

Greater Manchester's Outline Business Case to tackle Nitrogen Dioxide Exceedances at the Roadside

E5 Registers E5.2 – Project Risk Register



Salford City Council



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Authorised by: Date:	Simon Warburton 28 th February 2019		

Title:		Appendix E.5.2 - OBC Project Risk Register (Qualitative)																						
Review Date:		25-02-19																						
Project Category	Risk ID	Risk Description	Risk Cause	Risk Consequence	Risk Owner	Pre-Mitigation (VL-VH)						Risk Score (Pre-Mit)	Action ID	Action Name	Action Description	Action Owner	Post-Mitigation (VL-VH)						Risk Score (Post-Mit)	Review Notes/ Reason for change (incl. date of update)
						Likelihood	Project Cost	Schedule	Reputation & Legal	Service Disruption	Policy / Benefit realisation						Likelihood	Project Cost	Schedule	Reputation & Legal	Service Disruption	Policy / Benefit realisation		
Clean Air Zone (CAZ)	PROJ-1	Feedback on the proposed Greater Manchester Clean Air Plan (GM CAP) design during consultation(s) and through stakeholder/political engagement significantly impacts project costs and schedule	Feedback on the scheme results in revisions to the design	Scheme design revision Reputational challenges Delays to implementation Air Quality (AQ) compliance not achieved in desired timescales	TIGM - CAZ Project Financial Lead	H	VH	VH	VH	-	VH	20	PROJ ACTION - 1	Scheme revisions	Provide robust evidence to support scheme design and the well thought through strategy Obtain feedback at a formative stage from consultations and inform technical and economic models if any changes are required Review conditions of proposed scheme, informed by additional data/information from other Local Authorities, DEFRA, consultation	TIGM - CAZ Project Financial Lead	M	H	VH	H	-	VH	18	
Clean Bus Fund	PROJ-2	Some buses cannot be retrofitted due to the age of vehicles within the Greater Manchester bus fleet	The proposed age of vehicle which is valid for retrofit only applies to part of the total Greater Manchester bus fleet.	AQ compliance not achieved in desired timescales Reputational challenges Disruption to services/customers Potentially charges passed to customers	TIGM - Clean Bus Fund Project Lead	H	L	-	M	VH	H	20	PROJ ACTION - 2	Stakeholder engagement with bus operators	Stakeholder engagement - work with bus operators throughout the Full Business Case (FBC) stage to ensure they are prepared for the proposed changes and understand the road to AQ compliance to minimise impact and disruption to customers Maximise other relevant funds, where available.	TIGM - Clean Bus Fund Project Lead	M	VL	-	M	M	VH	18	
Clean Freight Fund	PROJ-3	Lack of availability for affordable second hand compliant LGVs	Affordability of new and second hand LGVs	AQ compliance not achieved in desired timescales Economic impact on businesses/customers	TIGM - Clean Freight Fund Project Lead	H	M	-	M	-	VH	20	PROJ ACTION - 3	Entry criteria and eligibility for funds Engagement with LGV owners	Establish in more detail at FBC stage to ensure that there are measures in place to ensure that the entry criteria and eligibility for the Clean Freight Fund addresses this risk through scheme design and mitigate against to any issues. Stakeholder engagement - work with small business and LGV owners throughout the FBC stage to ensure they are prepared for the proposed changes Proposed incentive scheme is designed to address this issue Work with JAQU on vehicle market (national) impacts of multiple schemes	TIGM - Clean Freight Fund Project Lead	M	M	-	L	-	H	15	
Clean Bus Fund	PROJ-4	Greater Manchester Bus fleet cannot be retrofitted in desired timescales	Lack of market capacity to carry out retrofits on the Greater Manchester bus fleet within the required timescales	AQ compliance not achieved in desired timescales Disruption to services/customers Delays to schedule Reputational challenges	TIGM - Clean Bus Fund Project Lead	H	H	VH	M	M	H	20	PROJ ACTION - 4	Market Engagement	During the FBC stage, engagement with potential suppliers for retrofitting of buses will be carried out to establish availability, costs and timescales -. These will be managed as appropriate to ensure compliance within the bus fleet in the shortest possible time Greater Manchester has written to the Secretary of State to request that national issues are addressed. Dialogue with the Government is ongoing on this issue.	TIGM - Clean Bus Fund Project Lead	M	M	M	M	-	M	11	
Clean Air Zone (CAZ)	PROJ-5	Interface between local system and Defra's Central Charging System (CCS) is unclear and therefore local system cannot be scoped	Uncertainty of scope from JAQU for FBC/Implementation with regard to IT infrastructure	AQ compliance not achieved in desired timescales Delays to schedule	JAQU	H	H	H	-	-	H	19	PROJ ACTION - 5	Engagement to understand CCS	Liaise with JAQU to understand scope of CCS and interface with local IT infrastructure	TIGM - CAZ Project Lead	M	H	M	-	-	H	15	
Clean Taxi Fund	PROJ-6	Lack of compliant vehicle availability in second hand hackney carriage market. Vehicles entering second hand market drop in value.	Hackney manufacturers have stopped making Euro 6 vehicles - now focuses on Electric Vehicle (EVs)	AQ compliance not achieved in desired timescales Delays to schedule Increase in project costs	TIGM - Clean Taxi Fund Project Lead	H	M	-	M	-	H	19	PROJ ACTION - 6	Taxi upgrades	Ensure that there are mechanisms in place to commence hackney upgrades and replacements Early engagement with the market is required Greater Manchester has written to the Secretary of State to request that national issues are addressed. Dialogue with the Government is ongoing on this issue.	TIGM - Clean Taxi Fund Project Lead	M	M	-	M	-	H	15	
Loan Finance	PROJ-7	Unable to collect payments and cover costs associated with repaying capital	Payment stops from those who have taken out the loan	Increased operational costs	TIGM - Loan Finance Lead	H	M	-	H	-	VL	19	PROJ ACTION - 7	Operational model (2)	Establish Loan Finance operational criteria in more detail at a FBC stage to ensure that there are measures in place to mitigate against this potential issue	TIGM - Loan Finance Lead	M	L	-	H	-	M	15	
Clean Air Zone (CAZ)	PROJ-8	The scale of a proposed CAZ IS infrastructure is significant and causes unforeseen delays and additional costs associated with implementation.	Scale of proposed scheme to achieve compliance	AQ compliance not achieved in desired timescales Delays to implementation Increase in project costs	TIGM - CAZ Project Lead	H	M	M	H	-	M	19	PROJ ACTION - 8	CAZ - scale of scheme	Design of scheme to consider risks associated with IS infrastructure implementation Coordinate Traffic Regulation Orders (TROs) centrally using a central resource to work with the Local Authorities	TIGM - CAZ Project Lead	M	M	M	M	-	M	11	
Electric Vehicle Infrastructure and Promotion	PROJ-9	Uptake of EV is lower than predicted in models	Lack of second hand market or attractiveness for vehicle users. Public perception of EV, results in reduced uptake	AQ compliance not achieved in desired timescales	TIGM - EV Project Lead	M	L	-	M	-	H	15	PROJ ACTION - 9	EV strategy	Ensure there is strategy for the EV infrastructure for owned assets in Greater Manchester and promote EV where possible Challenge Government to maintain/reintroduce support for EVs Build on existing EV promotion with business to encourage uptake through the early measures project	TIGM - EV Project Lead	M	L	-	M	-	M	11	
Loan Finance	PROJ-10	Operational costs are not covered by scheme	Admin costs are higher than anticipated Unable to recover costs from those taking out the loan	Increased operational costs	TIGM - Loan Finance Lead	M	H	-	M	-	VL	15	PROJ ACTION - 10	Operational model (1)	Establish Loan Finance operational criteria in more detail at FBC stage to ensure that there are measures in place to mitigate against this potential issue through systems and process and contingency funds	TIGM - Loan Finance Lead	M	M	-	M	-	VL	11	
LA & GM Fleet Upgrade	PROJ-11	Local Authority/Greater Manchester 'family' operational fleets are not compliant	Current Local Authority/Greater Manchester 'family' operational fleets are not 100% compliant	Reputational challenges AQ compliance not achieved in desired timescales	TIGM - LA & GM Fleet Upgrade Project Lead	M	-	-	H	-	M	15	PROJ ACTION - 11	Local Authority/Greater Manchester 'family' fleet upgrades	Ensure that the Local Authority/Greater Manchester 'family' operational fleet upgrades are scheduled during FBC stage	TIGM - LA & GM Fleet Upgrade Project Lead	L	-	-	H	-	M	10	
Loan Finance	PROJ-12	Loans are abused/not utilised to replace non-compliant vehicles with complaint vehicles	Processes are not robust enough to ensure full compliance	Increased operational costs AQ compliance not achieved in desired timescales	TIGM - Loan Finance Lead	M	L	-	H	-	H	15	PROJ ACTION - 12	Loan design	Ensure appropriate restrictions and checks are in place to ensure compliant vehicles are purchased from approved dealers. This could be mitigated by using a 3rd party assessing and administering criteria for successful applicants.	TIGM - Loan Finance Lead	L	-	-	H	-	L	10	
Loan Finance	PROJ-13	Scheme is not compliant with State Aid rules	Challenge from businesses/individuals Interest rate charges fluctuate	Increased costs AQ compliance not achieved in desired timescales	TIGM - Loan Finance Lead	M	M	-	H	-	L	15	PROJ ACTION - 13	Loan Design & Governance	Establish Loan Finance criteria in more detail at a FBC stage to ensure compliance and get informed legal opinion about structure of loan finance.	TIGM - Loan Finance Lead	L	M	-	H	-	L	10	
Clean Air Zone (CAZ)	PROJ-14	Drivers seek out to alternative routes to avoid Automatic Number Plate Recognition (ANPR) cameras	Anticipation of drivers avoiding certain routes	AQ compliance not achieved in desired timescales	TIGM - CAZ Project Lead	M	M	-	H	-	H	15	PROJ ACTION - 14	Camera enforcement	Mobile enforcement is being considered an potential to install new cameras on identified alternative routes - capture in Monitoring and Evaluation approach	TIGM - CAZ Project Lead	L	M	-	M	-	M	8	

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Clean Air Zone (CAZ)	PROJ-15	Assumed levels of non-compliance and non-payment are incorrect	Financial model predictions, not based on local data	Increased operational costs	TIGM - CAZ Project Financial Lead	M	H	-	M	-	H	15	PROJ ACTION - 15	Financial Model Refinement	Refine non compliance and non payment assumptions throughout FBC to inform Financial model	TIGM - CAZ Project Financial Lead	L	M	-	M	-	M	8	
Clean Air Zone (CAZ)	PROJ-16	Back office resources for CAZ operation need to reflect customer support requirements	Uncertainty of end user support scope	Increased operational costs Reputational challenges	TIGM - CAZ Project Lead	M	H	-	M	-	-	15	PROJ ACTION - 16	Back office scope	Refine back office scope and resources in FBC stage Confirm procurement approach and requirements are developed to ensure that peaks and troughs can be accommodated	TIGM - CAZ Project Lead	L	M	-	L	-	-	8	
Loan Finance	PROJ-17	Systems and processes that are designed do not adequately meet the required operational outputs	Approval and admin activities are more complex than anticipated	Increased operational costs AQ compliance not achieved in desired timescales	TIGM - Loan Finance Lead	M	L	-	H	-	M	15	PROJ ACTION - 17	Loan design	A FCA Regulated Organisation would be required to administer the scheme	TIGM - Loan Finance Lead	L	-	-	L	-	M	8	
Loan Finance	PROJ-18	Scheme is not FCA approved	Agreement between 3rd party and GMCA is not FCA approved	Increased operational costs AQ compliance not achieved in desired timescales	TIGM - Loan Finance Lead	M	H	-	H	-	L	15	PROJ ACTION - 18	Loan regulator / administrator	An FCA Regulated Organisation would be required to administer the scheme.	TIGM - Loan Finance Lead	L	M	-	M	-	L	8	
Clean Air Zone (CAZ)	PROJ-19	Liaising with other Local Authorities outside of Greater Manchester to put up CAZ signage in advance of entering a CAZ	Feasibility process to date hasn't included extensive engagement with neighbouring authorities	Increased costs Delays to schedule	TIGM - CAZ Project Lead	H	M	M	L	-	L	14	PROJ ACTION - 19	Clean Air Zone - signs outside Greater Manchester	Liaise with connecting Local Authorities during FBC stage to ensure coordination and agreement to implement	TIGM - CAZ Project Lead	M	L	M	L	-	L	11	
Loan Finance	PROJ-20	Initial point of entry is through Vehicle Renewal Scheme is challenged. Increased risk of loan default if criteria for successful applicants is widened	Entry criteria is challenged	Increased operational costs. AQ compliance not achieved in desired timescales	TIGM - Loan Finance Lead	H	M	-	M	-	L	14	PROJ ACTION - 20	Vehicle Renewal Scheme	Develop scheme criteria in FBC design	TIGM - Loan Finance Lead	M	M	-	M	-	L	11	
LA & GM Fleet Upgrade	PROJ-21	Fleet compliance with Clean Vehicle Retrofit Accreditation Scheme (CVRAS)	Vehicles not currently CVRAS accredited	AQ compliance not achieved in desired timescales	TIGM - LA & GM Fleet Upgrade Project Lead	H	L	M	-	-	M	14	PROJ ACTION - 21	CVRAS accreditation	An industry delivered solution will have to be developed to ensure that the fleet is approved by the Clean Vehicle Retrofit Accreditation Scheme (CVRAS)	TIGM - LA & GM Fleet Upgrade Project Lead	M	L	M	-	-	M	11	
Clean Air Zone (CAZ)	PROJ-22	Implementation of CAZ signage on SRN	Feasibility process to date hasn't included extensive engagement with Highways England	AQ compliance not achieved in desired timescales Delays to schedule	TIGM - CAZ Project Lead	M	M	M	M	-	L	11	PROJ ACTION - 22	Clean Air Zone - SRN	Engage with Highways England at the earliest opportunity to inform signage requirements and associated requirements to inform costs and timescales Highways England sit on the GM CAP Steering Group and will be kept informed of scheme developments	TIGM - CAZ Project Lead	M	L	M	L	-	L	11	
Loan Finance	PROJ-23	Level of interest/uptake is either very low or very high	Assumptions in financial model are incorrect	Increased costs Increased operational costs AQ compliance not achieved in desired timescales	TIGM - Loan Finance Lead	M	L	-	M	-	M	11	PROJ ACTION - 23	Policy Design	Ensure policy design is undertaken following OBC approval to determine appropriate criteria. Consider communications strategy/advertisement of the loans	TIGM - Loan Finance Lead	L	L	-	M	-	H	10	
Electric Vehicle Infrastructure and Promotion	PROJ-24	Sites identified do not match the EV demand analysis	Charging point implementation doesn't meet EV site demand	AQ compliance not achieved in desired timescales	TIGM - Clean Taxi Fund Project Lead	M	M	-	M	-	M	11	PROJ ACTION - 24	EV site identification	Analysis is carried out to identify suitable and accessible sites for EV charging points currently and where to encourage uptake in the future. Build on site identification process for rapid charging points being carried out in Early Measures project	TIGM - Clean Taxi Fund Project Lead	L	M	-	L	-	M	8	
Clean Bus Fund	PROJ-25	Cross-boundary buses are non-compliant with proposed CAZ standards	Buses are not compliant to operate inside of Greater Manchester	AQ compliance not achieved in desired timescales	TIGM - Clean Bus Fund Project Lead	M	L	-	M	-	M	11	PROJ ACTION - 25	Liaise with Bus Team - cross boundary services	Liaise with bus team and engage with operators and neighbouring authorities to understand these cross boundary routes and the full impact to cost, retrofitting, service and timescales	TIGM - Clean Bus Fund Project Lead	L	L	-	M	-	L	8	
Sustainable Journeys	PROJ-26	Sustainable Journeys offerings (Public Transport and Active Travel) do not receive the desired uptake	Offer not attractive or suitable for targeted audience Communications campaign and promotion isn't effective	AQ compliance not achieved in desired timescales	TIGM - Sustainable Journeys Work Package Lead	M	-	-	L	-	M	11	PROJ ACTION - 26	Public awareness	Work with comms team to promote sustainable journeys and align with Made to Move Initiative	TIGM - Sustainable Journeys Work Package Lead	L	-	-	L	-	M	8	
Bus capacity	PROJ-27	Operators unable to meet capacity with compliant buses	Bus retrofit and upgrade of vehicles aren't achieved in the desired timescales	AQ compliance not achieved in desired timescales	TIGM - Bus Capacity Lead	M	L	L	M	-	L	11	PROJ ACTION - 27	Bus capacity	Liaise with bus operators early to establish capability and work with them to address any potential issues to delivery	TIGM - Bus Capacity Lead	L	VL	L	M	-	L	8	
Loan Finance	PROJ-28	Unable to access the required amount of capital to fund the measure	Capital availability is lower than anticipated	Increased operational costs AQ compliance not achieved in desired timescales	TIGM - Loan Finance Lead	L	L	-	H	-	M	10	PROJ ACTION - 28	Loan Finance Access	Post OBC risk appetite for GMCA in underwriting loans needs to be agreed so as to ensure a minimum loan default risk adjusted position is taken by GMCA.	TIGM - Loan Finance Lead	VL	L	-	H	-	M	8	

TfGM Risk Assessment Criteria

Appendix E.5.2 - OBC Project Risk Register (Qualitative) Approved

Review Date: 05-12-18

Pre-Mitigation

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Probability	Low	Medium	High	Critical	
Very High					
High			3	4	4
Medium			6	10	
Low				1	
Very Low					
Impact	Very Low	Low	Medium	High	Very High

Post-Mitigation

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Probability	Low	Medium	High	Critical	
Very High					
High					
Medium			8	4	2
Low			9	4	
Very Low				1	
Impact	Very Low	Low	Medium	High	Very High

TfGM Risk Assessment Criteria

Likelihood criteria	Very Low (VL)	Low (L)	Medium (M)	High (H)	Very High (VH)
	≤5%	6-25%	26-50%	51-75%	>75%
Impact Criteria	Very Low (VL)	Low (L)	Medium (M)	High (H)	Very High (VH)
Project Cost					
T1 = < £1m	£0 - £5k	>£5k - £10k	>£10k - £30k	>£30k - £50k	>£50k
T2 = £1-10m	£0 - £30k	>£30k - £75k	>£75k - £200k	>£200k - £500k	>£500k
T3 = £10-50m	£0 - £50k	>£50k - £300k	>£300k - £500k	>£500k - £1m	>£1m
T4 = £50-400m	£0 - £100k	>£100k - £400k	>£400k - £1m	>£1m - £5m	>£5m
T5 = >£400m	£0 - £1m	>£1m - £5m	>£5m - £25m	>£25m - £50m	>£50m
Schedule	<2 weeks delay OR no impact on end date/ deadline.	2-4 weeks delay OR low impact on key activities; no impact on the end date (occurs at development stage and can be accommodated in schedule).	4-8 weeks delay OR significant impact to key milestones or activities but no impact on end date (requires changes to schedule to meet end date).	8-12 weeks delay OR significant impact to key milestone or activities and delays to the end date. No knock-on effect on other schemes / activities/ revenues.	>12 weeks delay OR significant impact significant impact to key milestone or activities and delays to the end date. Knock on effects on other schemes / activities/ revenues.
Health & Safety	Minor injuries; cuts and bruises (First Aid Case).	RIDDOR Reportable (Over Three Day Injury)	Serious Injury (Non Life Threatening)	Major injury (Life Threatening)	Fatality
Reputation & Legal	Isolated local complaints e.g. noise complaints; unlikely to lead to a loss in customer patronage / affect scheme. No legal concerns.	Local complaints by a local group: will reduce affection for TfGM in that locality. Minor legal concerns.	Serious local poor publicity that curtails TfGM's ability to operate effectively in that area without active stakeholder engagement OR region-wide poor publicity from not meeting additional customer expectations (e.g. cleanliness, ticketing & information accuracy); will reduce affection for TfGM network wide. Manageable legal concerns.	Region-wide poor publicity from not meeting minimum customer expectations (e.g. journey times and reliability); will seriously reduce affection for TfGM, gradually erode network patronage or ability to attract funding & customers from other modes (car). Potentially serious legal concerns.	Serious poor publicity and legal concerns: will affect public trust in TfGM, likely to have an immediate impact on customer patronage, or lead to the closure of a route or voiding of a scheme. E.g. serious H&S incident or violation of competition or other laws.
Service Disruption	Up to 1 day disruption to a non-critical route or system outside peak period.	> 2 days disruption to a non-critical route or to an IS system with restricted usage (e.g. SAP Financials) outside peak period.	> 1 day disruption to a restricted IS system or to a widely used but non-critical IS system (e.g. Intranet) during peak period. Up to 3 hours disruption to a critical route outside peak period.	Up to 3 hours disruption to a critical IS system (e.g. Hardrives/ Signalling) during peak usage. Up to 1 hour disruption to a critical route during peak period.	> 3 hours disruption to a critical IS system or > 1 hour disruption to a critical route during peak period.
Policy / Benefit realisation	Minimal delay or interruption to the realisation of a benefit / objective or loss of less than 10% of predicted benefits	Minor delay or interruption to the realisation of a benefit / objective or loss of 10-25% of predicted benefits	Reduces viability/ impacts on efficiency, output, and quality of benefits / objectives or loss of 25-50% of predicted benefits	Major impact on objectives. Serious impact on output and/or quality or loss of 50-80% of predicted benefits	Critical impact on the achievement of objectives and overall performance or loss of more than 80% of predicted benefits

Risk Matrix: Probability X Impact

Probability	<i>Low</i>	<i>Medium</i>	<i>High</i>	<i>Critical</i>	
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TfGM Risk Assessment Criteria

Very High	5	10	15	20	25	Showstopper
High	4	8	14	19	20	
Medium	3	7	11	15	18	
Low	2	6	8	10	17	
Very Low	1	2	4	8	13	
Impact	Very Low	Low	Medium	High	Very High	

Risk Scores>>

Score 19 - 25	Zone 1	Critical
Score 14 - 18	Zone 2	High
Score 7 - 13	Zone 3	Medium
Score < 6	Zone 4	Low

Dotted line is Risk Tolerance score.