

Project Management Plan: Metropolitan Central Transport Hub Regeneration Programme

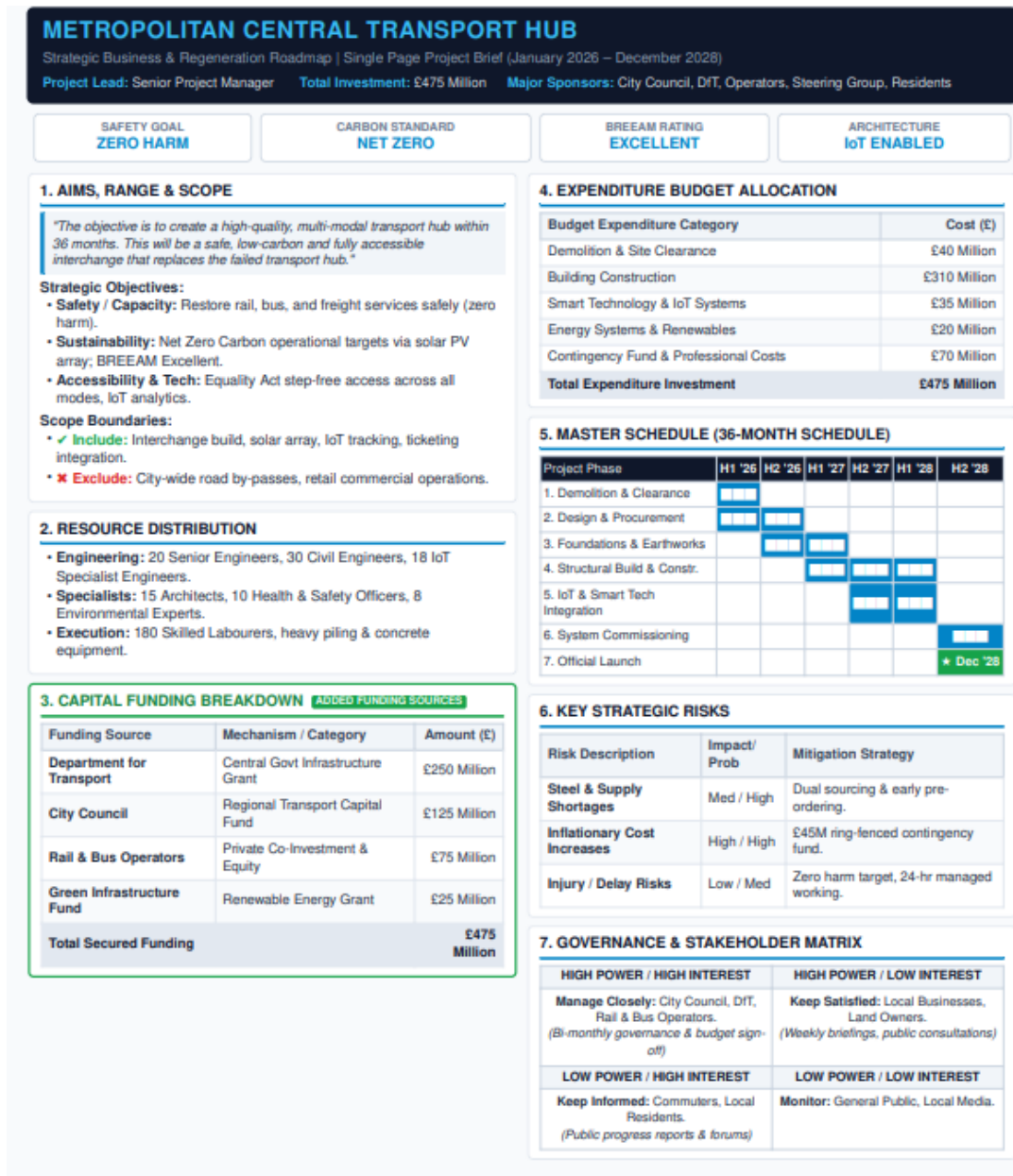
Module Code: LCLM5003 **Module Title:** Project Management Programme: BA (Hons) Leadership & Management Skills

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PART B REFLECTIVE FEEDBACK:



The primary concerns raised about the poster presentation were (1) there was no indication as to what the "funding" would be for this project, and (2) the poster was overly complex. While these comments were extremely valuable since they provided a direct impact on how I re-wrote and improved my final Project Management Plan; they also provided insight into several key aspects of project development and the execution of the plan.

In terms of the positives, one of the biggest positives was that all of the peers attending the presentations felt that the overall intent/aims and objectives of the project were very clearly stated. All of the attendees at the posters found that the purpose of the Metropolitan Central Transport Hub Regeneration Programme was clear and easily understandable. The tutor also commented that the focus on sustainability and accessibility was clearly consistent with modern priorities for the regeneration of transportation systems. Therefore, the overall direction of the project was solid and required minimal revision or updates.

On the other hand, the greatest criticism regarding the poster was that there was no evidence shown on where the money was going to come from. Although I had listed a total investment number, I had not separated out the funding sources. As such, the financial part of the project appeared to be incomplete and therefore reduced the overall credibility of the proposal. Based upon this critique, I created a full list of fund contributors including: Department for Transport, City Council, Rail and Bus operators, and the Green Infrastructure Fund. It is now much clearer how the funds will be allocated, and in doing so, has greatly increased the transparency of the project, while meeting expectations associated with professional project management practices. Additionally, making these revisions to improve my poster's layout assisted me in creating a better formatted financial section within Part C of my submission where I developed an expanded version of the funding table, along with linking it to the expenditure budget.

The second largest area of concern regarding the poster was that it was difficult to read. There were numerous elements on the poster that made it challenging to quickly locate key data points on the poster. As many peer reviewers pointed out, posters are meant to provide quick access to key data points. To correct this issue, I reformatted my poster to use clearer headings, utilized bullet points when possible, and made sure to add additional white space to allow for a cleaner appearance. In addition to improving the format of my poster I reorganized how I presented information based on whether it belonged in the background, aims/scopes/stakeholders/risk/strategic value categories. These changes allowed me to make my poster easier to read and view. Many of the formatting adjustments I made in order to improve my poster's readability have also

impacted how I organized my final PMP, ensuring that each section is clearly defined and logically sequenced.

As a result of receiving feedback I am able to appreciate the importance of being able to clearly communicate your project ideas, having your poster layout be easy to follow and understand, and providing enough detail regarding funding. Through addressing both of these issues I was able to strengthen both my original poster presentation and final Project Management Plan. Overall, I believe that the feedback process assisted me in producing a more professional, cohesive, and academically acceptable product than if I had done nothing but simply followed instructions.

PART C: PROJECT MANAGEMENT PLAN/ Metropolitan Central Transport Hub Regeneration Programme

1.Introduction

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A significant infrastructure deficiency was discovered in late November 2025 when the main central transport hub for a major UK metropolitan area suddenly closed due to necessary structural inspections which showed severe deterioration of materials that compromised the ability of the structure to carry loads, and therefore rendered it out of compliance with current standards relating to safety, fire protection and accessibility (Equality Act 2010). The central transport hub served as the focal point for rail services serving this region; a high capacity network of urban buses; and an extensive urban freight distribution system. Its immediate cessation resulted in total transport failure within this region resulting in severance of key regional economic links and severe daily commuting disruption.

As an emergency measure to reduce further loss of business productivity, and restore citizen mobility, local government officials authorized an expedited development program. This Project Management Plan (PMP) is the operational planning document used to manage the full scope-art, multimodal transportation

exchange. This PMP utilizes recognized project management processes (i.e., APM Body of Knowledge [APM, 2020] & PRINCE2 governance model), to provide oversight during the implementation phase over the next 36 months (Jan. 2026 – Dec. 2028).

2. Project Description

The Metropolitan Central Transport Hub Regeneration Project represents a **£475 million capital investment** designed to replace the decommissioned facility with an integrated, smart, and sustainable transit gateway. The project aims to re-establish seamless multi-modal connectivity by unifying passenger rail, rapid bus transit, active travel routes, and zero-emission freight delivery.

2.1 Strategic Objectives

- **Operational Restoration & Capacity Expansion:** Restore core passenger rail and bus transit capacities within 36 months, expanding overall passenger throughput by 35% to accommodate projected urban population growth over the next 30 years.
- **Environmental Sustainability & Net Zero Alignment:** Achieve BREEAM 'Excellent' certification and Net Zero Operational Carbon status by incorporating an integrated rooftop solar photovoltaic (PV) array, rainwater harvesting systems, and energy-efficient building materials (UK Green Building Council, 2021).
- **Digital Modernization & Smart Passenger Flow:** Implement IoT-driven real-time passenger tracking, dynamic ticketing integration, and automated logistics movement systems to optimize terminal efficiency and eliminate transit congestion.
- **Inclusive & Accessible Urban Design:** Guarantee 100% step-free universal accessibility across all concourses, platforms, and interchange points in accordance with Universal Design guidelines.

3. Scope Management

Defining clear scope boundaries is vital for preventing scope creep—a principal cause of capital project cost overruns (Kerzner, 2017). The scope of this project encompasses physical engineering, digital infrastructure, and environmental integration within the designated 12-hectare site boundary.

""Scope Management" defines the formal boundaries for what can be executed in order to keep the project tightly aligned with both stakeholder needs and financial baseline corequirements. — PMI (2021)

Table 1: Project Scope Boundaries (Inclusions vs. Exclusions)

Scope Inclusions (In-Scope)	Scope Exclusions (Out-of-Scope)
Demolition and site clearance of the existing 40-year-old hub structure.	Repairs or upgrades to external city-wide road bypasses or external highway networks.
Construction of new multi-level passenger terminals, platform concourses, and bus bays.	Commercial retail tenant fit-outs (retailers fund their own internal shop fit-outs).
Installation of on-site solar PV array (2.5 MW peak capacity) and smart grid architecture.	Off-site electrical grid infrastructure upgrades outside the 12-hectare site boundary.
Implementation of IoT passenger movement analytics, smart ticketing gates, and dynamic displays.	Long-term facility maintenance and operational management post-December 2028 handover.

4. Work Breakdown Structure (WBS)

To assure that managerial controls are strong on this project, a 100 percent rule work breakdown structure will be developed to break down the entire scope of the project into deliverables based upon a four tiered hierarchy. PMI(2021)

Table 2: Decomposed Work Breakdown Structure

WBS Code	Level 2: Major Element	Level 3 & 4: Work Packages

1.0	Project Management & Governance	1.1 Governance Framework & Charter Setup 1.2 Stakeholder Engagement & Public Reporting 1.3 Quality Assurance & Risk Management Audits
2.0	Site Preparation & Enabling	2.1 Hazardous Material Abatement (Asbestos Removal) 2.2 Demolition & Structural Deconstruction 2.3 Ground Remediation & Earthworks
3.0	Civil & Structural Engineering	3.1 Substructure Deep Piling & Foundations 3.2 Primary Structural Steel Frame Erection 3.3 Concrete Platform & Canopy Slab Construction
4.0	Building Services & Renewables	4.1 MEP (Mechanical, Electrical, Plumbing) Fit-out 4.2 Solar PV Array & Energy Storage Installation

		4.3 HVAC & Rainwater Recycling Systems
5.0	Digital Infrastructure & IoT	5.1 Fiber Optic Network Backbone Installation 5.2 Smart Ticketing & Passenger Flow Sensors 5.3 Integrated Command & Control Center Setup
6.0	Commissioning & Handover	6.1 Safety Inspection & Regulatory Compliance 6.2 Trial Operations & Stress Testing 6.3 Formal Handover to Municipal Transport Operators

5. Quad Chart

The Quad Chart provides a high-level executive visual summary of strategic alignment, operational targets, cost framework, and risk profile for steering committee review.

Section 1: Project Rationale & Objectives	Section 2: Schedule & Key Milestones
* Goal: Deliver a £475M Net-Zero transport interchange in 36 months. * Capacity: Expand daily transit capacity by 35% across rail/bus networks.	* Jan 2026: Project Initiation & Site Handover. * Jul 2026: Demolition & Site Clearance Complete.

* Sustainability: BREEAM 'Excellent', Net Zero Operational Carbon. * Inclusivity: 100% Equality Act step-free compliance.	* Dec 2027: Structural Steel & Envelope Completion. * Aug 2028: IoT & Renewable Systems Testing. * Dec 2028: Operational Launch & Public Opening.
Section 3: Budget & Financial Breakdown	Section 4: Strategic Risks & Mitigations
* DfT Infrastructure Grant: £250M (52.6%) * City Council Capital Fund: £125M (26.3%) * Transport Operators Equity: £75M (15.8%) * Green Infrastructure Fund: £25M (5.3%) * Total Capital Investment: £475.0M	* Supply Chain Bottlenecks: Advanced procurement & dual-sourcing. * Inflationary Overruns: Ring-fenced £45M contingency fund. * Community Disruption: Acoustic screening & off-peak heavy logistics.

6. Master Schedule & Gantt Chart Breakdown

Executing a multi-billion-pound infrastructure project over 36 months requires careful logical sequencing. The project critical path runs directly through **Site Clearance**

\$\rightarrow\$ Deep Substructure Piling \$\rightarrow\$ Structural Steel Framing
\$\rightarrow\$ Building Services & Systems Integration \$\rightarrow\$ Safety
Commissioning.

Table 3: Project Master Schedule (2026 – 2028)

Phase / Activity	Start Date	End Date	Duration	Predecessors
1. Governance & Procurement	Jan 2026	Jun 2026	6 Months	—
2. Demolition & Site Clearance	Mar 2026	Sep 2026	7 Months	Activity 1
3. Foundations & Earthworks	Jul 2026	Apr 2027	10 Months	Activity 2
4. Structural Frame & Envelope Build	Jan 2027	Jan 2028	13 Months	Activity 3
5. MEP & Renewable Energy Installation	Aug 2027	Jun 2028	11 Months	Activity 4
6. Digital IoT & Smart Systems	Oct 2027	Aug 2028	11 Months	Activity 4
7. Safety Commissioning & Public Handover	Jul 2028	Dec 2028	6 Months	Activity 5, 6

7. Stakeholders' Involvement

Stakeholder management follows Freeman’s (1984) Stakeholder Theory and Mendelow’s (1991) Power-Interest Matrix to ensure structured engagement and prevent friction that could delay delivery.

Table 4: Stakeholder Analysis & Engagement Strategy Matrix

Stakeholder Group	Power / Interest	Mendelow Category	Engagement Strategy & Frequency
Department for Transport (DfT) & City Council	High Power / High Interest	Key Players (<i>Manage Closely</i>)	Bi-monthly steering committee meetings, monthly formal earned value performance reports.
Rail & Bus Operators (National Rail, Local Bus)	High Power / High Interest	Key Players (<i>Manage Closely</i>)	Weekly operational integration workshops to align platform and bay specifications.
Local Businesses & Property Owners	High Power / Low Interest	Keep Satisfied	Monthly consultation forums, advance notification of heavy transport construction windows.
Commuters & Local Residents	Low Power / High Interest	Keep Informed	Public digital dashboard, weekly social media progress updates, dedicated community liaison line.

8. Allocation of Resources

Resource allocation encompasses both financial co-funding models and specialized human capital. Co-financing secures public-private alignment while spreading financial risk (Flyvbjerg, 2014).

8.1 Financial Capital Sources

Table 5: Capital Funding Breakdown

Funding Partner / Entity	Mechanism / Grant Category	Amount (£)	Share (%)

Department for Transport (DfT)	Central Govt Infrastructure Grant	£250,000,000	52.63%
City Council	Regional Transport Capital Fund	£125,000,000	26.32%
Rail & Bus Operators	Private Co-Investment & Equity	£75,000,000	15.79%
Green Infrastructure Fund	Renewable Energy Grant	£25,000,000	5.26%
Total Secured Capital Funding	—	£475,000,000	100.00%

8.2 Expenditure Allocation

Table 6: Capital Expenditure (CapEx) Allocation

Cost Center / Category	Allocated Budget (£)	Description / Major Deliverables
Demolition & Site Clearance	£40,000,000	Asbestos removal, site deconstruction, ground stabilization.
Building Construction & Structural Steel	£310,000,000	Primary steel structure, concrete slabs, terminal concourse building.
Smart Technology & IoT Systems	£35,000,000	Sensors, fiber backbone, automated ticketing control, central servers.
Energy Systems & Renewables	£20,000,000	2.5MW solar PV roof array, HVAC, rainwater harvesting infrastructure.

Contingency Fund & Professional Fees	£70,000,000	£45M ring-fenced contingency + £25M design, legal, and management fees.
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9. Risk Analysis

Major infrastructure projects carry inherent risks due to macroeconomic fluctuations, technical complexities, and tight regulatory constraints. Risk management follows the ISO 31000 standard, assessing risks on a 5x5 Impact and Probability matrix (Hillson, 2016).

Table 7: Strategic Risk Register & Mitigation Matrix

Risk Description	Prob.	Impact	Mitigation Strategy	Residual Risk
Global Steel & Material Supply Shortages <i>Delays critical structural framing build.</i>	Medium	High	Dual-sourcing contracts and early pre-ordering of steel frames during Phase 1 procurement.	Low
Inflationary Cost Overruns <i>Material and labor cost escalation over 36 months.</i>	High	High	Ring-fencing a £45 Million contingency fund; fixed-price EPC design and build contracts.	Medium
Unexpected Subsurface Contamination	Low	High	Comprehensive geo-technical soil testing during early site	Low

<i>Delays deep piling foundation works.</i>			clearance stage.	
Public Disruption & Noise Complaints <i>Community friction during 24-hr construction.</i>	High	Low	Installing acoustic barriers around site perimeter; scheduling heavy logistics during off-peak hours.	Low

10. Conclusion

The Metropolitan Central Transport Hub Regeneration Project directly addresses the urgent infrastructure crisis caused by the closure of the 40-year-old facility. By using a structured approach to managing this project based on APM and PRINCE2 standards (the methodologies will manage time, cost and quality) this project can be delivered successfully within budget (£475m), by time and with quality. The Co-Funding Model is designed to spread the risk of the project financially among both public sector bodies and private sector bodies; whilst having defined scope boundaries, detailed work breakdown structure and proactively identifying and mitigating risks as they emerge provides an effective route for delivering this project successfully by end of 2028.

11. References

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