

Title page

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Portfolio

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Part C – Project Planning Report

1. Introduction

The closure of the central hub of a major metropolitan city in the United Kingdom has led to considerable disruptions for passenger travel, freight transportation and local economic activity. According to a structural survey, the facility, which has been operating for more than forty years, fails to meet the current safety and accessibility standards. As a result, local authorities have initiated an urgent regeneration programme aimed at restoring transport capacity while supporting environmental sustainability, digital infrastructure and inclusive design.

This project management plan focuses on the redevelopment of the central transport hub as the preferred project option. Redevelopment has been chosen due to its ability to address the underlying causes of the disruption by upgrading old infrastructure, enhancing access for everybody and incorporating advanced digital transport networks. According to the Project Management Institute (2021), effective project management provides a structured framework for planning, scheduling, resource allocation and risk control throughout the project life cycle. The project is expected to deliver long-term economic, social and environmental benefits while supporting the city's strategic transport objectives.

This report presents a project management plan for the redevelopment of the central transport hub. It applies a range of project management tools, including a Work Breakdown Structure (WBS), Quad Chart, Gantt Chart, stakeholder analysis, resource allocation planning, and risk analysis. Therefore, the report provides a structured plan for managing the project from initiation through to completion while addressing the needs of relevant stakeholders and minimising potential project risks.

2. Project Description

The proposed project involves the comprehensive redevelopment of a central transport hub within a major metropolitan city in the United Kingdom. The current transport hub has been closed following a structural inspection that identified significant safety concerns and confirmed that the infrastructure no longer meets current accessibility standards. As the hub

was playing a crucial role in the functioning of the city transport system as well as rail, bus and freight logistics, the closure of the transport hub has caused losses in the city's economy and decreased the confidence of citizens in the transport system of the city. The redevelopment project aims to replace the ageing infrastructure with a modern, safe and sustainable transport hub that supports future transport demands.

The redevelopment option has been chosen because it addresses the underlying causes of the transport disruption rather than providing a temporary solution. While there could be other strategies, such as building a temporary multimodal transport hub or digital modernisation, which could provide a quick-fix solution to the disruption problem, they would not offer a long-term solution for the weaknesses of the current transport hub. Redevelopment provides a long-term solution by improving infrastructure resilience, increasing transport capacity and integrating digital technologies with sustainable design principles. This approach also aligns with the local authority's objective of creating an inclusive transport system that supports economic growth and environmental sustainability.

There are various important objectives that the project aims to achieve. These include the restoration of transport activities, ensuring accessibility for individuals with disabilities, and implementing smart transport technologies. The project also aims to reduce environmental impacts through sustainable construction practices while ensuring delivery within the approved budget and programme schedule. According to the Project Management Institute (2021), the project objectives are very important as they serve as an indicator of project success and help make informed decisions. It is anticipated that achievement of these objectives will help to enhance transport connectivity, improve user satisfaction and contribute to long-term regeneration of the city.

Table 1 presents the SMART objectives that will guide project delivery and enable performance to be monitored throughout the redevelopment programme.

Table 1 SMART Objectives

Objective	Specific	Measure	Target Date
Improve accessibility	Install lifts and ramps	100% accessibility compliance	December 2028
Increase safety	Replace unsafe infrastructure	Zero major safety defects	December 2028

Introduce digital ticketing	Smart ticketing system	95% operational reliability	September 2028
Reduce emissions	Sustainable construction	30% reduction in carbon emissions	December 2028

3. Project Scope

Project scope defines the work required to achieve project success and clearly outlines the boundaries between what is to be included in the project deliverables and what should not be. Scope management is necessary because it helps achieve an understanding of the project goals and objectives and minimises the likelihood of unnecessary changes to the project. According to the Project Management Institute (2021), defining the scope of the project makes it possible for managers to control costs and schedules and ensure that the deliverables are in line with the stakeholders' needs. Likewise, Althiyabi and Qureshi (2021) state that a lack of scope definition may lead to scope creep and increased project costs and delays, highlighting the importance of establishing clear scope boundaries from the outset.

The scope of the project comprises the entire redevelopment of the central transport hub to create a modern and sustainable transport facility that is both safe and secure. The main deliverables under the project include demolishing any structure considered structurally unsafe, construction of new rail and bus exchange facilities, and provision of step-free access via lifts and ramps. The project includes improvements to passenger waiting areas together with digital ticketing machines, passenger information displays and security systems. Also, the implementation of ticketing machines, passenger information systems and security systems. Energy-efficient construction techniques, technologies and materials will also be included in the process of construction to help achieve the environmental goals set by the city. In addition, the project includes system testing, staff training and the final handover of the completed transport hub to the local authority.

To have good project control, several activities fall outside the project's scope. This includes the building of additional railway lines in addition to those in the current transportation corridor, the broader development of city transportation and business buildings that have nothing to do with providing transport services and any infrastructure developments that may arise in the future outside the proposed re-development strategy. Clearly defining these

boundaries will help prevent scope creep, ensure efficient resource allocation and improve the likelihood of delivering the project on time, within budget and to the required quality standards.

Table 2 summarises the activities included within the project scope and identifies those that fall outside the approved boundaries.

Table 2 Project Scope

In Scope	Out of Scope
Demolition of unsafe structures	Construction of new railway lines
Construction of a new transport hub	City-wide transport network expansion
Accessibility improvements (lifts, ramps)	Commercial property developments
Digital ticketing system	Retail developments outside the hub
Passenger information displays	Future transport projects
Security and CCTV systems	Motorway construction
Sustainable construction methods	Projects beyond the approved budget
Testing, commissioning and handover	Unrelated urban regeneration projects

4. Work Breakdown Structure (WBS)

To organise the project into manageable phases, a Work Breakdown Structure (WBS) has been developed. These are illustrated in Figure 1 below. WBS depicts the major deliverables of the project along with the activities needed to be completed within each phase. According to Cerezo-Narváez et al. (2020), integrating a WBS with a construction project management improves project organisation and supports better cost and project control. The WBS provides a structured framework for planning, scheduling and resource allocation throughout the project life cycle. (Project Management Institute, 2021).

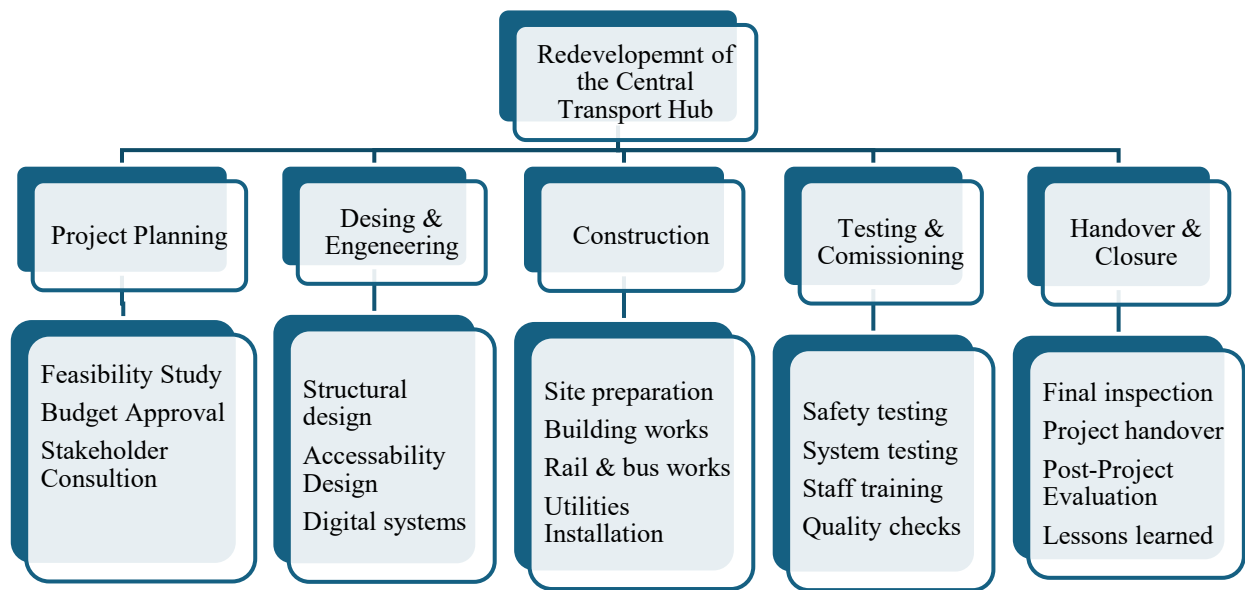


Figure 1. Work Breakdown Structure (WBS) for the Redevelopment of the Central Transport Hub.

4.1 Quad Chart

To provide stakeholders with a concise overview of the proposed redevelopment project, a Quad Chart has been developed. The Quad Chart summarises the project's objectives, schedule, resource requirements, and key risks, enabling stakeholders to quickly understand the project's scope and implementation strategy. According to the Project Management Institute (2021), the use of visual tools in project management supports planning, communication, and decision-making throughout the project's lifecycle. Figure 2 below shows the Quad Chart of the redevelopment of the central transport hub.

Project Objectives  • Improve passenger safety and infrastructure reliability • Improve accessibility for all users • Introduce smart transport technologies • Reduce the project's carbon footprint • Restore full transport operations	Project Timeline  • Project Duration: 42 months • Planning & Design: 0-6 months • Approvals & Funding: 6-12 months • Construction: 12-36 months • Testing & Commissioning: 36-42 months • Project Handover: Month 42
Resources Required  • Project manager • Civil & structural engineers • Architects • Construction contractors • Digital systems specialists • Environmental consultants • Government funding • Project budget	Key Risks  • Budget overruns • Construction delays • Supply chain disruptions • Health & safety risks • Environmental compliance issues • Disruption to transport services

Figure 2. Quad Chart

The Quad Chart provides a quick overview of the proposed redevelopment program by summarising its goals, schedule, required resources, and risks in a single graphic. This enables stakeholders to quickly understand the project's priorities, expected duration, resource requirements and the potential challenges before examining the more detailed project plan. Figure 2 shows the Quad Chart of the transport hub's redevelopment programme.

4.2 Gantt Chart

The Gantt Chart is one of the widely used project management tools through which project activities, their durations, sequencing and dependency can be presented graphically to ensure effective planning and control of the project. It enables project managers to schedule tasks, monitor progress, allocate resources and identify potential delays throughout the project

lifecycle (Project Management Institute, 2021). Similarly, Krcheva et al. (2023) suggest that the Gantt chart is one of the frequently used planning and controlling tools because they clearly present project activities, timeline, resources and risks, allowing managers to track the progress of the project effectively. For the redevelopment of the central transport hub, the Gantt chart provided the stakeholders with an overview of the schedule and sequencing of key project activities. Figure 3 shows the Gantt chart of the proposed project.

ID	Project Activities	M1-3 (0-3 months)	M4-6 (4-6 months)	M7-9 (7-9 months)	M10-12 (10-12 months)	M13-18 (13-18 months)	M19-24 (19-24 months)	M25-30 (25-30 months)	M31-36 (31-36 months)	M37-42 (37-42 months)
1	Project Initiation									
2	Planning& feasibility									
3	Detailed design									
4	Approval& funding									
5	Procurement									
6	Site preparation									
7	Construction									
8	Smart technology									
9	Testing									
10	Handover& closure									

Figure 3. Gantt Chart

5. Stakeholder Involvement

Stakeholder involvement is essential to the successful delivery of the redevelopment project because it promotes collaboration, reduces risks and supports effective decision-making throughout the project lifecycle. The project involves a wide range of stakeholders, including local authorities, passengers, transport operators, local businesses, construction contractors, environmental agencies and accessibility groups, each with different levels of interest and influence. According to Bourne (2016), effective stakeholder management requires continuous engagement and the ongoing management of stakeholder expectations to achieve successful

project outcomes. Table 3 identifies the key stakeholder involved in the project and outlines their roles, level of influence and appropriate engagement strategies.

Table 3 (continued)

Table 3. Stakeholder Analysis

Stakeholder	Role	Level of Interest	Level of Influence	Engagement Strategy
Local Authority	Project sponsor responsible for approval, funding and governance	High	High	Monthly progress meetings, reports and strategic decision-making
Project Manager	Plans, coordinates and monitors the project	High	High	Daily communication, meetings and performance monitoring
Construction Contractors	Deliver construction activities safely and on schedule	High	High	Weekly site meetings, progress review and safety briefings
Transport Operators	Ensure transport services continue during development	High	Medium	Regular operational planning meetings and service coordination
Local Businesses	Minimise disruption to business operations	Medium	Medium	Consultation meetings, newsletters and project updates
Passenger and Public	End users affected by the redevelopment	High	Low	Public consultations, travel updates, website and social media announcements

Environmental Agencies	Ensure compliance with environmental legislation	Medium	High	Environmental reports, inspections, and compliance meetings
Accessibility Groups	Advice on inclusion	High	Medium	Design workshops and consultation throughout the project

As shown in Table 3, local authorities, the project manager, construction contractors, and environmental agencies have the highest level of influence because they are responsible for project governance, decision-making, regulatory compliance, and successful project completion. The project manager and construction contractors require the most frequent communication because they coordinate and undertake the project's day-to-day activities. Although local businesses and the public have relatively low levels of influence, they are considered important stakeholders as they are directly affected by construction activities and the temporary disruption to transport services. Successful stakeholder management helps project managers to manage stakeholders' expectations, improve collaboration and contribute to successful project outcomes (Eskerod and Jepsen, 2013).

6. Resource Allocation

Resource allocation is essential to ensure that labour, equipment, materials, and financial resources are used efficiently throughout the project life cycle. Effective allocation of resources helps minimise delays, control costs and improve project performance. As stated by He et al. (2021), appropriate resource allocation is critical in construction projects because resources are often limited and must be distributed efficiently to achieve project objectives.

Table 4. Resource Allocation

Resource	Purpose	Allocation
Project Manager	Project coordination and monitoring	Full project duration
Civil Engineers	Design and technical oversight	Planning and construction phases
Construction Contractors	Site works and building activities	Construction phase
Smart Technology Specialists	Installation of digital systems	Smart technology phase
Environmental Consultants	Compliance and sustainability	Throughout the project
Funding/Budget	Project financing	Entire project lifecycle

As shown in Table 4, these resources are essential for the successful delivery of the project. Human resources, financial investment, specialist equipment and technical expertise enable each phase of the redevelopment to be completed efficiently while maintaining quality, safety and compliance with project objectives.

7. Risk Analysis

The aspect of risk management forms a key component of project management due to its ability of the practice to assist in identifying, assessing and managing risks that may impact the objectives of the project. Construction projects are exposed to a wide range of risks, including financial, environmental, operational and safety risks. According to Tepeli et al. (2021), risk management contributes to the success of a project through the identification of potential risks and the implementation of suitable mitigation strategies. Therefore, risk management is critical for ensuring the successful delivery of the redevelopment project.

Table 5. Project Risk Register

Risk	Likelihood	Impact	Mitigation
Budget overruns	High	High	Regular budget reviews and a contingency fund
Construction delays	High	High	Detailed scheduling and progress monitoring
Health & Safety incidents	Medium	High	Safety training and regular inspections
Environmental issues	Medium	Medium	Environmental monitoring and compliance
Transport disruption	High	Medium	Phased construction and public communication
Technology integration issues	Medium	Medium	Early testing and specialist support

Table 5 identifies the major risks associated with the redevelopment project together with their likelihood, potential impact and mitigation measures. Budget overruns and construction delays represent the highest project risks because they have the greatest potential to affect project cost, schedule and stakeholder confidence. Health and safety risks require continuous monitoring to ensure the protection of the stakeholders involved, as well as the environment, to comply with the legal requirements. By identifying these risks at an early stage, the project team can implement proactive mitigation strategies that reduce uncertainty and improve the likelihood of successful project completion (Tepeli et al., 2021).

8. Conclusion

The redevelopment of the central transport hub will not only ensure increased passenger safety, accessibility, infrastructure reliability and environmental sustainability but also ensure efficiency in transport services. To attain these goals, effective planning and careful management are needed throughout the entire process of the redevelopment.

This report has demonstrated how project management tools, including the project scope, Work Breakdown Structure (WBS), project objectives, Gantt chart, stakeholder involvement, resource allocation and risk management, contribute to the successful planning and delivery of the project. These tools have provided an organised way of carrying out activities, managing resources and even minimising risks.

Overall, effective project management increases the likelihood that the redevelopment will be completed within the planned time, budget and quality requirements while meeting stakeholder expectations. Careful planning, continuous monitoring and proactive decision-making are essential for ensuring the long-term success of the project.

Part B: Reflection on Feedback

1. Introduction

This reflective report evaluates the feedback from the tutor as well as peers regarding my project management poster concerning the redevelopment of the central hub. The feedback highlighted several strengths of the poster, including its clear structure, visual presentation, and thorough coverage of important project management elements such as project scope, stakeholders, risks and strategic value. However, it also noted areas for improvement, particularly regarding the use of project management tools, the measurability of the project objectives, and the depth of critical analysis. This reflection will discuss the main strengths identified, examine areas for improvement and explain how I will utilise the feedback to improve the final project management plan.

2. Key strengths

The feedback identified several strengths within my project management poster. One significant strength was the clear structure and visual presentation. The layout made it easy to present information logically, helping the audience grasp the purpose and goals of the proposed redevelopment of the central transport hub. Effective communication is important in project management as it enables stakeholders to understand project objectives and key information.

The feedback also highlighted the strong project rationale. The poster effectively justified the need for redevelopment by addressing issues such as safety, accessibility, efficiency and economic concerns. This demonstrated my ability to identify the benefits that could be achieved through effective implementation.

Moreover, the feedback highlighted the comprehensive coverage of key project management components, including the aims, objectives, scope, stakeholders, risks, strategic value and project timeline. The inclusion of scope boundaries and identification of stakeholders demonstrated my understanding of project planning and scheduling.

Finally, the strategic value section successfully linked the project to economic growth, social inclusion, environmental sustainability and long-term urban development. The discussion of risk and trade-offs also showed an awareness of the challenges involved in balancing

competing project constraints. Overall, these strengths provided a solid foundation for the final project management plan.

3. Areas for improvement

Although the feedback was mostly positive, several areas needed improvement. One area for improvement is the project objectives, which could be made more measurable through the inclusion of specific performance indicators and target dates. Further, the feedback highlighted the importance of using additional project management tools, such as stakeholder matrices and risk heat maps, to demonstrate a deeper understanding of project management knowledge and practice. I intend to include these tools in the final project management plan and provide a more detailed analysis of project risks and trade-offs. These improvements will help strengthen decision-making, improve project monitoring and foster a deeper understanding of project principles.

4. Applying Feedback to the Final Project Management Plan

The feedback received has provided valuable guidance for improving the final project management plan. To address the areas identified, I will revise the project objectives by including measurable targets and completion dates to enable more effective monitoring of project performance (Doran, 1981). I will also apply project management tools such as a stakeholder matrix and a risk heat map in evaluating the stakeholders and project risks, respectively (Project Management Institute, 2021). In addition, I will strengthen the analysis of risks and trade-offs by considering their potential impact on project delivery and decision-making. These improvements will enhance the quality of the final project plan and demonstrate a stronger application of project management principles.

5. Conclusion

Overall, applying feedback has strengthened both the quality of the project management plan and my understanding of how project management tools can be used to support successful project delivery.

References

The following reference list includes sources cited through Part A (Project Management Poster), Part B (Reflection on feedback) and Part C (Project Planning Report).

Althiyabi, T. and Qureshi, M., 2021. Predefined project scope changes and its causes for project success. *International Journal of Software Engineering & Applications (IJSEA)*, 12(2/3).

Belcher, E.J. and Abraham, Y.S., 2023. Lifecycle applications of building information modeling for transportation infrastructure projects. *Buildings*, 13(9), p.2300.

Bıyık, C., Abareshi, A., Paz, A., Ruiz, R.A., Battarra, R., Rogers, C.D. and Lizarraga, C., 2021. Smart mobility adoption: A review of the literature. *Journal of open innovation: Technology, Market, and Complexity*, 7(2), p.146.

Bourne, L., 2016. *Stakeholder relationship management: a maturity model for organisational implementation*. Routledge.

Cerezo-Narváez, A., Pastor-Fernández, A., Otero-Mateo, M. and Ballesteros-Pérez, P., 2020. Integration of cost and work breakdown structures in the management of construction projects. *Applied sciences*, 10(4), p.1386.

Doran, G.T., 1981. There's a SMART way to write managements's goals and objectives. *Management review*, 70(11).

Eskerod, P. and Jepsen, A.L., 2016. *Project stakeholder management*. Routledge.

He, W., Li, W. and Wang, W., 2021. Developing a resource allocation approach for resource-constrained construction operation under multi-objective operation. *Sustainability*, 13(13), p.7318.

Karimpour, R., Ballini, F. and Ölcer, A.I., 2020. Port-city redevelopment and the circular economy agenda in Europe. *European Port Cities in Transition: Moving Towards More Sustainable Sea Transport Hubs*, pp.53-71.

Krcheva, V., Djidrov, M., Srebrenoska, S. and Krstev, D., 2023. Gantt chart as a project management tool that represents a clutch hub manufacturing process. *Balkan Journal of Applied Mathematics and Informatics*, 6(2), pp.67-78.

Makarova, I., Serikkaliyeva, A., Gubacheva, L., Mukhametdinov, E., Buyvol, P., Barinov, A.,

Shepelev, V. and Mavlyautdinova, G., 2023. The role of multimodal transportation in ensuring sustainable territorial development: Review of risks and prospects. *Sustainability*, 15(7), p.6309.

Ndhlovu, E., Mhlanga, D. and Duri, B., 2025. Decarbonising urban transport: an overview of electric vehicles, public transport, and sustainable infrastructure in achieving net-zero emissions. *Discover Global Society*, 3(1), p.53.

Project Management Institute (2021) *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*. 7th ed. Newtown Square, PA: Project Management Institute.

Quiroz Villanueva, M.J., Guglielmi, F., De Fabiis, F. and Coppola, P., 2025. Social and Economic Impacts of Transportation Multi-Modal and Multi-Service Hub Development. *Sustainability*, 17(4), p.1767.

Sharma, S.N. and Dehalwar, K., 2025. A systematic literature review of transit-oriented development to assess its role in economic development of city. *Transportation in Developing Economies*, 11(2), p.23.

Tepeli, E., Taillandier, F. and Breysse, D., 2021. Multidimensional modelling of complex and strategic construction projects for a more effective risk management. *International journal of construction management*, 21(12), pp.1218-1239.

de la Torre, R., Corlu, C.G., Faulin, J., Onggo, B.S. and Juan, A.A., 2021. Simulation, optimization, and machine learning in sustainable transportation systems: Models and applications. *Sustainability*, 13(3), p.1551.

Appendix A: Project Management Poster

