



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

LCLM5003:
Project management

Title: A Project Portfolio

Course: BA (Hons) Leadership and Management Skills for the
Workplace

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Lecturer: Rexon Nting

1. Introduction for Part A

This project proposal forms Part A of the LCLM5003 Project Management assessment and introduces the initial idea for redeveloping Manchester's central transport hub. The hub was closed suddenly due to serious structural problems, which caused major disruption for commuters, local businesses, and the wider community. Because of this situation, the city now needs a modern, safe, and sustainable transport solution that supports future growth and meets environmental targets.

The aim of this proposal is to present a clear and straightforward concept for how the transport hub can be redesigned to support net-zero goals while improving everyday mobility. The project focuses on practical improvements such as electrifying public transport, adding smart mobility features, and creating better walking and cycling routes. These ideas are intended to help the city reduce emissions, improve accessibility, and strengthen transport reliability.

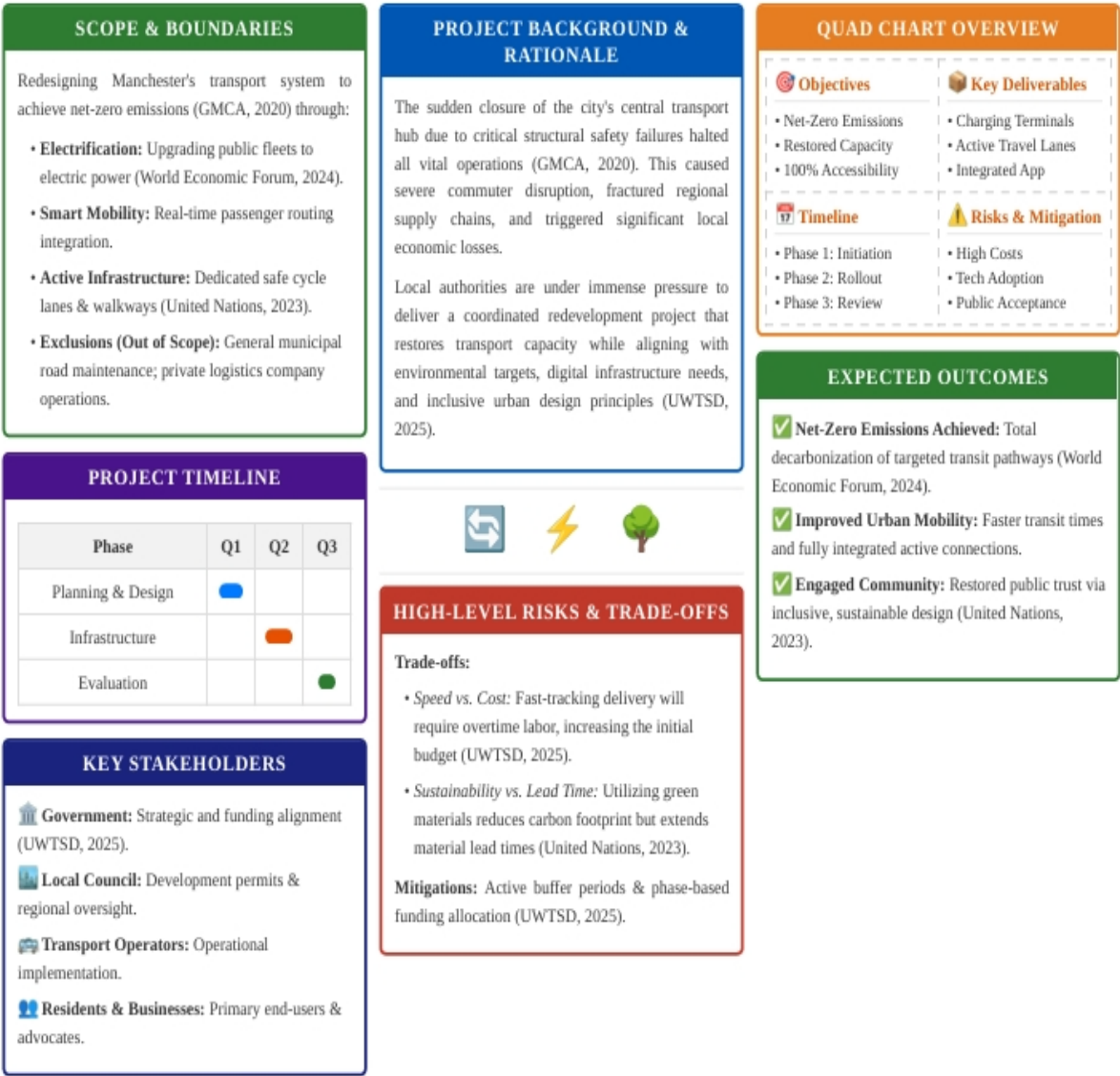
Figure 1 provides a visual pitch of the proposed project. The poster highlights the background, objectives, scope, stakeholders, risks, and expected outcomes in a simple and easy-to-understand format. The written sections that follow expand on the information shown in the poster and explain the reasoning behind the proposed approach. Together, the poster and the accompanying explanation create a clear foundation for the more detailed Project Management Plan that will be developed in Part C.

Figure 1. *Project Proposal Poster: Sustainable Redesign to Meet Net - Zero Transport Objectives.*

LCLM5003: PROJECT MANAGEMENT

Title: Component A Poster (Redesign Proposal)
Course: BA (Hons) Leadership and Management Skills in the Workplace
Student: Vasyi Kovenia (ID: 2422023) | Lecturer: Rexon Nting

SUSTAINABLE REDESIGN TO MEET NET-ZERO TRANSPORT OBJECTIVES



Key Academic & Industry References

GMCA 2020, Manchester Transport Strategy 2040, Greater Manchester Combined Authority, Manchester. • United Nations 2023, Sustainable Development Goals Report 2023, United Nations, New York. • World Economic Forum 2024, The Future of Urban Mobility: Pathways to Net-Zero, WEF, Geneva. • UWTSD 2025, Project Management Module Handbook (LCL5AM530), University of Wales Trinity Saint David Business School, Swansea.

The poster above summarises the initial project proposal developed for Part A. The following sections expand on the key elements presented in the visual format.

2. Project Proposal for Part A

The redevelopment of Manchester's central transport hub is urgently required after its sudden closure due to serious structural safety failures. This event caused major disruption for commuters, local businesses, and essential services, highlighting how dependent the city is on reliable transport infrastructure. At the same time, Greater Manchester is working toward long-term net-zero targets, which means that any new transport solution must be modern, sustainable, and aligned with environmental goals (GMCA, 2020). For these reasons, the project aims to introduce a safer, cleaner, and more efficient transport hub that supports both current needs and future growth.

The proposal focuses on practical improvements that can help the city reduce emissions and improve mobility. These include electrifying public transport fleets, adding smart mobility features such as real-time travel information, and creating better walking and cycling routes. Such interventions support wider sustainability objectives promoted in international frameworks, including the United Nations' guidance on sustainable urban development (United Nations, 2023). They also reflect industry recommendations for future transport systems that combine digital tools with low-carbon infrastructure (World Economic Forum, 2024).

The project's main objectives are to restore transport capacity, improve accessibility for all users, support net-zero goals, and strengthen connections between different modes of travel. To achieve these aims, the project will deliver several key outputs, including new electric charging terminals, upgraded active travel routes, improved hub facilities, and a smart mobility app that helps passengers plan their journeys more efficiently. These deliverables are designed to make the transport hub safer, more inclusive, and more environmentally friendly.

Several stakeholders are involved in this redevelopment. The government and local council provide funding and approvals, transport operators manage daily services, and residents and businesses rely on the hub for mobility and economic activity. Environmental groups also play a role in ensuring that the project meets sustainability standards. Balancing stakeholder needs requires careful consideration of trade-offs. For example, delivering the project quickly may increase costs, while using sustainable materials may extend procurement times. Introducing new digital tools may also require public adaptation and training. These

trade-offs must be managed to ensure that the project remains realistic, affordable, and aligned with long-term goals.

Several risks may affect the project. Budget overruns could occur due to the cost of sustainable materials and new technologies. Supply chain delays may slow down construction, especially for electric equipment with long lead times. Public acceptance of new digital tools may vary, and regulatory approvals could introduce further delays. Technical integration between electric fleets, charging systems, and digital platforms also presents challenges. These risks will be addressed through mitigation strategies such as buffer periods, phased funding, and early stakeholder engagement, as recommended in project management guidance (UWTSD, 2025).

Part B: Reflection on Feedback

This section provides a reflection on the feedback received during the presentation of the Part A proposal poster for the Sustainable Redesign to Meet Net-Zero Transport Objectives project. The lecturer and peers reviewed the poster and gave helpful comments on both strengths and areas that needed improvement. Overall, the poster was clear and visually well-organised, but two important weaknesses were identified: the lack of budget information and an overly general project timeline. This reflection explains these gaps and describes how the feedback will be used to improve the final Project Management Plan in Part C.

The feedback confirmed that the main idea of the project was easy to understand and logically presented. The connection between the transport hub redevelopment and Greater Manchester's net-zero strategy was seen as realistic and relevant. Reviewers also noted that the poster clearly explained what was included in the project and what was not. For example, focusing on fleet electrification and smart mobility was appropriate, while excluding general road maintenance helped keep the project scope clear and manageable. This showed that the initial proposal had a strong foundation.

However, the feedback also highlighted two major weaknesses that limited the quality of the proposal. The first issue was the complete absence of budget calculations. The lecturer pointed out that without cost estimates, it is difficult to judge whether the project is financially realistic. Public infrastructure projects require clear information about capital costs and ongoing expenses, and without this, stakeholders cannot properly assess feasibility

or value. This gap made the proposal look incomplete and will need to be addressed in the final plan.

The second issue was the generalised timeline. The poster showed the project divided into three broad phases across Q1–Q3, but it did not include specific tasks, durations, or milestones. Peers mentioned that this made the schedule too vague and not useful for planning. Large transport projects often depend on detailed timelines because they involve long approval processes, procurement delays, and technical dependencies. Without a more detailed breakdown, the timeline does not reflect the real complexity of the work.

The feedback will directly shape several improvements in Part C. First, the Work Breakdown Structure and Gantt Chart will be expanded to show clear work packages, start and end dates, and task dependencies. This will replace the high-level quarterly blocks with a proper project schedule. Second, a full budget section will be added, including cost estimates for charging infrastructure, fleet upgrades, and digital mobility tools. This will address the missing financial information and make the plan more realistic. Finally, the risk analysis will be strengthened by including financial risks, supply chain delays, and time pressures. These risks will be linked to mitigation strategies to make the plan more robust.

Overall, the feedback was very useful for me, because it highlighted gaps that were not obvious during the initial design. By applying these improvements, the final Project Management Plan will be clearer, more detailed, and more suitable for real project delivery.

Part C: Project Management Plan

1. Introduction

This Project Management Plan explains how the Sustainable Redesign to Meet Net-Zero Transport Objectives project will be delivered in Manchester. The plan was developed in response to the unexpected closure of the city’s central transport hub, which occurred due to serious structural safety failures and caused major disruption across public transport routes, commuter flows, and local supply chains (GMCA, 2020). Because of these challenges, the city requires a coordinated redevelopment project that restores transport capacity while supporting environmental goals, digital improvements, and inclusive design principles recommended in project management guidance (UWTSD, 2025).

The main aim of this project is to create a modern, resilient, and fully decarbonised transport hub. This plan outlines how the project will be managed throughout its lifecycle, including the work breakdown structure, project schedule, stakeholder engagement, resource allocation, and risk management processes. By combining green infrastructure with digital mobility tools, the project directly supports Greater Manchester's long-term goal of achieving net-zero carbon emissions by 2040 (GMCA, 2020). The plan provides a clear structure for delivering the project within the required timeframe and ensuring that all activities are aligned with sustainability and accessibility standards.

2. Project Description

The Sustainable Redesign project focuses on transforming the existing diesel-based transport operations at Manchester's central hub into a modern, low-carbon multimodal interchange. The project combines physical construction work with digital upgrades to improve how passengers move through the transport system and to ensure that the hub supports future mobility needs (World Economic Forum, 2024). The redesign aims to create a cleaner, safer, and more efficient transport environment that encourages the use of electric vehicles, active travel, and smart mobility tools.

A key part of the project involves electrifying public transport operations. This includes upgrading buses and municipal vehicles to electric power and installing rapid-charging stations at the hub to support daily operations. According to global transport innovation guidance, electrification is essential for reducing emissions and improving long-term operational efficiency (World Economic Forum, 2024). Alongside electrification, the project introduces a digital mobility system that provides real-time travel information and helps passengers plan journeys more effectively across buses, trains, cycling routes, and pedestrian pathways.

The project also prioritises active travel and inclusive design. New cycle lanes, pedestrian walkways, and accessible terminal facilities will be constructed to encourage non-motorised transport and ensure that the hub is usable for all members of the community, including people with disabilities. These improvements follow international recommendations on sustainable and inclusive urban development (United Nations, 2023).

The project will be delivered over a nine-month period, covering three consecutive phases from Q1 to Q3. The first phase focuses on planning and design, the second on construction and infrastructure deployment, and the final phase on testing and evaluation. Managing the project requires balancing tight delivery timelines with budget limitations and regulatory requirements, as highlighted in project management guidance (UWTSD, 2025). This description provides the foundation for the detailed planning sections that follow in the remainder of the Project Management Plan.

3. Scope

This project encompasses the design, procurement, construction, and integration of sustainable transport infrastructure and digital mobility systems for the central transport hub. Specifically, in-scope deliverables include the installation of high-capacity electric vehicle charging terminals, the construction of dedicated active travel routes (walking and cycling lanes), terminal accessibility and facility upgrades, and the deployment of a real-time multimodal passenger mobility application. Out-of-scope activities include ongoing routine highway maintenance outside the immediate hub perimeter, long-term fleet management operations, and private commercial logistics network management, which remain under the responsibility of third-party operators and local council maintenance frameworks (UWTSD, 2025).

The construction phase represents the core delivery stage of the project. During this period, physical infrastructure upgrades are carried out, including the installation of electric charging systems, construction of active travel routes, and refurbishment of terminal facilities. Digital mobility tools are also developed and integrated during this phase, ensuring that both physical and digital components progress in parallel (World Economic Forum, 2024). The final phase focuses on testing, evaluation, and handover. All systems, including charging infrastructure and digital mobility applications, undergo operational testing to ensure safety, reliability, and accessibility. After successful evaluation, the transport hub is formally handed over to the local authority for ongoing operation and maintenance.

4. Work Breakdown Structure (WBS)

The Work Breakdown Structure provides a clear and organised view of all project activities by dividing the redevelopment into manageable components. As shown in **Table 1**, the Work Breakdown Structure divides the project is separated into planning, construction, and testing. Within the planning stage, tasks include site assessments, design development, procurement scheduling, and stakeholder consultations. These activities ensure that the project has a solid foundation before physical work begins and that all regulatory requirements are met (UWTSD, 2025).

WBS Level	Task / Work Package	Description	Duration	Dependencies
1.0	Project Initiation	Confirm scope, objectives	2 weeks	None
1.1	Stakeholder Engagement	Consult stakeholders	2 weeks	1.0
2.0	Planning & Design	Site assessment, design	4 weeks	1.0
2.1	Procurement Planning	Supplier identification	3 weeks	2.0
3.0	Electrification Works	Charging station installation	8 weeks	2.0, 2.1
3.1	Civil Engineering Works	Resurfacing, cycle lanes	10 weeks	2.0
3.2	Digital Mobility System	App development	12 weeks	2.0
4.0	System Testing	Safety and accessibility checks	4 weeks	3.0–3.2
5.0	Handover	Documentation, approval	2 weeks	4.0

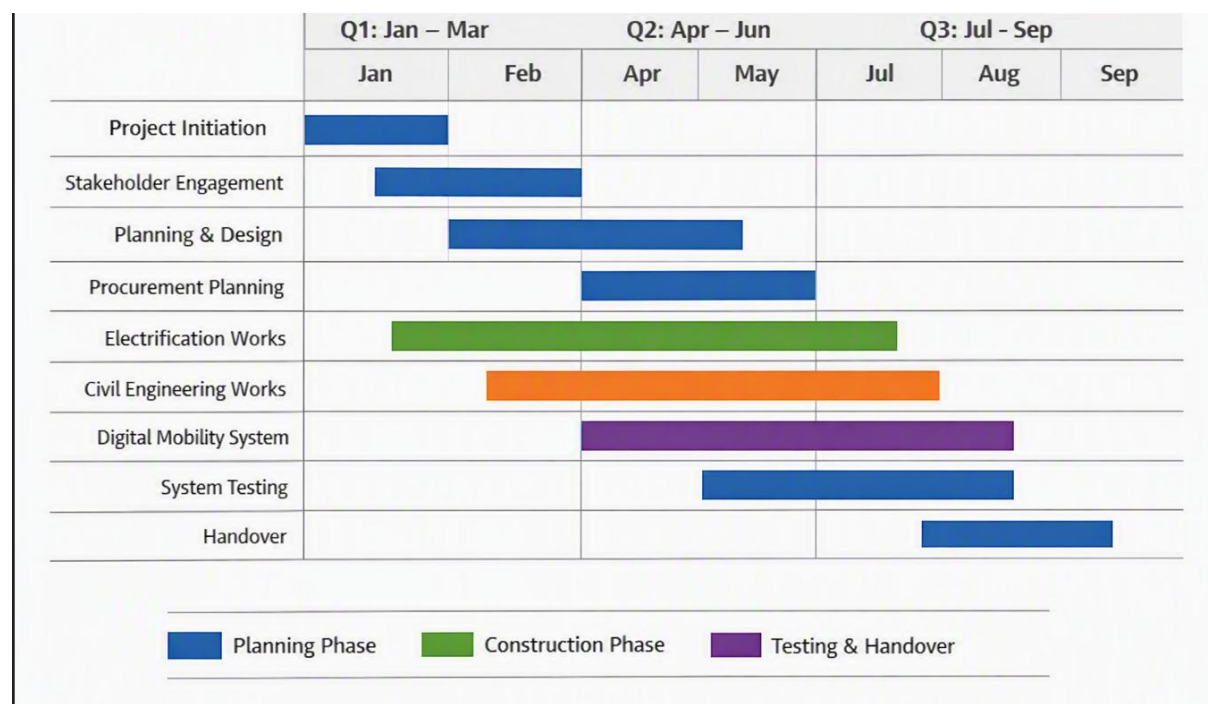
Table 1. Work Breakdown Structure (WBS)

The construction stage is divided into several work packages. One package focuses on electrification, including the installation of rapid-charging stations and the preparation of electrical systems needed to support an electric fleet. Another package covers civil engineering works, such as resurfacing areas of the hub, improving pedestrian access, and constructing dedicated cycle lanes. A third package involves digital integration, where software developers and transport operators collaborate to build and test the real-time mobility application (World Economic Forum, 2024). The final stage of the WBS includes system testing, safety inspections, accessibility checks, and final adjustments before the hub becomes operational. Structuring the project in this way ensures that all tasks are clearly defined, sequenced, and assigned to responsible teams.

5. Gantt Chart

The project schedule spans nine months and is divided into three consecutive phases from Q1 to Q3. The Gantt Chart in **Figure 2** provides a visual overview of the project timeline and shows the dependencies between tasks. During Q1, the project focuses on planning and design. Activities such as site analysis, stakeholder engagement, procurement planning, and risk assessment take place during this period. These tasks must be completed before construction can begin, making them critical path activities that directly influence the overall timeline (UWTSD, 2025).

Figure 2: Gantt Chart for Project Schedule (Q1–Q3).



6. QUAD Chart

The Quad Chart in **Figure 3** provides offers a clear visual summary of the Sustainable Redesign to Meet Net Zero Transport Objectives project. It presents the main aspects of the redevelopment in four concise sections: project overview, key deliverables, risks and challenges, and expected outcomes. This format helps communicate the project's purpose, scope, and benefits in a structured and accessible way, making it easier for stakeholders to understand the overall direction. It also supports effective decision-making by showing how objectives, risks, and results are connected within a single visual framework.

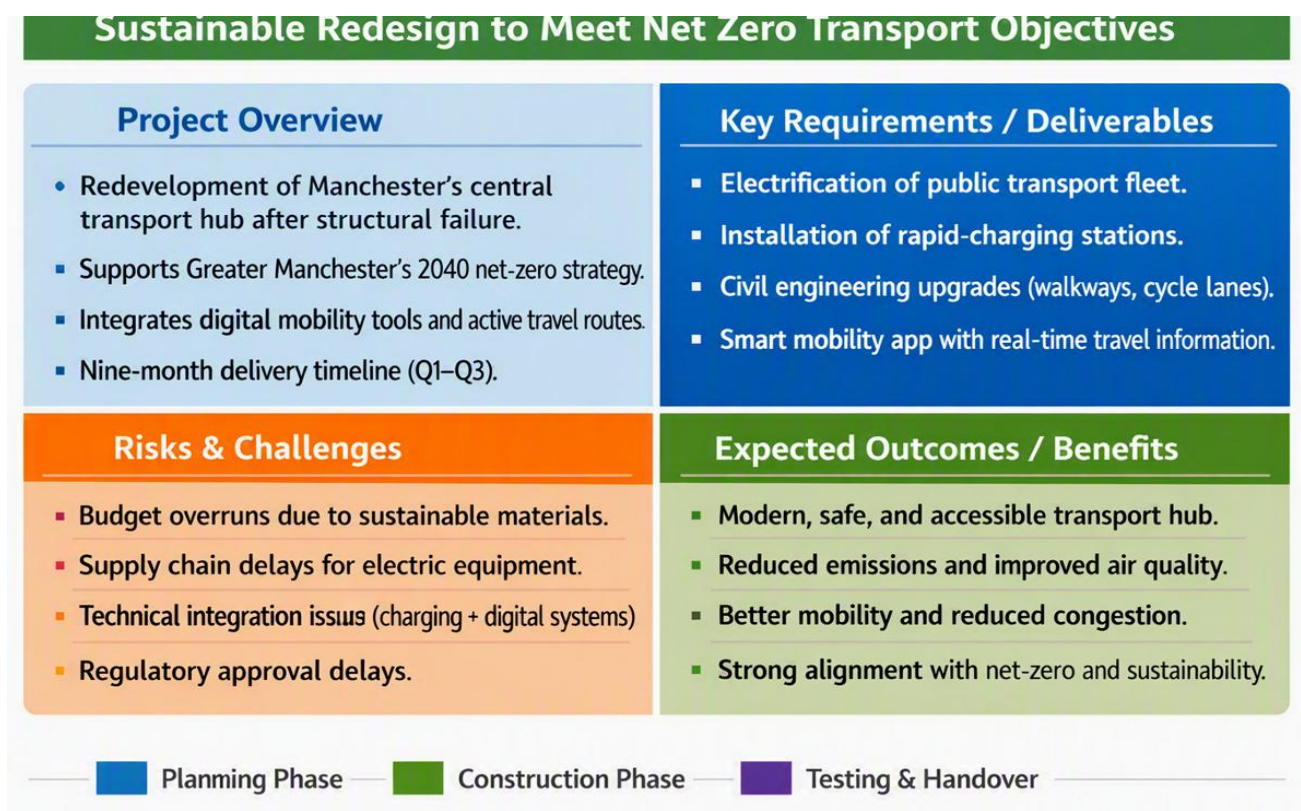


Figure 3: QUAD Chart.

Construction activities dominate Q2. Electrification works, civil engineering upgrades, and digital system development occur simultaneously but follow a coordinated sequence. For example, electrical groundwork must be completed before charging stations can be installed, and civil engineering works must be finished before accessibility features can be tested.

Digital mobility tools are developed in parallel, with software testing beginning toward the end of Q2 (World Economic Forum, 2024). The final phase, Q3, focuses on system testing, evaluation, and handover. All physical and digital components undergo operational testing to ensure compliance with safety, accessibility, and environmental standards (United Nations, 2023). Once testing is complete, the hub is prepared for public use and formally handed over to the local authority.

7. Stakeholder's Involvement

Effective stakeholder engagement is essential for delivering the Sustainable Redesign project successfully. The redevelopment of Manchester's central transport hub affects a wide range of groups, including local authorities, transport operators, residents, businesses, environmental organisations, and accessibility advocates. **Table 2** summarises the key stakeholders and the engagement strategies used throughout the project. Each group has different expectations and priorities, which means the project must maintain clear communication and transparent decision-making throughout its lifecycle. Early engagement ensures that stakeholders understand the project's objectives and constraints, while ongoing consultation helps identify concerns related to accessibility, environmental impact, and operational changes (GMCA, 2020).

Stakeholder	Interest / Influence	Impact	Engagement Strategy	
Local Council	High	Approvals, funding	Regular briefings	
Transport Operators	High	Operations	Workshops	
Residents	Medium	Accessibility	Consultations	

Businesses	Medium	Economic activity	Updates
Environmental Groups	High	Sustainability	Reports
Accessibility Advocates	High	Inclusive design	Co-design

Table 2. Stakeholder Analysis

The engagement process begins during the planning phase, where stakeholders are invited to review initial designs and provide feedback on proposed infrastructure changes. This collaborative approach helps ensure that the project aligns with community needs and regulatory requirements. During construction, regular updates are shared to minimise disruption and maintain public confidence. Digital communication channels, including the future mobility app, also support engagement by providing real-time information about transport changes and expected service improvements. By following recommended project management practices, the engagement strategy ensures that stakeholders remain informed, involved, and supportive throughout the project (UWTSD, 2025).

8. Allocation Resources

Delivering the project requires careful planning of financial, human, and technical resources. The redevelopment involves significant capital investment in electric charging infrastructure, civil engineering works, and digital mobility systems. Without clear cost estimates, it would be difficult to assess feasibility or allocate resources effectively, which is why the Project Management Plan includes a structured financial framework. This framework outlines expected capital expenditure for charging stations, fleet upgrades, and construction materials, as well as operational costs associated with software development and system maintenance (World Economic Forum, 2024).

Cost Category	Description	Estimated Cost (£)	
Charging Infrastructure	Rapid chargers	1,200,000	
Fleet Upgrades	Electric buses	3,500,000	
Civil Engineering	Walkways, cycle lanes	2,000,000	
Digital Mobility System	App development	750,000	
Accessibility Improvements	Ramps, signage	300,000	
Contingency (10%)	Risk buffer	770,000	
Total	—	8,520,000	

Table 3. Estimated Budget

Human resources also play a critical role. The budget structure presented in **Table 3** ensures transparency and supports financial planning. Engineers, software developers, transport planners, accessibility specialists, and project managers must work together to deliver the project within the nine-month timeline. Resource allocation must consider skill requirements, labour availability, and procurement lead times. For example, installing rapid-charging stations requires specialised electrical contractors, while developing the mobility app requires digital expertise. Aligning these resources with the project schedule ensures that tasks progress smoothly and that delays are minimised. The budget and resource plan follows guidance from public sector project management frameworks to ensure accountability and cost control (UWTSD, 2025).

9. Risk Analysis

Risk analysis is a central component of the Project Management Plan because transport infrastructure projects often face financial, technical, and regulatory uncertainties. One of the main risks involves budget overruns, which may occur if sustainable materials or electric charging equipment cost more than expected. Supply chain delays also pose a risk, especially

for specialised components with long procurement lead times. These risks can affect the construction schedule and may require contingency planning to maintain progress (World Economic Forum, 2024).

Technical risks are also significant. Integrating electric charging systems with existing grid infrastructure requires careful coordination, and any technical failure could delay the electrification process. Digital risks include potential software integration issues or delays in developing the mobility app. Regulatory risks must also be considered, as planning approvals and environmental assessments can extend timelines if additional documentation is required (United Nations, 2023). To manage these risks, the project incorporates mitigation strategies such as buffer periods, phased procurement, early contractor involvement, and continuous monitoring. Following established project management guidance ensures that risks are identified early and addressed proactively (UWTSD, 2025).

10. Monitoring and Evaluation

Monitoring and evaluation ensure that the project remains on schedule, within budget, and aligned with sustainability and accessibility goals. Throughout the project lifecycle, progress is tracked against the Gantt Chart, allowing managers to identify delays and adjust resources where necessary. Regular progress reviews are conducted with stakeholders to maintain transparency and ensure that emerging issues are resolved quickly. Performance indicators, such as installation progress, software development milestones, and accessibility compliance checks, help measure whether the project is meeting its objectives (GMCA, 2020).

Evaluation becomes especially important during the final phase, where all physical and digital systems undergo testing. Charging infrastructure is assessed for reliability and safety, while the mobility app is tested for accuracy and user accessibility. Feedback from test users helps identify improvements before the hub becomes fully operational. Once evaluation is complete, the project is formally handed over to the local authority, along with documentation outlining maintenance requirements and long-term sustainability considerations. This structured monitoring and evaluation process ensures that the project delivers lasting value and supports Manchester's transition to a net-zero transport system (United Nations, 2023).

11. Conclusion

The Sustainable Redesign to Meet Net-Zero Transport Objectives project provides Manchester with a clear and practical pathway for modernising its central transport hub after the recent structural failure and service disruption. This Project Management Plan brings together all essential components required for successful delivery, including a structured lifecycle, a detailed work breakdown, a realistic schedule, stakeholder engagement strategies, resource planning, and a robust risk management framework. By integrating electric transport infrastructure, digital mobility tools, and inclusive active travel design, the project directly supports Greater Manchester's long-term ambition to achieve net-zero emissions by 2040 (GMCA, 2020).

The plan also responds directly to the feedback received during the Part A presentation, particularly the need for clearer budgeting, more detailed scheduling, and stronger risk analysis. These improvements ensure that the project is not only environmentally aligned but also operationally feasible and financially responsible. Through continuous monitoring and evaluation, the project will maintain accountability and adapt to emerging challenges, following established project management guidance (UWTSD, 2025). Overall, the plan provides a solid foundation for delivering a resilient, accessible, and future-ready transport hub that meets the needs of Manchester's residents, businesses, and wider regional transport network.

References

- Field, M & Keller, L 1998, *Project Management*, Open University/Thomson Learning, London.
- GMCA 2020, *Manchester Transport Strategy 2040*, Greater Manchester Combined Authority, Manchester.
- Heagney, J 2012, *Fundamentals of Project Management*, 4th ed., American Management Association, New York.
- Heerkens, G 2015, *Project Management (A Briefcase Book)*, McGraw-Hill, New York.
- Hughes, B 2012, *Project Management for IT-Related Projects*, 2nd ed., BCS, Swindon.
- Kerzner, H 2017, *Project Management: A Systems Approach to Planning, Scheduling, and Controlling*, 12th ed., Wiley, Hoboken.
- Maylor, H 2010, *Project Management*, 4th ed., Financial Times Prentice Hall, Harlow.
- OECD 2020, *Transport Strategies for Net-Zero Mobility*, Organisation for Economic Co-operation and Development, Paris.
- PMI 2021, *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, 7th ed., Project Management Institute, Newtown Square.
- Reiss, G 2015, *Project Management Demystified*, Routledge, London.
- Roberts, P 2011, *Effective Project Management*, Kogan Page, London.
- United Nations 2023, *Sustainable Development Goals Report 2023*, United Nations, New York.
- UWTSD 2025, *Project Management Module Handbook (LCLM5003)*, University of Wales Trinity Saint David Business School, Swansea.
- World Economic Forum 2024, *The Future of Urban Mobility: Pathways to Net-Zero*, World Economic Forum, Geneva.