

# Risk Register Report

## September 2011



# Croxley Rail Link

## Risk Register

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Hertfordshire County Council

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# 1 Introduction

As part of the project development of Croxley Rail Link, a detailed risk register is used to take account of the various categories of risk that exist or emerge in all elements of the scheme. This was developed as part of a set and agreed risk management strategy and associated process.

The Register is a live document, held on HCC's Risk Management Information System (RMIS).

RMIS is an online risk management database which offers substantial risk assessment tools and monitoring. It is accessed by all parties (service providers, contractors and all organisations: Hertfordshire County Council (HCC), London Underground Limited (LUL), Network Rail (NR), Watford Borough Council (WBC), Three Rivers District Council, (TRDC)) contributing to the development of the scheme via protected online login details. As such, the Register is being constantly updated to reflect modifications in design and variations to the scheme, regardless of the geographical location of project team members. Furthermore, the transparency of using an online system enables project team individuals to view and understand scheme progress across the project as it occurs.

The Register is managed through set processes and is reviewed as part of the project governance at both Project and Strategic Board level.

## 2 Risk Management Strategy and Process

Croxley Rail Link risk management adheres to both a Risk Management Strategy and a Risk Management Process Guide, both of which were agreed at Strategic Board level.

The Risk Management Strategy was developed in 2009 and details the following:

- Commitment to using the RMIS database for recording and monitoring risks.
- A structure and outline of roles and responsibilities, e.g. Risk Owners, Control Measure Owners for mitigation, the roles of Project and Strategic Board, Project Manager and Risk Manager
- Reporting and Escalation procedures in accordance with project governance, e.g, risks that have increased are reviewed at Project Board on a monthly basis and may be referred to Strategic Board, high level risks are reviewed at Strategic Board.

The Risk Management Process Guide, also developed in 2009, details the following:

- Step by step completion of the HCC RMIS database tailored for Croxley Rail Link
- Likelihood and Impact Classification matrices
- Risk scoring Matrix and scoring parameters

Both documents ensure there is a consistent and systematic approach to recording and monitoring risks for Croxley Rail Link.

### 3 Risk Workshop

Whilst risks are addressed and monitored on a regular basis, Risk Workshops are also held to overview the risk register at key points in the scheme delivery.

For example, the most recent risk workshop was held on 13<sup>th</sup> June 2011 to take a new baseline of progress and set out progress achieved, emerging risks and actions ahead of the BAFFB submission in September 2011.

Attendees to the June 2011 workshop included the following:

<b>Name</b>	<b>Organisation</b>
Ian Chambers	Network Rail
Jon Kirkup	London Underground Limited
David Leboff	London Underground Limited
Tom Duckmanton	Mouchel
Leonie Dubois	Mouchel
Steve Parkinson	Mouchel
Robert Beaumont	Mouchel
Steve Godman	Mouchel
Matthew Hill	Mouchel
Steve Hunter	Steer Davies Gleave
Alastair Hutchinson	Steer Davies Gleave
Marny Moruzzi – RMIS Lead	Hertfordshire County Council
Mike Younghusband	Hertfordshire County Council
Jane Wakeham	Winckworth Sherwood

Attendees were grouped according to scheme elements, e.g. TWAO, Design, Business Case, etc. Each group then reassessed a number of relevant risks and identified new risks in two separate exercises. After each exercise the group was brought back to a whole to present their findings for general group discussion and consensus.

As a result the key outcomes of this particular workshop were as follows:

- Identification of a number of emerging risks, particularly those around TWAO development and design
- Alterations to existing risk scores, particularly for communications as the workshop was held during the recent consultation period
- Updated risk and mitigation ownership



## 4 Risk Register

A copy of the current Risk Register is attached. For ease of use, the register is provided in an excel output, however risk reference numbers for the RMIS database can be seen in the left hand column.

Risk Ref	Short Description	Current Risk Score			Risk Owner	Controls	Control Owner	Target Risk Score		
		Probability	Impact	Rating				Probability	Impact	Rating
CRD0003	As a result of current constraints there is a risk that it is not possible to design an engineering solution that addresses all the requirement of the PRS which may result in not being able to operate the railway as required by the PRS.	2	8	16	Steve Parkinson	1. PRS 2. Workshops 3. Design out - CDS's submission 4. Concession	1. David Leboff 2. Tom Duckmanton 3. Steve Parkinson 4. Steve Parkinson	1	8	8
CRD0006	As a result of lack of approval of design there is a risk that we will be unable to obtain project assurance from either LU or Network Rail which may result in delays in producing TWAO documentation and objections to the TWAO from LU and Network Rail.	2	8	16	Steve Parkinson	1. LUL Approval - CDS Submission 2. NR assurance 3. Assurance - CDS Submission 4. Engineers - CRE Approval (NR) Obtained	All Steve Parkinson	2	8	16
PJT0002	As a result of significant changes to project scope there is a risk that the project costs are higher than is currently budgeted resulting in inability to secure suitable funding.	2	8	16	Tom Duckmanton	1. Baseline Spec - PID 2. Cost review Oct/Nov 2010 (further review due before BAFB submission) 3. Design changes agreed in PID 4. Monthly design development control meetings 5. Outputs from consultation	All Tom Duckmanton	2	8	16
COMMS0005	As a result of the multiple partners involved and the protracted timescale there is a risk that significant (6mth - 1 year) programme delays in any form may result in a withdrawal of support or commitment to the scheme by a key partner (e.g. political change).	2	16	32	Mike Younghusband	1. Legal Agreements 2. Mayors Transport Strategy 3. Line Protection	All Rob Smith	1	16	16
COMMS0001	As a result of successful objections to the proposals there is a risk that some aspects of the scheme need to be revisited, resulting in delays.	3	8	24	Leonie Dubois	1. Clear Communication 2. Early management of objections 3. Technical briefing/s 4. clear justification for scheme - assess all viable alternatives	1,2,3 Leonie Dubois 4. Steve Hunter	3	8	24
CRENV0002	As a result of large volumes of public objections to TWAO from local residents & line side neighbours about noise and nuisance from trains and visual intrusion from raised embankment (invasion of privacy), there is a risk that there is not enough time or resources to process all objections before the public inquiry, resulting in delay.	2	8	16	Leonie Dubois	1. Implement objection management system 2. Early management of objections	Leonie Dubois	1	8	8
BC0006	As a result of changes in personnel and/or corporate attitude, there is a risk that a satisfactory agreement regarding revenue transfer between LU and HCC cannot be achieved which may result in HCC taking a view not to progress the scheme.	1	16	16	Mike Younghusband	Develop Heads of terms into a formal legal agreement	Mike Younghusband	1	16	16
COMMS0004	As a result of the extensive project history and false starts there is a risk that the stakeholders may not be fully engaged with the project which may result in lack of prioritisation for the project and that information is not obtained within programme.	1	8	8	Tom Duckmanton	1. Stakeholder engagement - agreed project governance response	Tom Duckmanton Ian Chambers Jon Kirkup	1	8	8
CNSLT0002	As a result of the extensive project history there is a risk that the public may feel they have not been adequately consulted on the proposals which may result in increased number of objections and a risk of non compliance at public inquiry.	2	8	16	Leonie Dubois	Implement communications strategy - catalogue of decisions being developed	Leonie Dubois	1	8	8

Risk Ref	Short Description	Current Risk Score			Risk Owner	Controls	Control Owner	Target Risk Score		
		Probability	Impact	Rating				Probability	Impact	Rating
ENGI0003	As a result of limited ground investigation information regarding the disused line, there is a risk that works required will be greater than anticipated which may result in significant additional cost, delays and land take.	4	4	16	Steve Parkinson	1. Ground investigation - CDS June 2011 2. Design 3. VE workshop	All Steve Parkinson	2	4	8
CNSLT0001	As a result of missing/omitted statutory consultees there is a risk that any objections/comments/views to the scheme cannot be accommodated in the design stage which may result in strong opposition to the scheme.	1	8	8	Leonie Dubois	1. Consultees 2. Deliver comms strategy	Both Leonie Dubois	1	8	8
LGL0001	As a result of scheme partners being unable to agree the working/legal agreements, there is a risk of programme delay and/or withdrawal of support for the project, resulting in programme delay and cost increase.	1	16	16	Tom Duckmanton	1. Stakeholder relations 2. Formal agreements	Both Tom Duckmanton	1	16	16
BC0001	As a result of ownership of the disused line by NR there is a risk that efforts to dispose or actual disposal of that asset by NR may result in the scheme becoming undeliverable and a TWAO application not being made.	1	16	16	Tom Duckmanton	1. Protection of line 2. TWAO delivery 3. Formal Agreement	1. Ian Chambers 2. Tom Duckmanton 3. Rob Smith	1	16	16
ENGI0004	As a result of not enough land being taken in TWAO submission, there is a risk that construction will be delayed, resulting in programme delay and need to acquire more land.	2	8	16	Steve Parkinson	1. Stakeholder requirements 2. Land take accuracy	1. Steve Parkinson 2. Steve Parkinson and Jane Wakeham	1	8	8
ENGI0001	As a result of the existing and required track gradients there is a risk that any objections/comments/views to the scheme cannot be accommodated in the design stage which may result in strong opposition to the scheme (track position).	2	4	8	Steve Parkinson	1. Consultation 2. Design 3. Concession	All Steve Parkinson	2	4	8
CRD0004	As a result of public objections to the viaduct/engineering issues with the viaduct (size, height, visual impact and noise nuisance) there is a risk that the design will change resulting in increased costs and project delay.	3	4	12	Steve Parkinson	1. Consultation 2. Collective decision making 3. Consultation 4. CDS	1/2. Steve Parkinson 3/4. Leonie Dubois	2	4	8
COMMS0006	As a result of the number of organisations developing the CRL proposals there is a risk that the messages released from the project are not consistent which may result in confusing the stakeholders and damaging the reputation of the project.	1	8	8	Leonie Dubois	1. Support 2. Liaison	Both Leonie Dubois	1	8	8
CRD0010	As a result of inadequate planning of other projects/organisations interfacing with CRL, there is a risk that conflicts arise between competing projects for space/access/testing, etc. resulting in delay and cost increase.	2	8	16	Tom Duckmanton	1. Formal agreement 2. Stakeholder relations	Both Tom Duckmanton	1	8	8
PJT0001	As a result of significant changes to materials cost, there is a risk that the project costs are higher than is currently budgeted resulting in the need to reassess the business case and secure additional funding.	3	16	48	Tom Duckmanton	1. Capital revenue 2. Outcomes of Value Engineering Workshop 3. Establish level of inflation 4. Maintain programme	All Tom Duckmanton	2	16	32

Risk Ref	Short Description	Current Risk Score			Risk Owner	Controls	Control Owner	Target Risk Score		
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CRD0001	As a result of delays issuing the final PRS (that includes satisfactory responses to the queries raised by specialists, the final location of the stations, viaduct alignment, location of site compound, etc) there is a risk that incorrect or superseded information is used to assess impacts which may result in the TWAO delivery date being missed.	2	4	8	David Leboff	1. PRS 2. Communicate	1. David Leboff 2. Tom Duckmanton	1	4	4
COMMS0007	As a result of an objection to the scheme, there is a risk that one or more of the partner organisations are not content with the negotiation option offered, which may result in inability to resolve an objection.	2	8	16	Mike Younghusband	1. Develop road map for resolving objections 2. Develop agreed policy documents 3. Capture 1 & 2 in Legal Agreements 4. Anticipated objections FAQs	1,4 Leonie Dubois 2,3 Tom Duckmanton	2	8	16
BC0005	There is a risk that NR seek a higher price for the land than is currently included in the business case leading to significant increases in business case costs.	1	3	3	Tom Duckmanton	Pricing	Tom Duckmanton	1	3	3
CRD0005	As a result of inadequate/insufficient land referencing, there is a risk that a significant interest/objector can demonstrate lack of reasonable endeavours on the part of the promoter in identifying interests resulting in TWAO rejection.	1	4	4	Mark Aanensen	1. Enquiry 2. Review	Both Mark Aanensen	1	4	4
COMMS0003	As a result of insufficient survey information, there is a risk that the TWAO is not robust leading to a rejection of the Order.	1	4	4	Tom Duckmanton	1. Surveys 2. Audit	Both Tom Duckmanton	1	4	4
COMMS0002	As a result of the complexity of the information required to perform full consultation, there is a risk that full consultation/reasonable endeavours do not take place as required, resulting in incomplete consultation which may delay TWAO approval.	1	4	4	Leonie Dubois	ES finalised	Robert Beaumont	1	4	4
BC0007	As a result of the updated benefits model showing different results, there is a risk of negative impact and/or inability to secure the required level of funding, resulting in scheme reduction/closure.	1	16	16	Mike Younghusband	Ensure accurate interpretation of model results and assessment against scheme costs	Steve Hunter	1	16	16
FCL0003	As a result of defining the costs of an additional unit and poor timing of ordering the additional unit, there is a risk that cost increases will be incurred, resulting in detrimental changes to the financial case.	5	4	20	Jon Kirkup	LUL to liaise with preferred supplier	David Leboff	1	4	4
FCL0004	As a result of the scheme not generating the level of revenue predicted (passenger numbers) there is a risk that borrowed funds cannot be paid back as planned, resulting in the need for HCC to use own funds.	2	8	16	Mike Younghusband	To ensure appropriate HCC preparation for such an eventuality	Mike Younghusband	1	8	8
OP0001	As a result of increased operating costs there is risk that borrowed funds cannot be paid back as planned, resulting in the need for HCC to use own funds.	2	8	16	Mike Younghusband	To ensure appropriate HCC preparation for such an eventuality	Mike Younghusband	1	8	8

Risk Ref	Short Description	Current Risk Score			Risk Owner	Controls	Control Owner	Target Risk Score		
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TP0003	As a result of misleading information by 3rd parties, there is a risk that delays occur and reputation/support from elected members is affected, resulting in reduced support for the scheme.	4	4	16	Tom Duckmanton	1. Monitor online media streams 2. Adhere to consultation strategy 3. Maintain and update list of FAQ's 4. Maintain/update website	All Leonie Dubois	2	4	8
TP0004	As a result of failure to co-ordinate works to programme/handover of contracts from one party to another, there is a risk of potential delays, increased costs and/or reputational impacts, resulting in scheme delay, redesign and/or closure.	3	4	12	Mike Younghusband	Mitigation strategies to be developed	Mike Younghusband	2	4	8
TP0005	As a result of low market appetite to provide competitive bids and competing projects, there is a risk that specialist resources are difficult to source, resulting in delay and cost increases.	3	8	24	Mike Younghusband	1. Search contracts for specific work streams 2. Review best practice procurement	1. Mike Younghusband 2. Marny Moruzzi	2	8	16
TP0006	As a result of changes within NR/LU/HCC in delivery models and/or organisational structure, there is a risk of negative/adverse effects on project delivery, resulting in scheme delay.	3	4	12	Mike Younghusband	1. Ensure implementation plan includes all delivery models and is continually updated 2. Maintain good working relationships with all partners	1. John Houghton 2. Tom Duckmanton	2	4	8
CRENV0004	As a result of insufficiently developed/considered robust ES, there is a risk that statement challenges are increased, resulting in additional work in responding and consequent delays in application (e.g. additional surveys, GI surveys, seasonal surveys).	3	4	12	Rob Beaumont	1. Ensure surveys are programmed, undertaken and delivered to programme 2. Continually assess ES and ensure adequate resources are allocated 3. Review ES for completeness	1. Robert Beaumont 2. Adrian Dawes 3. David Walker	2	4	8
ENGI0005	As a result of failure to get LUL approval for the viaduct CDS, there is a risk that consequent delays and redesign will be required, resulting in increased objections and further delay to public inquiry.	2	8	16	Steve Parkinson	1. Continued liaison of design team 2. Ensure appropriate resources are allocated	Both Steve Parkinson	1	8	8
CRD0011	As a result of the design, there is a risk that fire engineers requirements are enhanced, resulting in increased safety requirements and scheme costs.	3	4	12	Michael Watkins	1. Ensure appropriate safety measures are built into the design 2. Ensure appropriate budget is allocated to afford all safety measures	Both Steve Parkinson	2	4	8
CRD0012	As a result of pedestrian flow modelling results showing unexpected impacts, there is a risk that existing station designs may need amendments, e.g. increase number of entrances, resulting in delay.	2	4	8	Michael Watkins	1. Ensure programme reflects potential need to alter designs 2. Ensure appropriate resource can be allocated	Both Michael Watkins	1	4	4
CRD0013	As a result of objections from the EA, there is a risk that design aspects such as the proposed viaduct piling solution needs addressing, resulting in more complex/costly solutions, such as other foundations.	3	4	12	Steve Parkinson	1. Ensure EA objections are addressed appropriately 2. Ensure budgets cater for appropriate changes to design solutions	1. Leonie Dubois 2. Steve Parkinson	2	4	8

Risk Ref	Short Description	Current Risk Score			Risk Owner	Controls	Control Owner	Target Risk Score		
		Probability	Impact	Rating				Probability	Impact	Rating
CRENV0005	As a result of delays in the clearance of invasive species, there is a risk that the start of construction could be delayed, resulting in overall project delivery delay.	2	8	16	Tom Duckmanton	1. Appoint environmental risk specialist to assess 2. Manage programme to ensure adequate time is allowed for clearance	Both Tom Duckmanton	2	8	16
ENGI0006	As a result of delayed approval of submitted CDS's/concessions, there is a risk that the TWAO application is submitted incompletely, resulting in a weaker application.	1	2	2	Steve Parkinson	CDS Approvals to be managed	Tom Duckmanton	1	2	2
PJT0005	As a result of the timescale for appointment of inspector and DfT decision making (up to 18 months), there is a risk that the process is drawn out beyond the current review period of 2014, resulting in an underspend/failure to spend any allocated funding.	4	8	32	Mike Younghusband	Ensure timely answers are given to queries and ongoing communication	Tom Duckmanton	3	8	24
PJT0006	As a result of a judicial review of the scheme, there is a risk that the outcomes lead to failure to progress, resulting in scheme closure.	2	8	16	Mike Younghusband	Ensure all workstreams are sufficiently resourced and prepared for input to judicial review	Tom Duckmanton	1	8	8
CRTWAO0002	As a result of the TWAO special categories, there is a risk that a resolution is raised against the order when laid in Parliament, resulting in failure to obtain the order and scheme closure.	3	8	24	Tom Duckmanton	Ensure special categories are considered as far as possible before submission	Tom Duckmanton	1	8	8
CRD0014	As a result of step free access requirements changing at Watford High Street station, there is a risk that additional works will be required, resulting in increase cost.	2	4	8	Steve Parkinson	Ensure changes to design are adequately programmed and budgeted	Tom Duckmanton	2	4	8
ENGI0007	As a result of settlement of the existing Met line embankment, there is a risk that construction will take longer to complete, resulting in delay.	2	4	8	Steve Parkinson	Ensure settlement plan is in place	Steve Parkinson	2	4	8
ENGI0008	As a result of uncertainty around signalling type/timing/installation, there is a risk of signalling works will not marry with the SSL upgrade, resulting in budgetary and programme shortfalls.	3	8	24	Jon Kirkup	Ensure signalling solution is determined ahead of TWAO submission	Jon Kirkup/Steve Parkinson	2	8	16
BC0012	As a result of increased land costs, there is a risk that compensation claims increase, resulting in budgetary shortfall.	2	4	8	Tom Duckmanton	1. Ensure land cost estimates are up to date 2. Assess compensation budget against land cost estimates 3. Develop possession strategy	1. LSH Rob Snell 2. Tom Duckmanton 3. Tom Duckmanton	2	4	8
CRTWAO0003	As a result of poor alternative locations for existing amenity areas, there is a risk of increased objections, resulting in programme delays.	3	4	12	Tom Duckmanton	Discussions with HCC/WBC to identify alternative sites for existing amenity areas.	Tom Duckmanton	2	4	8