How method links and helps to answer investigation
Footfall count	Primary Quantitative Purposive sampling	Data will be collected in 4 locations: Prospects Way North Entrance & South Entrance of the Power Station Thessaly Road Time of day: Morning Midday Afternoon Data recorded in 40 minute windows: Morning: 10-10:40am Midday: 12:00-12:40pm Afternoon: 15:00-15:40pm 24th August 2024 Summer UK school holiday Data will be collected as a group for this survey.	A footfall count will be conducted at four different sites, counting the number of people entering and departing the designated area within the three-minute time allowance. Data will be recorded in the form of a tally chart. One person will count and record the data whilst the other person will stop and start the three-minute timer with a phone. This process will be repeated at three different times of day in each location.	Purposely standing at route junctions/entrances of the data collection sites will allow the total number of people walking in and out of the site to be easily counted, whilst data will be recorded accurately and quickly on tally chart data collection sheets. Having one person counting and recording the data and another person watching the time will ensure that people will be counted in strict three-minute intervals and no individuals will be over/under counted. Completing the surveys in 40-minute windows ensures sufficient time to walk to each data-collection site and still collect accurate results in the designated 'time of day' period. Conducting the footfall count three times a day will produce a large data set to enable the calculation and comparison of the mean daily average of footfall of the different sites.	Link to investigation/sub-question/s/: To understand whether there has been a positive social addition to the local area including sense and character of place Has the spending of the project been used in the most direct and sustainable way to support the local community? (Sub-question) Conducting a footfall count survey enables the understanding of whether there has been an increase in people in each area compared with pre-regeneration footfall data and to understand if this has contributed to an improved perception and sense of place for the pre-existing local community. The four locations were chosen to ensure that a representative sample will be collected, demonstrating the population density within the shopping centre and new housing complex on the regenerated site and in the pre-existing surrounding neighbourhood i.e. Thessaly Road. This will allow the comparison and understanding of whether there is a greater footfall solely in the regenerated areas, therefore only improving the sense of place within the complex, not in the pre-existing local area. A purposive sampling strategy will be selected as it allows a comparative sample of the population to be collected avoiding bias that could have occurred using other strategies.
Clone town survey	Primary Quantitative	1 location: Battersea Power Station Shopping Centre	A clone town survey will be carried out within the shopping	Before carrying out the survey, the categories will be listed to ensure each are clearly classified. Using tally chart	Link to investigation/sub-question/s/: To understand whether there has been positive economic impact for the local community as a result of the project

Figure 8 shows a partial example of an effective use of a table for the methodology. The student ensures that they cover the various strands of the mark scheme by having appropriate headings, covering sampling strategies (2a), locations and timings (2a) description /explanation of method (2b), justification and link to purpose of investigation (2b). Methodology is explained and justified in detail.

Figure 9: Methods of investigation.

Data Collection / Methods:

9 AM – 2PM Thursday 25th July (~5 hours), before rain started at 1500 (see Appendix 1)

I plan to collect all primary data and samples from 33 different sites, each progressing 50m inland each time along 3 separate transects, as shown in Figure 8 below. From my 'central sample' (transect B), there are two other parallel transects 10m either side (transects A and C). My sample sites are shown as red dots, and the transects which I plan to measure using a tape measure are shown as yellow lines. I chose this particular location for the transects prior to data collection as it shows the progression of the psammose into a machair (in this case, a farmed field – see figure 7 below). This method of sampling is an example of systematic sampling. I chose this method as I deemed it the most suitable for collecting data that is affected by the distance it is from a point – in this case, distance from the strandline, taking samples and data in regular 50m intervals and it reduces bias. A technique like random sampling, whereby sample points are chosen at random, would have deemed inappropriate for my hypothesis as there would have been no way of comparing sample points by how they have changed with distance from shoreline. Alternatively, I could have potentially split up my sample area into smaller sections and conducted random sampling within them which would have allowed me to compare values and data from different distances from the shoreline. **All methods in this part of my methodology are primary.**

Figure 8 – a satellite image showing sampling site in Maghera Dunes to scale, scale shown in bottom right hand corner.

Hypothesis and relevant methodology:

Sub-hypothesis: 'Plant species and biodiversity coverage increase with distance from the shoreline' 2a = Links method to appropriate sub-hyp

Quadrat Sampling:

To investigate vegetation diversity and % cover, I used a 50x50cm (100 square) quadrat at all 33 sample sites. I placed it down (with care) at each specific location and took photos of the quadrat (plane view), close enough to be able to identify plant species later – not in the field. To calculate percentage cover of species within the quadrats, I identified a species, and then counted how many squares the 'roots' were (where the plant made contact with the soil) present in. The number of squares I calculated was equivalent to a percentage (e.g. a dandelion's roots were present in 7/100 squares, its percentage cover would be 7%). I also conducted 'opportunistic sampling' here as well as the 'systematic sampling' technique (Mahmutovic, 2022). Whereby, if I happened upon an unusual plant species that had not appeared in any of my quadrat photos, I took a photo of the plant and identified it for descriptive purposes (Appendix). It could be argued that this method of sampling is not representative of the whole plant species population in the psammose as it only surveys plants in close proximity and accuracy of data can be compromised as only easily accessible plants were recorded. Additionally, I would have only taken photos of 'unusual' plants or plants that 'stood out' to me, making my data somewhat unreliable and biased. However, due to my research combining the use of two different sampling techniques, my data is arguably more reliable and representative of the entire population (of plants). This data collection technique is quantitative ('data that usually consists of factual information that can be counted and used in fieldwork') (Bitesize, 2024). To identify the plant species, I used the Field Studies Council booklet: 'A key to plants common on sand dunes' by Sally Edmondson and Carol Roberts (2002) as a secondary data resource as well as online sources (Dunescapes, 2024) (O'Brien and Gialquinto, 2023) to identify the more uncommon and unusual plants (e.g. specific to a machair habitat).

Figure 9 shows a one of several methods employed in a study of plant succession in a sand dune environment. The methodology explains and illustrates sampling procedures, as well as describing stage by stage how the method is to be carried out, indicating times and frequencies. Detailed demonstration of practical knowledge and understanding of field methodologies appropriate to the investigation of human and physical processes.

Figure 10: Methods of investigation.

Section 2- Data Collection- Methodology:

Hypotheses:

1. Public perception towards the impacts of City of Culture are positive.
2. Investment in Hull City Centre has improved environmental quality.
3. Investment has created new employment opportunities in Hull City Centre.

Online questionnaire:

I am going to create an online questionnaire to ask residents and business owners about their perception of the City of Culture award and how it impacted them. I have chosen to do this because of my 1st hypothesis which is 'public perception towards the impacts of City of Culture is positive.' I will ask a series of questions that will link directly to public perception of the City of Culture Award, from this I will be able to gather enough data to present in a graph. I have chosen to present my answers in a graph form so that it will be able to see a clear trend and patterns within the answers given, it will also give me chance to be able to analyse the results and explain why people may have said what they said. I am going to create the questionnaire on Microsoft forms, and I am aiming to have between 8-12 questions so that it is not too long, but I still have enough questions to be able to analyse and create a graph or bar chart. My online questionnaire will be an example of random sampling because random people from Hull will be answering it to give me larger dataset. I want a representative sample of data from the people in Hull so that I can interpret the data through either a bar chart or a graph.

Environmental quality survey:

An environmental quality survey is an example of primary source of data. I am going to print out an online environmental quality survey sheet and fill it out as I walk around Hull city centre and my specified areas of development. I have chosen to conduct an environmental quality survey because one of my hypotheses is 'investment in Hull City Centre has improved environmental quality.' From the survey I can analyse how the environmental quality has improved; I will compare the results to past secondary data sources such as articles about Hull and photos. An environmental quality survey is an example of random

sampling because the answers I get depend on how the area is presented on the day that I go to collect my evidence.

Environmental quality survey is from 'The Island Geographer' website.

Photos to compare to older photos to show the changes and developments.

During my trip to Hull I am going to take photos of each area I visit. This is because I will be able to use the latest photos to compare them to secondary sources of data such as old photos. Old photos are a useful source of qualitative data, and I will be able to use them to compare to my photos and see the differences. From this I will look at the change and talk about how the investment and developments has helped transform areas within Hull City centre. The areas I am studying have all changed over time due to investment opportunities or a lack of investment, so therefore photos are especially useful source of primary data as I can analyse them and talk about the changes I can see. I will be taking the photos on my iPhone and then uploading them onto my NEA.

In figure 10 the methodology for the investigation is limited, and the explanations are basic. Specific details of individual methods are not provided and there is some confusion about sampling strategies and size of sample. Collection of data in the field is narrow in scope, and unlikely to generate sufficient information to support or refute the three hypotheses. Intermittent use of appropriate observational, recording and other data collection approaches including sampling. There's some justification of data collection approaches.

Figure 11: Methods of investigation.

Take a photo of the survey position.*

Allows me to easily find the location where data was collected during my second visit to ensure consistency and track changes.

Take a photo

How many people pass a set point in five minutes?

Measures footfall.

123

Result of decibel reading 1*

123

Result of decibel reading 2*

123

Result of decibel reading 3*

123

How well is the built environment maintained?*

Attractive and well-maintained buildings can increase environmental quality by improving quality of life and creating a sense of pride in residents.

1234567

15

How well is the built environment maintained?*

-3 -2 -1 0 1 2 3

Is litter evident?*

Litter and vandalism suggest environmental neglect or a lack of community engagement.

-3 -2 -1 0 1 2 3

Is there any visible graffiti or vandalism?*

-3 -2 -1 0 1 2 3

Is there an unpleasant smell?*

Unpleasant smells reduce pedestrian appeal of an area and may indicate poor air quality.

-3 -2 -1 0 1 2 3

Is it badly designed?*

Well-designed areas are visually appealing and cater to all users.

-3 -2 -1 0 1 2 3

Is there visible greenery?*

Trees and plants act as natural air filters and exposure to nature reduces stress levels. Greenery also makes spaces more attractive.

-3 -2 -1 0 1 2 3

Are there benches easily accessible?*

-3 -2 -1 0 1 2 3

Figure 11 shows how annotated recording sheets can be a useful way of justifying the methods adopted and show the link to investigation sub-questions or hypotheses. This example shows a survey sheet, annotated to highlight the reasons for each observation.

Figure 12: Methods of investigation.

Primary/Secondary data collection method: re-photography and historical street view

Method: While visiting in the summer, I took photos along the high street and the Cornhill Quarter using my mobile phone camera. I will then find the location using historical street view imagery to analyse how the area has visually changed in the last 15 years.

Method justification: Visual evidence will allow me to make concise comparisons between what the place currently looks like and what it previously did, enabling me to see how the high street has changed in the last 15 years. By using my mobile phone, it is easy to carry, can produce high-quality images, and find the exact location it was taken so I can easily find it using street view.

Sampling type: I used opportunistic sampling, choosing areas to photograph during my visit; this ensured the location was accessible. It also allowed me to take photos in places where I thought there had been significant changes to look at and create meaningful comparisons with historic street views.

Data type: My photographs will provide primary qualitative data, and the historical street view using Google will be secondary qualitative data.

21

Ethical consideration

Ethical concerns: When taking photos, I had to be considerate by not blocking the pavement. I tried to avoid taking photos with people in the frame in case they felt uncomfortable; however, due to how busy the areas were, this proved to be difficult. I also only took photos from the street and not on private property.

How this links to my hypotheses: This data will allow me to see how the high street has changed visually in the last 15 years and will help me to identify whether there has been a change in land use by looking at what amenities were previously there and what has now replaced them (if they have been replaced). I am also taking photos of the Cornhill Quarter so I can compare them with images before regeneration occurred to see how it has changed the place to help me answer my hypothesis on whether regeneration is having a positive impact.

Limitations: Using opportunistic sampling may affect my ability to draw accurate conclusions on whether there has been a change in land use by focussing on areas where I think change has occurred. I will need to be mindful of this when analysing how much change I think there has been, as biased results may occur. I also may miss areas where significant change has occurred.

All data collection techniques should be clearly explained. While primary sources were often described in detail, explanations for using secondary data were sometimes brief or lacking depth. However, some students did relate their use of secondary sources directly to the aims of the enquiry, as illustrated in [figure 12](#), a method which combined primary with secondary sources.

Area 2 – Summary

Students performed strongly when they demonstrated a sound understanding of sampling strategies, providing clear justifications aligned with the investigation's purpose. High-quality enquiries featured substantial primary data collections, supported by relevant secondary sources, and employed varied methods tailored to their hypotheses. Pilot surveys were used effectively to assess feasibility and timing, while students often designed their own recording sheets to detail methodology comprehensively. Careful planning around sampling timing and frequency, covering both temporal and spatial dimensions enhanced data validity. Strong reports also included annotated data sheets, photographs to document fieldwork, and mapped sample locations to aid clarity and replicability.

Students performed less well when they failed to justify sample size or method, used a limited or poorly executed range of techniques, or relied excessively on secondary data with minimal fieldwork. Misunderstood sampling strategies, indiscriminate method selection, and use of generic recording sheets from external sources further weakened investigations. Methodologies were often only partially explained, with some studies based on unrepresentative samples or irrelevant data. In several cases, credit was given for proposed techniques that were never implemented in practice.

Area 3 - Methods of critical analysis

Commentary

All techniques should be linked to the hypotheses or research questions stated in the introduction.

Most students showed strong skills in using a variety of graphs and maps to present and analyse data. Many used basic tools like Excel effectively, while higher-quality projects incorporated GIS to improve spatial clarity and analysis.

Weaker submissions relied heavily on simple graphs, like pie and bar charts, that offered limited insight. Some copied secondary data from online sources without critique. Tables were common but worked best when key data was clearly highlighted. While some students made good use of annotated photos, spatial mapping techniques like proportional symbols or shaded maps were often underused, despite their value in visualising spatial variation.

Use of statistics varied. Strong projects applied descriptive methods such as mean and standard deviation effectively. However, many misused inferential techniques, applying Chi-squared or Spearman's rank inappropriately, often without considering sample size or relevance. In some cases, statistical tests were used by default rather than purposefully.

Qualitative methods appeared frequently in studies of Changing Places, with students analysing interview data using colour coding and structured text strategies like theming and categorising to draw meaning.

Lower-marked work often leaned on simple description and lacked deeper analysis. Without proper literature review, theoretical links were weak, and students rarely questioned data accuracy or representativeness, key aspects of reliability.

Stronger submissions built coherent analysis by tying data to hypotheses, referencing theory throughout, and integrating visuals like maps and graphs into the narrative. Instead of just describing results, they explored them critically, identified anomalies, and backed their conclusions with multiple sources and thoughtful reasoning.

Figure 13: Methods of critical analysis.

Figure 22- Analysis of re-photography using Google street view imagery May 2009.

What3words: 'remark.facing.hurry'



Figure 13 shows an example of re-photography including analytical comments relating to the two images. Note that there is some credit for 3a presentation and analysis as well as 3b interpretation.

Figure 14: Methods of critical analysis.

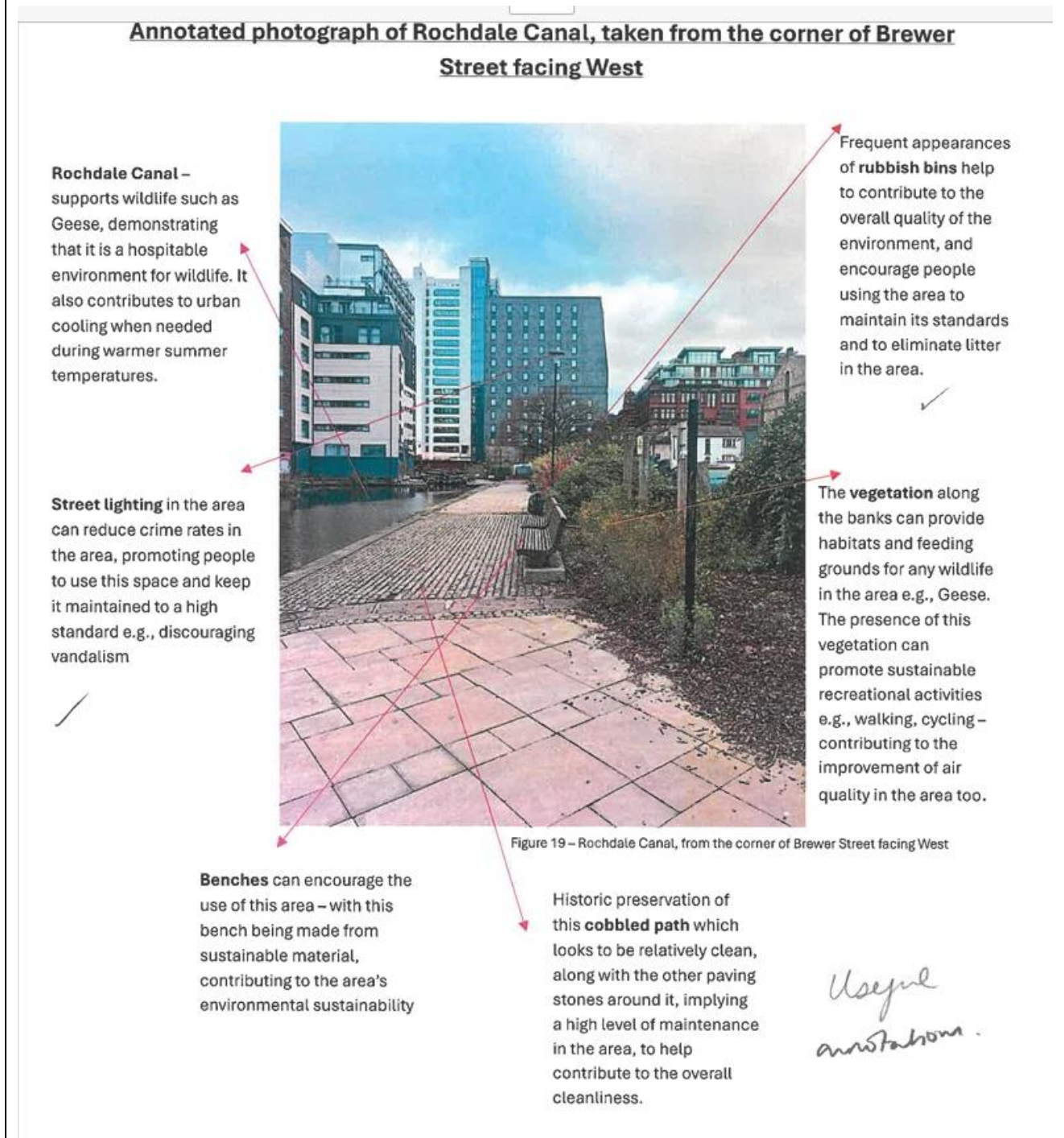


Figure 14 shows the effective use of detailed annotations on photographs in a study of gentrification in Manchester's Northern Quarter

Geolocated data can effectively show comparisons between different data sets.

Figure 15: Methods of critical analysis.

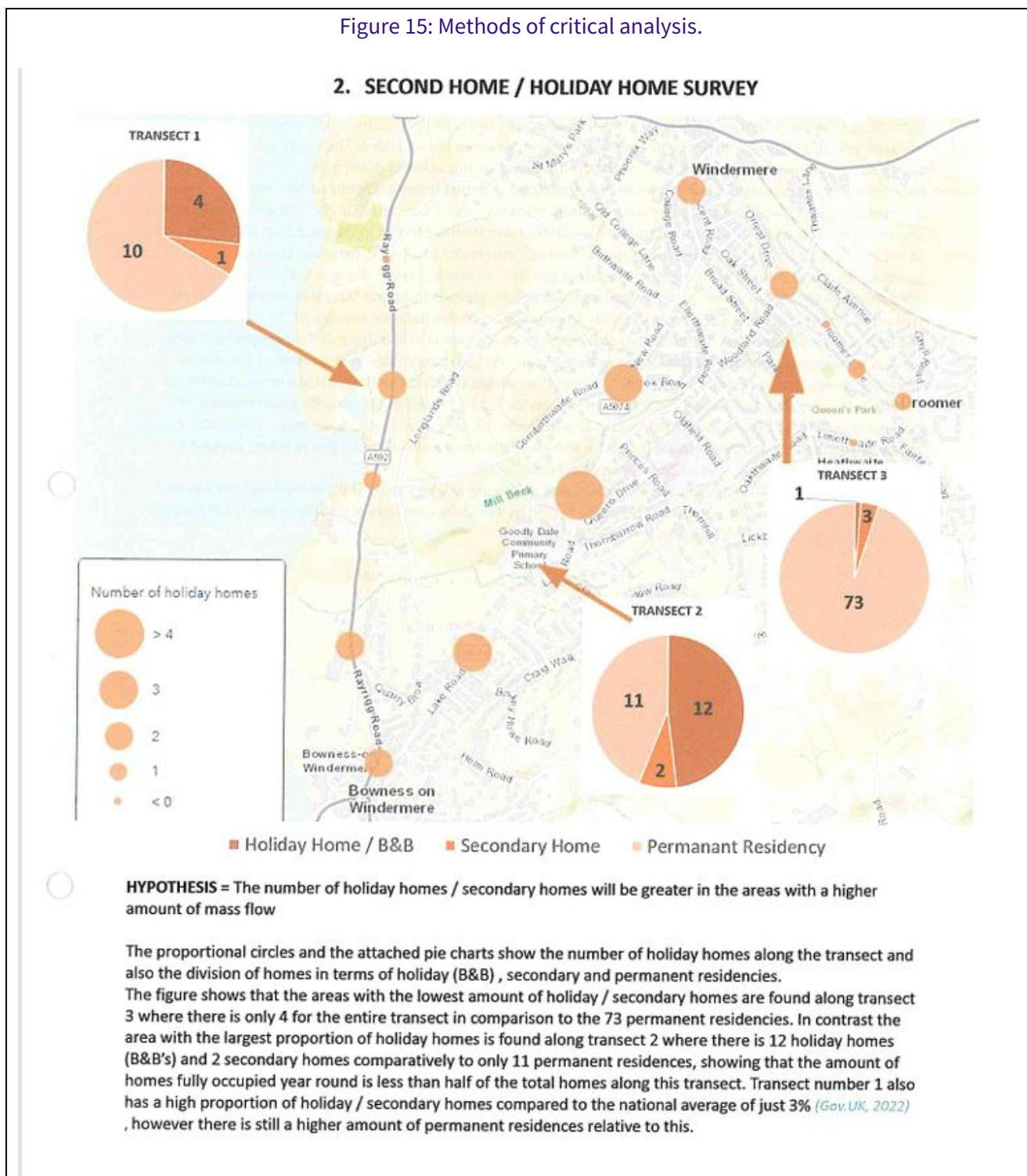


Figure 15 shows a map of located proportional circles and pie charts illustrates spatial variation of second homes and other properties in Windermere. Subsequent analysis made thorough use of the data.

Figure 16: Methods of critical analysis.

Figure 27: Map showing the building decay survey scores across Hunslet and Riverside



Figure 28: Map showing the average house price across Hunslet and Riverside



5.1 Page of
geo-spatially
linked data
to prices
etc.

Figure 16, show both primary data (building decay index) and secondary data (house price averages) across an urban area.

In the strongest studies, the application of statistical tests was clearly justified, with documented calculations and results effectively integrated into the analysis. Where students demonstrated sound understanding, statistical significance was considered, and findings were interpreted in relation to the original hypothesis.

Figure 17: Methods of critical analysis.

The points display a linear relationship, and a line of best fit has been drawn in the middle of the points. The best fit line suggests there is a negative relationship between the two variables with the level of deprivation increasing with distance from TRSC which supports hypothesis three. This suggests that TRSC may have had a positive impact on deprivation levels in its immediate area which could have contributed to the regeneration of Bury town centre.

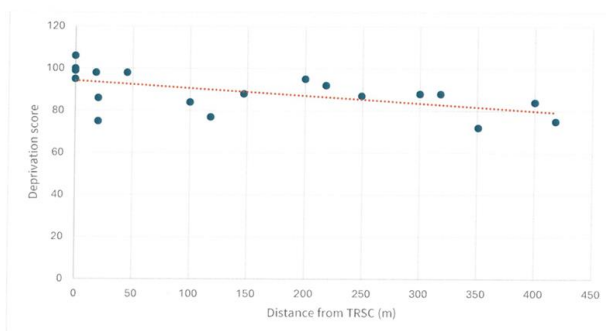


Figure 21: Scatter graph plotting the deprivation score and distance from TRSC for each sample site

To confirm the relationship between deprivation score and distance from TRSC, I conducted a Spearman's Rank Correlation Coefficient, and the results are below.

Spearman's Rank Correlation Coefficient (SRCC)

Null hypothesis: There is no significant correlation between deprivation level and distance from TRSC

Research hypothesis: There is a significant correlation between deprivation level and distance from TRSC

Result: SRCC = -0.50

This result shows a relatively strong negative relationship between deprivation level and distance from TRSC. As the coefficient is higher than the critical value of 0.40 ($n=19$ and $p<0.05$) the null hypothesis is rejected and there is a significant correlation which indicates that the level of deprivation increases with distance from TRSC

The SRCC result above provides further evidence to support hypothesis three. To confirm that deprivation scores are significantly different in TRSC compared to the rest of Bury retail centre, I conducted a Mann Whitney U test (see below).

Mann-Whitney U test

Null hypothesis: There is no significant difference between the deprivation levels in TRSC and the rest of the study area

Research hypothesis: There is a significant difference between the deprivation levels in TRSC and the rest of the study area

Result: Lowest U score = 3

Critical value ($n_1=4$, $n_2=15$, $p<0.05$) is 10

See Appendix 4 for the full calculation.

As the lowest U score is lower than the critical value, the null hypothesis is rejected, and the research hypothesis is accepted that there is a significant difference between deprivation levels in TRSC and the rest of the study area

Both statistical tests provide strong evidence to support hypothesis three and suggest that TRSC has significantly improved environmental and social deprivation levels even if only in its immediate area thereby contributing to regeneration

Figure 17 meets the minimum data requirements for conducting a Spearman's rank correlation test and Mann Whitney U test, with links between data presentation, starting with a scatter graph, analytical process, and brief interpretative commentary. The student could have shown their working out and calculation.

Figure 18: Methods of critical analysis.

2: How has the rebranding impacted the local economy?

CODING: THE GREAT ORME TRAMWAY

- Popular **tourist attraction**
- 1902 - 1932: **3.75 million** passengers carried overall
- 2006 - 2009: **140,000 - 155,000** passengers per year
- **Slight dip** in passenger numbers: 2020 - 2022
- Now: carrying around **200,000** passengers per year
- Numbers have grown steadily over the years
- Unique **heritage** attraction
- Many visitors came to the Tramway when younger, coming back / **nostalgia** is a huge factor in numbers
- Overall, **more visitors due to Alice rebranding**, means more visitors to the Tramway
- **Involved in Alice Day** for a few years, with **Miss Alice** winner for that year
- **Passenger numbers have been higher since the rebrand**, but this could be due to a number of reasons
- Brings in **families, retirees, tourists** - both domestic and international
- Much busier in July - August, with small spikes during half-term - weather is much more pleasant at the top of the Orme during these times

KEY:

- **TOURISTS** - x 8
- **REASONS FOR VISITING** - x 2
- **REBRANDING** - x 4

Figure 8a: Coding from an interview with the Great Orme Tramway.

CODING: THE LOOKING GLASS ICE-CREAM PARLOUR

- Opened after the rebranding
- Thought the rebranding was a **great asset to the town** and **something to heartily embrace**
- The Alice in Wonderland rebranding has helped **benefit the business**, as it **enhances the theme** and **gives it more meaning**
- **Families and tourists** come to visit
- The rebranding will **always impact the business in a positive way** in the foreseeable future

KEY:

- **TOURISTS** - x 2
- **REBRANDING** - x 6

Figure 8b: Coding from an interview with the Looking Glass Ice-cream Parlour.

Through coding the interview with the Great Orme Tramway (Figure 8a), it is evident that it is incredibly successful. The three key themes identified were the rebranding, the tourists, and the reasons for visiting. Tourists were mentioned a total of 8 times, the rebranding mentioned 4 times, and the reasons for visiting mentioned twice. Passenger numbers have increased significantly over the following years, from over 140,000 to 200,000 passengers per year, demonstrating its increasing popularity. The rebranding has further propelled visitor numbers, and has increased its connection with the book, as they are 'involved with Alice Day' and with 'the Miss Alice winner'. Similarly, in Figure 8b, the Looking Glass Ice-cream Parlour has experienced tremendous success since opening the business after the rebranding. Although I was unable to obtain statistics from this business, through coding it is incredibly evident that the rebranding has affected the business in an extremely positive way. With only 2 themes present, the rebranding was mentioned a total of 8 times compared to tourists, which was mentioned

Figure 18 demonstrates how coding of interview transcripts and responses to questionnaires was used effectively as a way of representing qualitative data in some investigation reports.

Figure 19: Methods of critical analysis.

Figure 26- Analysis of data taken from the Office for National Statistics (ONS) on Housing Prices in Lincoln, (Office for National Statistics, 2024).

This data shows that the average house price in Lincoln decreased; this stood out from the trend in the East Midlands. As the average house price rose by 2.1% in the East Midlands, during this period, house prices in Lincoln fell by 3.9%. The impact of studentification on house prices in theory, as mentioned in the literature review, is often the inflation of property prices, as family homes are bought by developers to be converted into houses of multiple occupations and rented out to students. A reason behind this fall may be linked to higher interest rates on mortgages leading to lower demand.

House price
£182,000

The average house price in Lincoln was £182,000 in August 2024 (provisional), down 3.9% from August 2023. Across the East Midlands, the average house price rose by 2.1% over the same period.

[Go to house price section ↓](#)

Monthly rent
£848

Private rents rose to an average of £848 in September 2024, an annual increase of 10.1% from £770 in September 2023. This was higher than the rise in the East Midlands (8.8%) over the year.

[Go to rents section ↓](#)

First-time buyers
£161,000

The average price paid by first-time buyers was £161,000 in August 2024 (provisional). This was 3.6% lower than the average of £167,000 in August 2023 (revised).

[Go to buyer type section ↓](#)

As a large number of students seek accommodation near their campus, it increases demand and causes rental prices to rise. This would be an expected impact of studentification. On average, rental prices in Lincoln increased by 1.3% more than the East Midlands average.

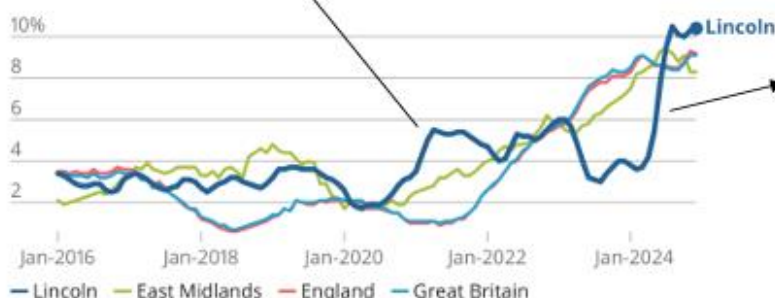
Links to theory

A challenge commonly associated with studentification is that after the inflation of property prices, first-time buyers will be pushed out of the area as they will no longer be able to afford to purchase property there. This data shows that this is not the case in Lincoln, as the average house price for first-time buyers in 2024 was almost 4% lower than in 2023.

Lincoln differs from the overall trend in the East Midlands indicating a localised effect, one factor that may cause this is the university presence in the area.

Annual change in rents in Lincoln

Private rental price annual inflation, Lincoln, January 2016 to December 2024



Source: Price Index of Private Rents from the Office for National Statistics

We can see there has been rapid inflation of rental prices in Lincoln after 2024, this could be partially due to studentification increasing demand for rented properties with limited supply, this supports the theory in my literature review that studentification can inflate rental prices.

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Figure 19 shows the analysis of secondary data, with annotations of statistical and graphical information pertinent to the investigation.

Area 3 – Summary

Students performed well when they showed creativity in combining photos, maps, and graphs to effectively locate data geographically. Techniques were applied accurately and in line with proper mapping and graphing conventions. Statistical methods, including significance testing, were used appropriately. Annotated photographs offered thoughtful analysis, and anomalies were explored with reasoned explanations. Patterns and trends were explained with clear understanding of the broader context. Consideration was given to how representative and accurate the data sample was. Analysis was consistently linked to the original aim and hypotheses, with recognition that unexpected or weak relationships between data sets are just as valid as strong ones. The findings were connected back to the study's underlying theory, showing awareness of their wider implications.

Students performed less well when the work relied too heavily on computer-generated graphs and used only basic, conventional presentation methods. It lacked spatial analysis and overlooked standard conventions in mapping and graphing. Opportunities for statistical testing were missed, and some methods, like using chi-squared tests for correlation, were incorrectly applied. The data set was too limited for meaningful statistical analysis, and significance testing was not carried out. Instead of coding interview responses, simple transcript tables were presented. Presentation, analysis, and interpretation were treated in isolation, resulting in a descriptive overview without deeper explanations of trends or results. Data connections were not explored, and the wider context was largely ignored.

Area 4 - Conclusions, evaluation and presentation

Commentary

Many investigations were well-organised and clearly structured, often following the order of hypotheses through each section. Strong presentation techniques were used, and some included abstracts. Written communication was generally mature and technically accurate. However, some reports lacked consistency in layout, making them harder to follow.

Ethical considerations were typically acknowledged in evaluations, though often only briefly and without clear connection to the specific context of the study. Risk assessments were commonly included despite not being required in the final submission.

Evaluation sections tended to focus on general improvements like collecting more data. Stronger students offered targeted suggestions, such as refining EQS criteria or adjusting sample sizes, and linked these directly to their findings to show how changes could improve reliability.

Broader context was often weak, with limited comparisons across areas or scales and little attention to future implications. While most students included conclusions, some failed to support them with data or strayed from their original aims. The best reports reflected thoughtfully on their findings, acknowledged uncertainty, and avoided overconfident claims, especially with limited evidence.

Better submissions consistently referred to theory, judged how well their hypotheses were met, and assessed the reliability of their conclusions, demonstrating real insight into the wider meaning of their work.

Figure 20: Conclusions, evaluation and presentation.

Ethical issues

When conducting my practical investigation along the Ainsdale dunes, I encountered some problems which I had to overcome, whilst being as environmentally and ethically considerate as possible.

My first ethical consideration was to ask the Sefton council for permission to conduct my study on the site. This was important as the Ainsdale sand dunes are a National Nature Reserve, holding some of the most important wildlife species in England. Therefore, asking the council for permission to use the dunes and making them aware of our intentions, minimised any potential conflict as I conducted the practical study in a group of around 5 people - which could be seen as disruptive. We were then granted permission from the council to conduct our investigation; subsequently a further set of ethical considerations were taken.



Sefton Council's sign and bin illustrating the importance of picking it up

Once we arrived at the Ainsdale Dunes, we were greeted by 2 signs. These signs illustrated the importance to pick up rubbish, avoid lighting fires and barbeques. I carried the message these signs showed into my actions all throughout my time on the Dunes. I made sure any rubbish such as my food packaging or any waste that was previously left on the dunes was brought with me and disposed of appropriately.

Conveniently, my practical investigation did not require the use of any barbeque or fires so mitigation of this was not a pressing concern. However, if I did spot any of these hazards, I would have quickly reported it to the responsible body and acted in accordance with the Council's expectations.

My investigation required me to move along a transect on the dunes; this action meant that, at times, I had to come off the footpaths. To ensure I acted in a manner that was as environmentally considerate as possible, I only stepped upon natural paths left by wildlife or areas with less vegetation, to minimise my disruptive human impact. Avoiding as much

vegetation as possible and adhering to paths also ensured rare animal species (such as the Natterjack Toad) were protected. Ensuring these species are disrupted as little as possible helps biodiversity flourish safely in the environment and thereby maintains a healthy ecosystem. This is critical for the short, medium and long term protection of the sensitive and balanced eco-community at Ainsdale.

Throughout various parts of my practical I took photographs to record data and evidence. As I was in a public space, I made sure to avoid any members of the public being in any photographs to avoid the invasion of privacy. The sole people captured in any of my photographs were members of my group who helped me with the practical. Under GDPR,



Sefton Council's sign prohibiting the use of barbeques and fires

my peers were fully aware of this and gave consent for them to be in the background of any photographs.

Notably, one of my practical investigations involved measuring the volume of organic matter. In order to do this effectively, I collected soil samples from the dunes and dried them out in a science lab. When collecting my soil samples, I prioritised the need to be environmentally considerate; in practice I removed only a small sample to cause as little disruption as possible to the sand dunes. My investigations also involved the use of a measuring tape to record each location/site along the dunes. When using the measuring tape along the dunes, I noticed that it could potentially get caught within the low-lying vegetation, resulting in disruption. As I noticed my impact, I was very careful with the measuring tape, delicately placing it on top of the shrubs and bushes to protect the environment within which I worked.

Overall, I took all these actions and considerations into account during my practical investigations on the dunes to ensure I was as environmentally and ethically responsible as possible.

The ethical dimension addresses considerations related to data collection practices that may affect individuals and the environment. In this psammosere investigation (figure 20), a broad spectrum of ethical concerns was identified and thoughtfully evaluated throughout the research process.

Figure 21: Conclusions, evaluation and presentation.

ETHICAL DIMENSIONS	
Ethical issue	Actions to ensure that the impacts are minimised
Disturbance in the environment	Before starting fieldwork I will observe where the members of the public are in the surrounding area. In very crowded areas I will ensure to spend as little time as possible disturbing others and disrupting everyday life in the area. Whenever I conduct my methods I will ensure I'm not blocking any pavements etc and that everyone around me is able to continue like normal. This is important to respect those in Windermere.
Confidentiality of personal details	Only necessary data will be gathered and any details gathered from my investigation such as those gathered in questionnaires etc will be entirely confidential and no personal details such as age or address will be gathered. This means the volunteers used in my investigation will remain entirely confidential and I will ensure that they are aware of this before participating. I will also give the participants the option to withdraw from participation at any time and follow procedures in adherence with GDPR guidelines.
Participation and consent	I will ensure that any volunteers in my questionnaires are entirely voluntary and are completely aware of the type of data collected. I will make sure that they only complete the questionnaire if they are entirely happy to do so.
Damage or pollution of study sites	At each site when completing all of my methods I will ensure that the site will be left the same as when I arrived. I will leave behind no form of damage or litter etc and by travelling to the site via an electric car there will even be no air pollution etc to negatively impact the area. The sites will not be affected by investigation and will remain as I found them.

In this submission (figure 21), the student outlines several broad ethical considerations relevant to the investigation and provides explanations of the measures taken to address them appropriately within the research framework.

Figure 22: Evaluations.

Evaluation

This research has provided valuable insights into the impacts of the South Bank regeneration on Hunslet & Riverside; however, several conclusions can be drawn regarding its overall success. Firstly, time constraints limited the comprehensiveness of data collection across the whole ward. The use of a grid-based systematic sampling method ensured good spatial coverage however, the relatively small sample size of only 12 sites per ward for environmental quality and building decay surveys has limited the data's overall representativeness. A larger sample size (e.g. 30+ sites per ward) would have improved this, particularly in areas with uneven regeneration effects across southern areas of Hunslet and Riverside where persistent deprivation may have altered findings. Additionally, the use of a single observer has maintained consistency whilst scoring but introduced subjectivity, particularly for the qualitative observations like environmental quality. Multiple observers could be used to check scoring which will reduce bias and increase the reliability of these findings.

Statistical tests, such as the Mann-Whitney U test and Spearman's rank correlation improved the reliability of the findings, however some results such as persistent deprivation in the south of Hunslet & Riverside contradicted broader conclusions of the whole ward regarding improvements in the socio-economic conditions. This raises questions about the accuracy of certain aspects of the investigation. Temporal constraints are also likely to have affected the validity of the data. Collecting data over just two days in August ensured consistency in findings but did not account for potential seasonal variations or long-term changes. For example, higher litter levels and traffic in the summer is likely due to greater tourism which may have negatively influenced environmental quality scores at the time of data collection. A longitudinal study of conducting surveys across different seasons, would assess long-term variations. The reliance on secondary socio-economic data, such as census and index of multiple deprivation records has provided useful context for the study. However, Census data is only updated every ten years meaning that more recent demographic changes haven't been represented in the findings, this gave a relatively small insight into the conditions within the ward, limiting the ability to fully relate these changes to the regeneration attempts. Conducting resident questionnaires or business owner interviews could have provided more in depth and up to date information of gentrification and retail changes. Despite these limitations, the investigation has successfully achieved its original aims, evaluating the impacts of regeneration on retail diversity, environmental quality, and socio-economic characteristics. These findings reflect broader patterns of regeneration, as seen in Birmingham's Jewellery Quarter, where economic developments typically create unequal benefits, highlighting the challenges of balancing economic development whilst attempting to address social needs.

Overall, the study's limited sample size, exclusion of smaller businesses, and reliance on secondary data has narrowed the investigations' ability to explain the full impacts of the South Bank regeneration. Potential future research could address these limitations by increasing the sample sizes for better spatial representation, conduct studies across the year to account for seasonal changes, and incorporate qualitative data through interviews and questionnaires with residents to provide insights into community perspectives. Multiple control areas across Leeds could be used to offer a broader understanding of how regeneration impacts differ across places. By addressing these limitations, future studies are likely to offer a more balanced assessment of the impacts of urban regeneration.

Figure 22 demonstrates a thorough grasp of the main constraints of the investigation and shows awareness of the wider context. Several feasible suggestions were made for improvement and further research.

Figure 23: Evaluations.

Evaluation

This study has shown some clear summaries of how the regeneration and sustainability of an area can significantly impact it. Firstly, it was difficult to survey the whole area due to time, however I think results such as traffic counts could have been improved by taking multiple counts at the same place and getting an average. Getting one set of results was good but it may have hindered the accuracy of the results slightly. A significant limitation to this data was the football game that was carried out on the same day of research. This may have influenced the results and may point to a slight inaccuracy. If the football game wasn't carried out the results still should have pointed to the same conclusion, however the results would have been more prominent. Deciding to do a questionnaire to get an insight into the social aspects of the area was incredibly useful. It allowed me to get an understanding of how people use these methods daily and what they thought of them. Providing more questions to help get a better understanding may have been good but I think leaving the questionnaire pretty much open ended allowed people to really talk about their personal experiences and what they like and dislike about the area. These results were collected by local people which potentially could be biased due to them living in the area, but I think the results show honesty and not all responses were necessarily positive. Finally, I think my research into economic activity was fairly accurate. Not only were these points backed up through the questionnaire but also through secondary research. To improve the research into the economic activity in the area more census data could have been found and this would therefore have helped further back up my response. Overall I think my data collection methods were successful in analysing regeneration and sustainability within the area. I think it's also important to consider there's been a lot of change within Salford Quays and many more questions could be asked, particularly about their future aims with sustainability and the continuation of regeneration.

By contrast, figure 23 shows how the evaluation focuses in a more limited way on some of the practical limitations affecting the investigation and touches on some possible improvements. It shows partial evaluation and reflection on the fieldwork investigation.

Figure 24: Links to the wider context of the study.

Wider context

High streets are powerful and dynamic, constantly an altering environment with building units and shops opening and closing down. This project explores the current Swindon Old Town High Street and Swindon New Town High Street, and critically compares them. However, this project was also aimed to help other research groups to benefit both areas. For example, Swindon Borough Council conducted a survey in 2023 to 6,800 households in Swindon regarding how they feel about the area, and what could be done to improve it. Therefore, this proves that the data and my project as a whole may not be relevant to just me, but to the residents and people of Swindon Town and the Town Council who are evidently keen to understand and comprehend the perception of Swindon and the high streets among the Town, and how they can improve these respectively.

Furthermore, my project is representative of issues elsewhere in the UK. For example, Public Health England and others have highlighted that outlets selling fast food have clustered in areas of deprivation (Health, 2018). This shows that problems occurring in mainly Swindon New Town is representative of problems being experienced in other parts of England, as per my data shows. Therefore, my data can be used to support these theories that High Streets up and down England are suffering from similar problems, which can hopefully lead to action in preventing these issues from reoccurring constantly.

Relatively few submissions explicitly consider the wider implications of the study, part of the descriptor for 4b evaluation. Figure 24, an investigation of retail environments in Swindon attempts to show the results relate to the wider context(s).

Figure 25: Links to the wider context of the study.

Links to Wider Context

Overall this research has helped to show many different factors in relation to soils within two different ecosystems. The research has explored how metrics for soil quality such as infiltration rates, percentage of organic matter and soil pH vary both within a single environment and between different environments. This could have further potential for impact within other fields.

This research study was conducted within two different environments in North-Wales that were located 4.17 km apart, while this study is directly applicable to these two environments the range of data collected could have some applicability outside this region with potential relevance throughout the UK to form at least an initial baseline expectation for how the two ecosystems of ancient woodland of afforested pine plantation could behave if the same experiments were carried out in these locations, while there are some regional specific differences in this research study, I think the general conclusions would be applicable in many locations around the UK.

However this research may not be best suited for other ecosystems that are not part of the British isles as the unique climate of the UK and British Isles may lead other research studies with a similar scope to achieve different results in different geographical locations internationally.

Some possible applications of this knowledge could be used to help inform decision making in terms of creating new afforested plantations or any developments on plantation sites. This could be used to show how simply planting trees may not be wise as they can have negative impacts on other factors that make up the environment and this research could help to inform wise decisions in regards to new afforestation efforts and how they could influence soil quality. There are also some possible links to construction within these environments. Overall this helps new developments to inform about how soil quality can be impacted by human activities such as planting a pine woodland and whether the negative impacts on soil quality can be balanced by its benefits.

Based on this research possible next steps could include sampling more sites around the UK to identify possible larger regional trends. I could also complete this research on other environments to better assess the extent of changes by planting a pine woodland on a heathland ecosystem for example. One other major next step could be to also track these changes temporally from the initial introduction of a pine plantation through to maturity to identify how these measures of soil quality change over time to better understand the specific impacts that humans have upon soil quality. Overall helping to better understand potential afforestation strategies and their specific impact upon the environment.

Figure 25 makes several pertinent points linked to the wider context in a study of soil properties in natural forests at climatic climax compared with those in forested plantations in North Wales.

Figure 26: Conclusions.

Conclusion

1. Hunslet & Riverside is dominated by chain stores, classifying it as a 'clone town' which has been influenced by the South Bank regeneration.

The findings from the clown town survey confirm that Hunslet & Riverside fits the definition of a 'clone town', with chain stores dominating the retail landscape (72%). This aligns with other theories of property focused regeneration, where rising rental costs reflect the growing appeal to national retailers at the expense of displacing independent businesses. Areas like Leeds Dock and Crown Point Retail Park have seen the most significant changes, reinforcing the link between regeneration and retail homogenisation. However, variations within the ward are very likely due to smaller streets and residential areas which were not directly surveyed, and may still maintain local business diversity, suggesting that retail transformation is not the same across the ward. Despite this, the overall trend and data supports this hypothesis that the South Bank regeneration has likely reduced retail diversity and led to the classification of Hunslet & Riverside as a 'clone town.'

2. The South Bank regeneration has led to a significant increase in environmental quality in the ward of Hunslet and Riverside compared to Bramley.

Evidence from this research supports this hypothesis, suggesting that the South Bank regeneration has improved environmental quality in Hunslet and Riverside compared to Bramley. Targeted regeneration sites within Hunslet and Riverside, such as those near Hunslet Park (church street, site 6), scored much higher due to benefiting from investments into green spaces and public infrastructure. However, the impacts of the regeneration remain uneven as there is also notable variations in environmental quality within Hunslet & Riverside itself. Sites near major roads, like the A61 (site 7), suffer from greater pollution due to traffic and lower environmental quality scores. Meanwhile, Bramley, which has lacked similar regeneration efforts, showed consistently lower environmental quality, reinforcing the impact of targeted investment. This suggests that while the regeneration efforts have significantly improved environmental quality in Hunslet & Riverside, the benefits have been unevenly distributed across the ward.

3. The South Bank regeneration has resulted in an influx of more affluent residents, accelerating gentrification in the area, consequently increasing property value compared to Bramley.

Based on the evidence collected above, there is clear indication that the socio-economic and demographic characteristics within Hunslet & Riverside are shifting, likely due to the South Bank regeneration. Gentrification is accelerating, which is driven by rising property values, housing quality and more affluent residents. IMD data also reflects these changes, with some areas across the ward showing significant improvements in deprivation rankings since the regeneration efforts, for example, northern areas of the ward, particularly Leeds Dock (site 9) has seen the most pronounced demographic shifts. In contrast, southern parts of the ward remain much more deprived, highlighting the uneven impacts of this regeneration, with considerable variations observed both within and between the two wards. Comparatively, Bramley, which has not undergone regeneration has seen little to no socio-economic change, reinforcing the link between targeted regeneration and demographic changes, thereby supporting this hypothesis.

Overall conclusion

Based on the evidence collected from a wide range of criteria, it can be concluded that the South Bank regeneration has had a significant but unequal distribution of impacts across the Hunslet and Riverside ward. While improvements in environmental quality and changes to commercial activity are most visible in northern parts of the ward such as Leeds Docks, southern parts have seen fewer benefits, facing persistent challenges like traffic pollution and lower environmental quality. In comparison, the unregenerated control ward of Bramley has consistently experienced minimal changes in both the environmental and building quality, showing the disparities between regenerated and non-regenerated areas, highlighting both the potential benefits and mainly social drawbacks of regeneration projects.

Figure 26 drawn from an investigation into the impacts of a regeneration scheme, was structured around individual hypotheses. This approach allowed each mini conclusion to remain closely aligned with the original aims and hypotheses of the study, while also contributing to a coherent and comprehensive summative conclusion. Thorough ability to write a coherent analysis of fieldwork findings to answer a specific geographical question.

Figure 27: Conclusions.

Conclusions

Overall, I believe the sea walls at Walton on the Naze are extremely effective at protecting the coastline. The sea wall at Walton is one of the most expensive kinds - it curves and acts as an immediate barrier to significantly reduce energy of the waves hitting the coastline. The wave hits the wall, slopes round to reduce the energy and then slopes back round dispersing the wave. This reduction in energy significantly reduces coastal erosion. Overall, I believe the groynes at Walton on the Naze are partially effective in protecting the coastline, a groyne is a low wall or sturdy timber barrier built out into the sea from a beach to monitor erosion and drifting. Groynes are used in the north side of the Naze and due to the most valuable part of the cliff being protected by crag walk, Walton has placed wooden groynes along the entire beach to protect against longshore drift. Unfortunately, without the proper maintenance, the groynes become damaged, meaning that they cannot be used as effectively. This is what we are seeing with the groynes at Walton on the Naze.

By contrast, the conclusion in [figure 27](#) offers a general summary of the report's findings but lacks clear evidence base and does not systematically address the sub-questions established at the outset of the investigation.

Area 4 – Summary

Students performed best when they presented a well-structured, clearly written report with page numbers, an appendix, and a bibliography. These reports used a variety of presentation techniques and were accurate in both grammar and content. High-achieving students critically reviewed their methodology, suggested improvements, reflected on strengths and weaknesses, and identified ideas for future research. They also considered ethical aspects of data collection, applied geographical concepts to their analysis, and explained any unexpected findings. The strongest work effectively combined evidence to draw conclusions that were clearly linked to their original aims.

Students tended to perform less well when key stages of the enquiry process were omitted, such as the evaluation of the investigation, and when the range of presentation techniques used was narrow. Over-reliance on the appendix often weakened the clarity of the main report. Evaluations that focused only on logistical issues or claimed the investigation was flawless lacked critical depth. Ethical concerns were sometimes confused with risk assessments, and conclusions were either vague, repetitive, or unsupported by evidence. In some cases, students failed to present a clear summative conclusion or made sweeping claims not justified by their findings.

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