

Thames Tideway Tunnel
Thames Water Utilities Limited



Application for Development Consent

Application Reference Number: WWO10001

Draft Project Framework Travel Plan

Doc Ref: **7.11**

APFP Regulations 2009: Regulation **5(2)(q)**

Hard copy available in

Box **54** Folder **A**
January 2013

**Thames
Tideway Tunnel**



Creating a cleaner, healthier River Thames

This page is intentionally blank

Thames Tideway Tunnel

Draft Project Framework Travel Plan

List of contents

	Page number
Executive summary	v
1 Introduction	1
1.1 Purpose of the document.....	1
1.2 The Thames Tideway Tunnel project	1
1.3 Approach	3
1.4 Ownership	4
1.5 Structure.....	4
2 Background and policy	5
3 Project description	7
3.1 Overview.....	7
3.2 Construction phase.....	7
3.3 Operational phase	8
4 Objectives, targets and indicators	11
4.1 Objectives.....	11
4.2 Targets	11
4.3 Indicators.....	12
5 Roles and responsibilities	13
5.1 Management and organisation	13
5.2 Client responsibilities.....	14
5.3 Contractor responsibilities	15
5.4 Subcontractor and supplier responsibilities	15
5.5 Worker responsibilities	16
5.6 Travel plan liaison group.....	16
6 Site specific travel plans	19
7 Travel plan measures	21
7.1 Introduction.....	21
7.2 Travel awareness	21
7.3 Walking.....	22
7.4 Cycling.....	22

7.5	Public and worker transport	23
7.6	Car travel and parking	23
8	Monitoring, review, and funding	25
8.1	Monitoring.....	25
8.2	Review.....	25
8.3	Funding.....	26
	Glossary	27
	Appendices	29
	Appendix A : Policy review	31
	Appendix B : Influencing travel behaviour	35
	Appendix C : Guidelines for project travel plan contractual requirements.....	37
	Appendix D : Project travel plan guidelines.....	39
	Appendix E : Site specific travel plan example template.....	45
	References	49

List of plates

	Page number
Plate 5.1 Travel Plan Management Structure	14
Plate 5.2 The role of the Travel Plan Liaison Group	17

List of tables

	Page number
Table 3.1 Estimated maximum workforce numbers per site	9

List of abbreviations

ATTrBuTE	Assessment Tool for Travel Plan Building Testing and Evaluation
CoCP	Code of Construction Practice
CSO	combined sewer overflow
DfT	Department for Transport
MTS	Mayor's Transport Strategy
NPS	National Policy Statement
PFTP	Project Framework Travel Plan

TPC	Travel Plan Coordinator
TPLG	Travel Plan Liaison Group
TPM	Travel Plan Manager
TPR	Travel Plan Representative
SSTP	Site Specific Travel Plan
TWUL	Thames Water Utilities Limited
TfL	Transport for London
UWWTD	Urban waste water treatment directive

This page intentionally left blank

Executive summary

EX 1 Overview

- EX 1.1 The primary aim of the draft *Project Framework Travel Plan* (PFTP) is to set a framework to minimise the adverse environmental impact of worker and visitor travel to and from construction worksites. The PFTP includes guidance for the contractor requirements to produce individual Site Specific Travel Plans (SSTPs) and provides a guiding template for those plans. The PFTP and SSTPs together are referred to as the Travel Plan.
- EX 1.2 This PFTP takes account of national and regional planning policy and has been prepared with regard to appropriate best practice guidance for travel planning.
- EX 1.3 At the time of writing, contractors for the project have not yet been appointed, therefore the preparation of this PFTP as a draft together with a set of guidelines for contractors is a means of establishing the context within which detailed measures can be developed at a future stage.

EX 2 Objectives, targets and indicators

- EX 2.1 Objectives, targets and the use of indicators are discussed in the PFTP. The generalised project wide targets for the PFTP, at this stage, include:
- a. maximising the proportion of workers using public transport (including river services) to travel to and from the site
 - b. minimising the number of single occupancy vehicle journeys made to and from each site
 - c. encouraging those workers that live within 5km of the site to cycle to the site, where possible
 - d. encouraging those workers that live within 1km of the site to walk, where possible.
- EX 2.2 Project-wide and site-specific targets would be developed, the latter included within the SSTPs.
- EX 2.3 Indicators and surveys would be used for monitoring purposes. A number of indicators would be measured as part of the monitoring regime, to include the percentage of workers who walk, cycle, use public transport and car share.

EX 3 Roles and responsibilities

- EX 3.1 The PFTP would be owned by Thames Water Utilities Limitedⁱ as the project promoter. Contractors would be required to commit to the principles of the PFTP and to ensure that the SSTPs and PFTP are implemented effectively and reviewed on a regular basis. The management structure and the roles and responsibilities of the client, contractor, sub-contractor and worker are described in the PFTP.
- EX 3.2 TWUL would manage the overall Travel Plan through a Travel Plan Manager (TPM). Contractors and subcontractors would be required to identify individuals (Travel Plan Coordinators (TPLs) and Travel Plan Representatives (TPRs) respectively) to manage Travel Plan activities for their sites. A Travel Plan Liaison Group (TPLG) would be established, before the commencement of construction, comprising stakeholder representatives and project representatives. Meeting on a regular basis, the TPLG would be responsible for monitoring and reviewing travel planning across the project. The role of the TPLG is described in the draft PFTP.

EX 4 Site specific travel plans

- EX 4.1 The PFTP identifies a series of Travel Plan measures. Issues which are specific to individual site locations would be captured in the SSTPs to ensure that local characteristics are fully reflected in the SSTP proposals.
- EX 4.2 Contractors would be expected to develop SSTPs for the sites for which they are responsible and to contribute to the development and refinement of project-wide measures. Guidance on a set of contractual requirements is set out in the PFTP appendices and specifically indicates that SSTP measures should include:
- a. no parking on site for workers unless otherwise agreed with local authorities
 - b. co-operation with TWUL and local authorities to deter parking by workers in the surrounding area
 - c. a permit system to control operational vehicles on site
 - d. provision of transport to and from public transport nodes where sites are at a distance from public transport services
 - e. provision of cycle parking facilities.
- EX 4.3 The contractual requirements would be supported by guidelines and a template, both included in the PFTP appendices, to assist contractors in understanding the objectives, responsibilities and the range of potential travel planning measures.

ⁱ Thames Water Utilities Ltd (TWUL). The Draft Development Consent Order (DCO) contains an ability for TWUL to transfer powers to an Infrastructure Provider (as defined in article 2(1) of the DCO) and/or, with the consent of the Secretary of State, another body.

EX 5 Travel Plan measures

- EX 5.1 The Travel Plan would draw from a range of potential measures, identifying those which are appropriate for each location and are likely to be most effective. Over the life of the project, it may be appropriate to add, remove or amend measures in the PFTP or SSTPs to respond to changing requirements and travel patterns.
- EX 5.2 Examples of Travel Plan measures which at this stage are considered to be suitable for the project are covered in this document under the following categories:
- a. travel awareness: aimed at ensuring that the purpose and objectives of the Travel Plan are communicated to all workers
 - b. walking
 - c. cycling
 - d. public and worker transport
 - e. car travel and parking.

EX 6 Monitoring, review and funding

Monitoring

- EX 6.1 The PFTP and SSTPs would be actively implemented throughout the construction of the project. TWUL, contractors, subcontractors and suppliers would all be obliged to commit to the monitoring and review process which includes:
- a. employee travel surveys. A single common survey structure would be set by the TPM to enable common information to be captured across the project
 - b. discussions with the TPCs to ensure that relevant site-specific information is collected in each location.
 - c. engagement with the TPLG, including reviewing progress on the effectiveness of the PFTP and SSTP action plans
- EX 6.2 On completion of the construction phase, the on-going implementation and formal monitoring of the PFTP and SSTPs would be reviewed and an appropriate approach determined for the operational phase.

Review

- EX 6.3 The TPLG would be responsible for reviewing the operation of the Travel Plan, based on the targets and indicators identified and the regular reporting from the TPM. In the event of targets not being met, and the degree of shortfall being considered significant, remedial measures and an

implementation timetable would be presented to the TPLG for agreement. The emphasis of addressing any target shortfall would be to consider 'soft' measures first, including incentives or disincentives designed to address the shortfall.

Funding

- EX 6.4 TWUL would fund the preparation, implementation and operation of the Travel Plan, including the TPM role and activities related to the implementation of the PFTP and the TPLG. The provision of the TPC roles, preparation of the SSTPs and the implementation and monitoring of SSTP measures would be a requirement of contractors' appointments which would be funded by the contractors.

1 Introduction

1.1 Purpose of the document

- 1.1.1 This document is the suggested draft Project Framework Travel Plan (PFTP) for the Thames Tideway Tunnel project.
- 1.1.2 The purpose of the draft PFTP is to provide an overarching framework to proactively manage trips by workers and visitors to and from construction sites throughout the construction period. The aim is to minimise local impacts by reducing the number of single occupancy vehicle trips and encouraging the uptake of sustainable modes of travel.
- 1.1.3 The draft PFTP also sets out guidance for the requirements for contractors to produce individual Site Specific Travel Plans (SSTPs) and provides a guiding template for those plans. The PFTP and SSTPs together are referred to as the Travel Plan.
- 1.1.4 The draft PFTP is a stand-alone document which accompanies the Development Consent Order, but is supported at this stage of the project by two guidance documents setting out Travel Plan guidelines and contractual requirements in Appendices C and D.

1.2 The Thames Tideway Tunnel project

Overview

- 1.2.1 At present, untreated sewage mixed with rainwater (combined sewage) regularly overflows into the River Thames from London's Victorian sewerage system via combined sewer overflows (CSOs).
- 1.2.2 Combined sewage discharges must be reduced in order to comply with relevant wastewater legislation. The primary objective of the proposed Thames Tideway Tunnel project (the 'project') is to control discharges from CSOs in order to meet the requirements of the European Union's Urban Waste Water Treatment Directive (91/271/EEC) (UWWTD) and the related United Kingdom (UK) Urban Waste Water Treatment Regulations. Other European Union and UK legislation also forms part of the legal framework within which the project is to be designed and delivered. The Water Framework Directive, and the regulations that transpose it into UK law, set out various 'environmental objectives' to be achieved in relation to surface water quality.
- 1.2.3 The project would control CSO discharges by intercepting and diverting combined sewage flows into a new storage and transfer tunnel. The tunnel would run from Acton Storm Tanks in west London to Abbey Mills Pumping Station in the east, where it would connect to the Lee Tunnel, which would transfer the flows to Beckton Sewage Treatment Works for treatment.

1.1.2 The project comprises two principal elements:

- a. Tunnels:
 - i The main tunnel.
 - ii Connection tunnels.
- b. sites:
 - i Main tunnel sites.
 - ii CSO sites.
 - iii System modification sites.
 - iv Beckton Sewage Treatment Works.

Main tunnel

1.1.3 The main tunnel route would take the shortest line from Acton Storm Tanks to the River Thames and stay beneath the river from west London to Rotherhithe. It would then divert from beneath the River Thames to the northeast via the Limehouse Cut and terminate at Abbey Mills Pumping Station, where it would connect to the Lee Tunnel.

1.1.4 The main tunnel would be approximately 25km long with an approximate internal diameter of 6.5m in the west increasing to 7.2m through central and east London. The approximate depth of the tunnel would be between 30m in west London and 65m in the east in order to provide sufficient clearance to existing tunnels and facilities under the city and meet the hydraulic requirements.

Connections tunnels

- 1.1.5 Two long connection tunnels would be required in order to connect five remote CSOs to the main tunnel. The tunnels are known as:
- a. The Frogmore connection tunnel (approximately 3m internal diameter and approximately 1.1km long), which would be situated in the London Borough of Wandsworth.
 - b. The Greenwich connection tunnel (approximately 5m internal diameter and approximately 4.6km long), which would pass through the London boroughs of Southwark and Lewisham and the Royal Borough of Greenwich.
- 1.1.6 A series of shorter connection tunnels would also be necessary to connect various CSOs that are close to the proposed main tunnel route.

Sites

1.2.4 The Environment Agency has identified 34 'unsatisfactory' CSOs that the project needs to address. CSO control studies and design development have established that 14 of these CSOs could be controlled indirectly, which reduces the number of worksites required.

1.2.5 A detailed site selection process has been carried out, having regard to engineering, planning, environment, socio-economic, community and

property constraints. Twenty-four worksites were selected in total, which can be categorised by function as follows:

- a. Five 'main tunnel sites': These sites would be used to construct the main tunnel and can be further classified as 'drive sites' and/or 'reception sites'. Shafts would be excavated to the appropriate depth and the tunnel boring machines would start at 'drive shafts' and be removed via 'reception shafts'. A shaft may serve as both a drive and a reception shaft.
- b. Sixteen 'CSO sites': These sites would be used to construct the CSO drop shafts and interception structures and to drive or receive connection tunnels.
- c. Two 'system modification sites': These sites would be used to control CSOs locally rather than connecting them to the main tunnel.
- d. Beckton Sewage Treatment Works: This site would be used to lift the combined sewage flows from the main tunnel system and transfer them for treatment. This site also requires a siphon tunnel to bypass the pumping mechanism when the tunnel system is full.

- 1.2.6 The new infrastructure would protect the tidal Thames from increasing pollution for at least the next 100 years. The current assumption is that construction would commence in 2016 and be completed by 2023.

1.3 Approach

- 1.3.1 The development of the Travel Plan is a key stage in the forward planning process. It identifies a coordinated strategy for improving travel opportunities to and from the Thames Tideway Tunnel construction sites and managing travel demands. It is a dynamic process intended to grow and develop with time as the travel patterns of employees change and new initiatives are introduced.

- 1.3.2 The PFTP and accompanying SSTPs are designed to be 'live' documents which incorporate the flexibility to respond and adapt to changing conditions over the duration of the project, such as:

- a. Variation in the levels of construction activity over the duration of the construction programme in each location.
- b. New or amended transport services in the vicinity of each site.
- c. Transport network operation as a result of changing background travel demand over time.
- d. Initiatives employed through the travel plan drawing on experience of its implementation.

- 1.3.3 The PFTP and the guidance for the SSTPs have been prepared on the basis of established policy and guidance including that from the Department for Transport (DfT) and Transport for London (TfL). Relevant background is discussed in Section 2.

- 1.3.4 As the project is currently still in its design phase, this document will find more detailed population of objectives and measures once construction has commenced.

1.4 Ownership

- 1.4.1 It is important that there is committed ownership of the PFTP and its supplementary measures as this ensures that there is clear responsibility for the implementation of the Travel Plan over the life of the project.
- 1.4.2 The PFTP would ultimately be owned by Thames Water Utilities Limited (TWUL) as promoter of the Thames Tideway Tunnel project. TWUL would retain overall responsibility for the implementation of the Travel Plan and for liaising with the appropriate statutory authorities and transport operators.
- 1.4.3 Operational responsibility for the development of measures specific to each site, and for day-to-day implementation of these measures, would be delegated to the appointed contractor at each site. Contractors would be required to work within the context of this PFTP and to monitor and report progress to TWUL.

1.5 Structure

- 1.5.1 This draft PFTP has been developed in accordance with best practice guidance. The PFTP is set out using the following structure:
- a. Section 2 summarises the background to Travel Plans and relevant policy considerations.
 - b. Section 3 describes the Thames Tideway Tunnel project.
 - c. Section 4 discusses the objectives, targets and indicators for the PFTP.
 - d. Section 5 explains the roles and responsibilities of those involved.
 - e. Section 6 sets out the requirements for the SSTPs.
 - f. Section 7 describes the range of measures that would be considered within the Travel Plan.
 - g. Section 8 explains the arrangements for monitoring, review and funding of the Travel Plan.
- 1.5.2 The draft PFTP also contains a number of appendices which include guidance on contractual requirements and in relation to the preparation of SSTPs by contractors appointed to the project.

2 Background and policy

- 2.1.1 Increased car use has resulted in high volumes of traffic in peak hours, which gives rise to localised congestion in town and city centres such as London. This congestion contributes to poor air quality, delays to journeys and threats to personal health.
- 2.1.2 Whilst there is no single solution to combat these problems, a combination of individual measures implemented through the Travel Plan will have a beneficial effect by encouraging sustainable access during the proposed construction period.
- 2.1.3 The draft PFTP takes account of national and regional planning policy and has been prepared with regard to appropriate best practice guidance for travel planning. This ensures that the PFTP reflects established policy aims and objectives at national, London-wide and London Borough level. The Policy Review which helped guide the development of the objectives, targets and indicators can be found in Appendix A.
- 2.1.4 Transport for London's (TfL) 'Travel Planning for new development in London'¹ recognises in Section 3.7 that "a Framework Travel Plan – sometimes referred to as a site-wide or umbrella travel plan – should be prepared for developments comprising at least more than one land use above the local-level or strategic-level thresholds; or when outline planning permission is sought for which scheme elements are not established".
- 2.1.5 Although not specifically identified in the TfL guidance referred to above, it is anticipated that the scale of the Thames Tideway Tunnel project means that it is appropriate to produce a 'strategic-level Travel Plan'. This draft PFTP and the template for the SSTP have therefore been prepared with reference to the TfL 'Assessment Tool for Travel Plan Building Testing and Evaluation' (ATTrBuTE)² guidance and aims to ensure compliance with that guidance as far as is possible for a construction project of this nature.
- 2.1.6 Furthermore, given that at the time of writing this draft PFTP, contractors for the project have not yet been appointed, the preparation of this draft PFTP together with a set of guidelines for contractors is considered fully justified as a means of establishing the context within which detailed measures can be developed at a future stage.

This page intentionally left blank

3 Project description

3.1 Overview

- 3.1.1 Construction sites would be located in the London Boroughs of Ealing, Richmond-upon-Thames, Hammersmith and Fulham, Wandsworth, Lambeth, Lewisham, Newham, Southwark, Tower Hamlets, the City of Westminster, the City of London and the Royal Boroughs of Greenwich and Chelsea.
- 3.1.2 Typical features of the transport network found in the vicinity of each construction site include pedestrian and cycle networks (including the Thames Path at many locations, London and National Cycle Networks, Barclays Cycle Superhighways and Barclays Cycle Hire stations), public transport services (bus, London Underground, Docklands Light Railway, London Overground, National Rail and river passenger services) and the local highway network (including on- and off-street parking).

3.2 Construction phase

- 3.2.1 The project would involve construction activity at a number of locations, the majority of which would be located close to the River Thames. These comprise:
- a. Sites at which Combined Sewer Overflows (CSOs) would be intercepted to divert excess flow into the Thames Tideway Tunnel.
 - b. Sites from which the main tunnel would be driven by tunnel boring machines.
 - c. Sites at which tunnel boring machines would be received and removed.
 - d. Sites at which connection tunnels would be driven between CSO interception locations and the main tunnel.
- 3.2.2 On some sites more than one of the activities listed above may be undertaken.
- 3.2.3 The anticipated construction period for the project is approximately seven years. Not all construction sites would be active for the whole of this period as the duration of work would be dependent upon the works required at each location and the overall construction programme and sequencing of activities. Peak levels of construction activity would not take place at the same time on all sites.
- 3.2.4 Construction workers would be made up of two primary groups - staff and labour workers employed by the contractor, and project supervision staff employed by TWUL. Estimates of the predicted size of the workforce and the expected length of the construction period have been made. Each of the different construction sites would have a different start and finish time throughout the overall construction period of the project. During this time, the number of employees would fluctuate according to workload.

- 3.2.5 The number of workers on site at a particular time of day would also vary depending upon the nature of the works at each site. In general terms, sites where tunnelling activities would take place are expected to operate for longer hours, with shift working for construction workers. At other sites, a single day shift would be required.
- 3.2.6 The anticipated working hours at each of the sites are set out in the Code of Construction Practice (CoCP) Parts A and B.
- 3.2.7 Table 3.1 sets out the estimated peak number of workers at each of the proposed construction sites.

3.3 Operational phase

- 3.3.1 Once construction is complete, sites would be finished to an operational condition. This would incorporate necessary ventilation and control equipment together with provision for access to the tunnels and interception chambers for occasional maintenance purposes.
- 3.3.2 Routine maintenance would be carried out by staff every three to six months with staff travelling to the site by van. A major tunnel inspection would occur approximately every ten years and operatives would be picked up from local transport locations.
- 3.3.3 During the operational phase, there would be no permanent employees present at the Thames Tideway Tunnel sites.

3 Project description

Table 3.1 Estimated maximum workforce numbers per site

	Contractor										TWUL		Total workers
	Staff		Labour						Staff				
	0800-1800	1800-0800	0700-1900	0800-1800	0800-1500	1500-2300	1900-0700	2300-0800	0800-1800	1800-0800			
Shift-working sites													
Dormay Street	30	5	25				15			15	2	92	
Carnwath Road Riverside	60	15		60	60			45		45	4	289	
Kirtling Street	80	20		90	90			75		65	6	426	
Chambers Wharf	60	15		60	60			45		45	4	289	
Greenwich Pumping Station	60	15		60	60			45		45	4	289	
Beckton STW	20	5	20				15			4	1	65	
Dayshift-only sites													
Acton Storm Tanks	15			20						5		40	
Hammersmith Pumping Station	20			20						5		45	
Barn Elms	15			20						5		40	
Putney Embankment Foreshore	20			20						10		50	
King George's Park	15			20						5		40	
Falconbrook Pumping Station	15			20						5		40	
Cremorne Wharf Depot	30			25						10		65	

3 Project description

	Contractor												Total workers		
	Staff		Labour						Staff		TWUL				
	0800-1800	1800-0800	0700-1900	0800-1800	0800-1500	1500-2300	1900-0700	2300-0800	0800-1800	1800-0800					
Working hours															
Chelsea Embankment Foreshore	30			25									10		65
Heathwall Pumping Station	15			20									5		40
Albert Embankment Foreshore	30			25									10		65
Victoria Embankment Foreshore	30			25									10		65
Blackfriars Bridge Foreshore	30			30									10		70
Shad Thames Pumping Station	7			13									4		24
King Edward Memorial Park	15			20									5		40
Earl Pumping Station	15			20									5		40
Deptford Church Street	15			20									5		40
Abbey Mills Pumping Station	20			20									5		45
Bekesbourne Street	7			13									4		24

The figures in this table represent the estimated maximum number of workers by shift at each site, for the period of peak construction activity. Peak activity would not occur at the same time on every site and worker numbers either side of those peak periods may be lower than shown in this table

4 Objectives, targets and indicators

4.1 Objectives

- 4.1.1 The primary aim of the PFTP is to set a framework within which the project can reduce the adverse environmental impact of worker and visitor travel to and from construction sites through a reduction in single occupancy vehicle use and encouraging the use of sustainable modes.
- 4.1.2 The PFTP has been developed with the primary objectives of:
- a. Enhancing construction worker and visitor awareness of sustainable travel options to enable more informed travel choices to be made.
 - b. Maximising the proportion of worker and visitor trips to and from the site which are made by sustainable modes.
 - c. Enhancing the health and fitness of construction workers and visitors through the encouragement of sustainable travel.
- 4.1.3 In order to meet the objectives of the Travel Plan, a number of measures would be implemented which would primarily be aimed at influencing travel behaviour. Appendix B contains further summary information on the approach to influencing travel patterns and choices.

4.2 Targets

- 4.2.1 DfT guidance ('Delivering Travel Plans through the Planning Process', 2009)³ sets out an 'outcomes-based' approach to Travel Plans, which specifies outcomes linked to specific targets that can also be strengthened with remedial measures if these are not met. This approach has been adopted during the development of the PFTP and would be integral to the preparation and implementation of the SSTPs.
- 4.2.2 At present there are a number of unknown factors and considerations at the project-wide level including the locations from and to which the workers would commute on a daily basis and individual details about the workforce.
- 4.2.3 Additionally it must be recognised that the nature of construction work would change over time. Initially work would involve more generalised civil engineering activities, where labour may be sourced locally. However, as construction progresses, the proportion of workers with particular skills (in tunnelling, for example) would increase and this in turn may influence the catchment area from which such workers can be drawn.
- 4.2.4 At this stage, therefore, the generalised project wide targets for the PFTP include:
- a. Maximising the proportion of workers using public transport (including river services) to travel to and from the site.
 - b. Minimising the number of single occupancy vehicle journeys made to and from each site.

- c. Encouraging those workers that live within 5km of the site to cycle to the site, where possible.
 - d. Encouraging those workers that live within 1km of the site to walk, where possible.
- 4.2.5 Given the above uncertainties, setting specific mode share targets at a project-wide level is difficult especially prior to travel surveys. Project-wide targets would also be related to site-specific targets, which have not yet been prepared.
- 4.2.6 Site specific targets would be developed and included within the SSTPs. As details of the workforce would not be available until shortly before construction commences, the latest available Census Journey to Work data would be used as a basis for setting initial targets. More accurate mode share data would be derived after the first travel survey at each site has been conducted. This would be done within three months of the start of construction.
- 4.2.7 The site-specific and project-wide targets would be reviewed and agreed with the relevant stakeholders following analysis of travel survey results.
- 4.2.8 Guidance from TfL1 and others notes that Travel Plan targets should be 'Specific, Measurable, Attainable, Realistic and Time-bound' (SMART). Targets for the SSTPs, and therefore also at the project-wide level, would be developed against these criteria.

4.3 Indicators

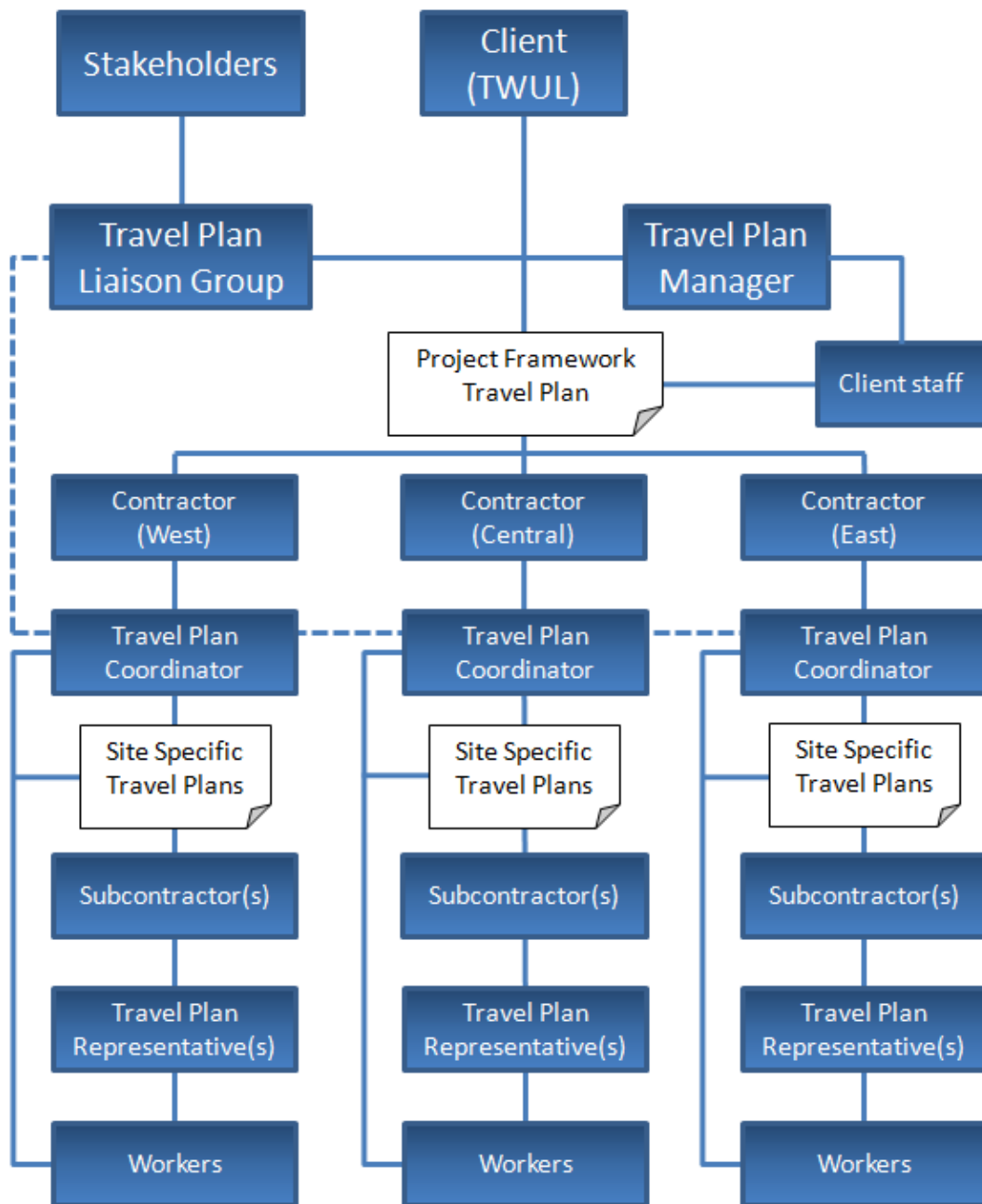
- 4.3.1 DfT guidance³ highlights the importance of distinguishing between outcome targets and indicators. For the Thames Tideway Tunnel project indicators would be used to monitor how sites are being accessed and how effectively different modes are meeting travel needs. This information would be used to identify where the greatest potential for mode shift may lie and to inform the implementation strategy for the PFTP and SSTPs.
- 4.3.2 An on-going programme of undertaking and reviewing construction worker travel surveys would be followed. Initially these surveys would establish a representative baseline and inform the development of the strategy to influence construction worker travel behaviour at the proposed construction sites. Subsequently travel surveys would be undertaken then on a regular basis as needed (at an interval to be agreed with the Travel Plan Liaison Group, see para 5.1.5 below) to determine performance against the strategy and the indicators identified.
- 4.3.3 A number of indicators would be measured as part of the monitoring regime. Key indicators would include the below and additional indicators may be developed during the life of the Travel Plan if necessary:
 - a. percentage of construction workers walking
 - b. percentage of construction workers cycling
 - c. percentage of construction workers using public transport
 - d. percentage of construction workers car sharing.

5 Roles and responsibilities

5.1 Management and organisation

- 5.1.1 The PFTP would be owned by TWUL as the project promoter. Contractors would be required to commit to the principles of the PFTP as part of their appointment to the project. Contractors would also be required to work in conjunction with TWUL to ensure that the SSTPs and PFTP are implemented effectively and are reviewed on a regular basis.
- 5.1.2 In order to successfully achieve the objectives of the PFTP, a consistent and well-managed programme of action needs to be implemented. This would involve a number of key parties including the TWUL, project contractors, subcontractors and suppliers, transport authorities and transport providers.
- 5.1.3 Plate 5.1 illustrates the management structure proposed for the implementation of the PFTP and SSTPs. The roles contained within this structure are explained below.
- 5.1.4 TWUL would manage the overall Travel Plan through a Travel Plan Manager. Contractors and subcontractors would be required to identify nominated individuals within their organisations to manage Travel Plan activities for their sites.
- 5.1.5 A Travel Plan Liaison Group (TPLG) would be established, comprising stakeholder representatives such as public transport operators, TfL, and local authorities, together with the Travel Plan Manager and TWUL representatives. Contractors' Travel Plan Coordinators would also be invited to attend the TPLG as necessary to discuss site-specific issues.

Plate 5.1 Travel Plan Management Structure



5.2 Client responsibilities

- 5.2.1 TWUL would appoint a Travel Plan Manager (TPM). The TPM would:
- Ensure standards and best practice are applied across the project through coordination and information sharing with the appointed contractors.
 - Issue and explain the PFTP and the requirement to produce SSTPs to each of the appointed contractors.
 - Review and ensure the PFTP and SSTP action plans are identified, appropriate and implemented.

- d. Support procurement and implementation of measures set out in the PFTP and SSTPs in conjunction with contractors.
- e. Assess, collate and report progress on Travel Plan performance and determine amendments and further initiatives where required.
- f. Liaise and consult with the Travel Plan Liaison Group (TPLG), which will consist of key stakeholders including representatives from TfL and Local Authorities. The TPM's responsibilities within this group are detailed in Section 5.6 of this PFTP.
- g. Update the PFTP on a regular basis before and during construction.

5.3 Contractor responsibilities

5.3.1 Each contractor would be required to appoint a Travel Plan Coordinator (TPC) to develop and implement the relevant SSTPs.

5.3.2 A contractor may choose to appoint a single TPC with responsibility for a number of construction sites. The appointed TPCs would be required to:

- a. Develop a SSTP for each site in accordance with the contractual requirements and Travel Plan guidance set out in the PFTP, working with the client's TPM.
- b. Procure, implement and actively promote Travel Plan measures in the SSTPs and support implementation of the PFTP.
- c. Act as a focal point on transport-related issues at the site/s being represented and ensure that contractor's staff comply with their responsibilities.
- d. Manage the monitoring, audit and review of the SSTP process.
- e. Liaise with other coordinators and representatives in order to share ideas, coordinate efforts and review progress.
- f. Ensure subcontractors and suppliers comply with their role and, where appropriate, appoint Travel Plan Representatives (TPRs).

5.4 Subcontractor and supplier responsibilities

5.4.1 All subcontractors and suppliers that are likely to have a significant presence on site would be required to appoint a TPR. The appointed TPR would:

- a. Act as a key interface between the contractor's TPC and the subcontractor's workers.
- b. Ensure that their own staff comply with their responsibilities.
- c. Provide support to the TPC in monitoring and reviewing the effectiveness of Travel Plan measures.
- d. Liaise with the TPC and other tprs to share ideas and coordinate efforts.

5.5 Worker responsibilities

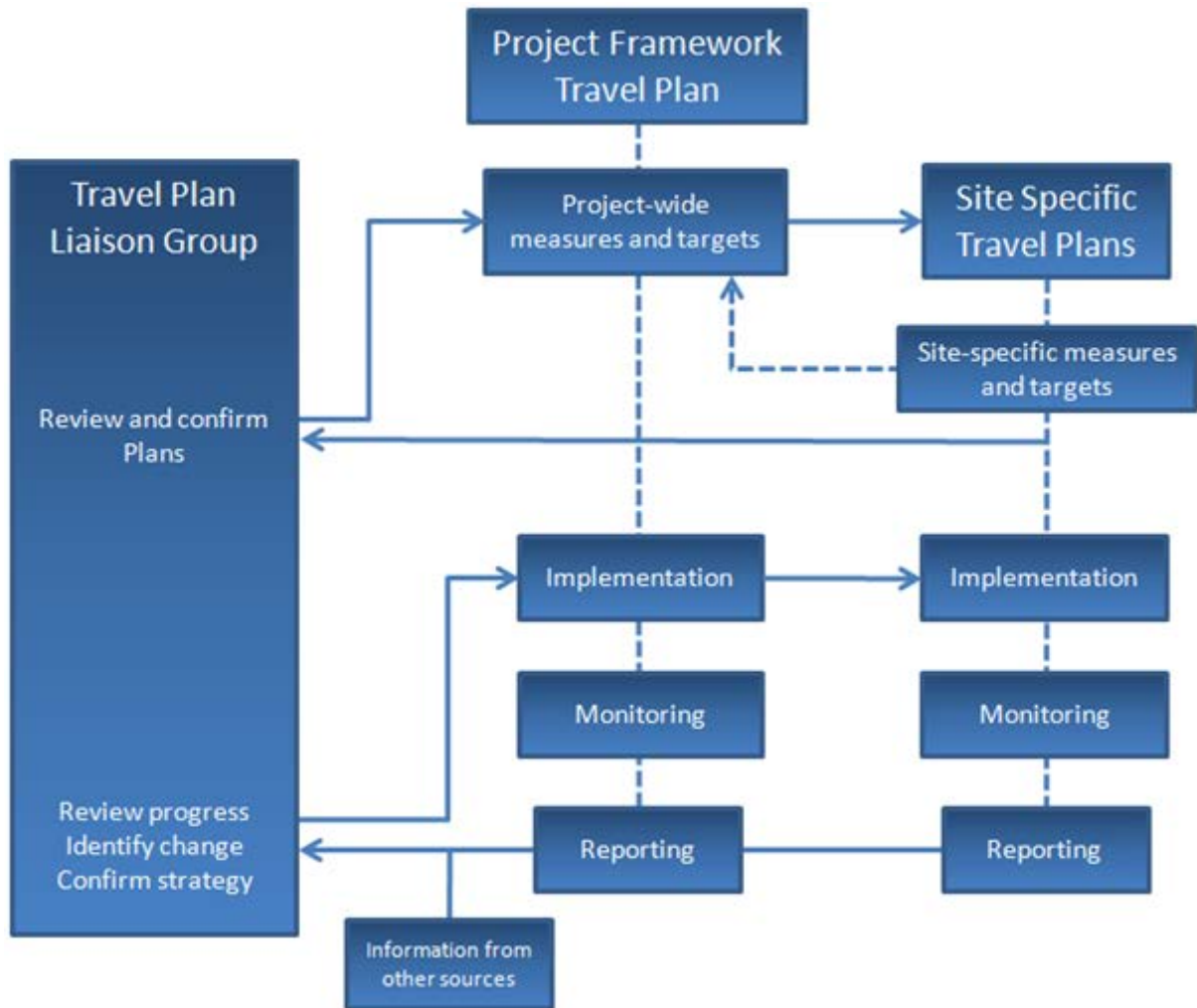
- 5.5.1 Each worker on the Thames Tideway Tunnel project would be required to uphold and comply with the Travel Plan requirements and objectives. Their responsibilities would be to:
- a. Consider all transport options available to them for travel to and from the site and ensure that adequate travel time is allowed for the journey.
 - b. Ensure they have all the necessary equipment to travel safely by their chosen mode of transport.
 - c. Report on the effectiveness of the travel plan and raise concerns about any problems that become apparent.
 - d. Suggest ideas to their appointed representative on how to modify the plan to suit the workforce.

5.6 Travel plan liaison group

- 5.6.1 The TPM, working with stakeholders, would be responsible for setting up and participating in the TPLG. The TPLG would be constituted before the commencement of construction, with meetings held on a regular basis.
- 5.6.2 The TPLG would be responsible for providing high level support to, and critical review of, travel planning across the project. It would support efforts towards achieving greater sustainable travel, monitoring and reviewing progress and agreeing new or amended initiatives.
- 5.6.3 The TPM would be responsible for managing and coordinating the TPLG activities to promote partnership working. The TPM would prepare agendas, briefing papers and minutes for TPLG meetings.
- 5.6.4 It would be open for the TPLG to determine whether it is appropriate to set up sub-groupings to deal with particular groups of sites with similar characteristics or particular interactions.
- 5.6.5** It is expected that liaison with the statutory transport authorities would be continuous throughout the project to ensure that all parties are aware of immediate project activity. The TPLG is not intended to replace this continuing dialogue but to support it in relation to the PFTP and SSTPs.

5.6.6 Plate 5.2 details the role of the TPLG and illustrates the SSTP process and how the success of the measures would feed into the PFTP targets.

Plate 5.2 The role of the Travel Plan Liaison Group



This page intentionally left blank

6 Site specific travel plans

- 6.1.1 The PFTP provides a single central framework to manage and guide the movement of construction workers to and from construction sites across the Thames Tideway Tunnel project.
- 6.1.2 Given that the project falls within a number of local authorities and has a complex overlapping programme of construction at each site, the travel planning strategy would be underpinned by SSTPs. This is to ensure that implementation, development of targets and the subsequent monitoring and management are appropriate to each site and its surroundings, whilst also retaining a project-wide overview.
- 6.1.3 The PFTP identifies a series of Travel Plan measures which may be relevant to one or more sites, or could be applied on a project-wide basis. These are discussed in Section 7.
- 6.1.4 Issues which are specific to individual site locations would be captured in the SSTPs to ensure that local characteristics are fully reflected in the SSTP proposals.
- 6.1.5 Contractors would be expected to develop SSTPs for the sites for which they are responsible and to contribute to the development and refinement of project-wide measures.
- 6.1.6 To support this process, guidance on a set of contractual requirements has been developed which will form part of the arrangements for appointed contractors. These are set out in Appendix C and cover the following issues:
- a. A requirement to develop a SSTP within the framework of the PFTP and to implement the SSTP prior to the start of construction at that site.
 - b. Minimum requirements for the content of the SSTP in relation to measures to be employed and the need for an identified action plan.
 - c. A requirement to work with TWUL to monitor the effectiveness of the Travel Plan, including undertaking regular travel surveys.
 - d. A requirement to ensure that relevant subcontractors and suppliers comply with the SSTP.
- 6.1.7 The guidance on contractual requirements specifically indicates that SSTP measures should include:
- a. No parking on site for workers unless otherwise agreed with local authorities.
 - b. Co-operation with TWUL and local authorities to deter parking by workers in the surrounding area.
 - c. A permit system to control operational vehicles on site.
 - d. Provision of transport to and from public transport nodes where sites are at a distance from public transport services.

e. Provision of cycle parking facilities.

6.1.8 The contractual requirements to produce SSTPs would be supported by guidelines for contractors to assist them in understanding the objectives of the Travel Plan, the responsibilities of the various parties and the range of potential measures that should be considered for inclusion in the action plan.

6.1.9 These SSTP guidelines are included in Appendix D. A template to aid the development of the SSTPs is provided in Appendix E.

7 Travel plan measures

7.1 Introduction

- 7.1.1 It is important that the implementation of measures within the PFTP and associated SSTPs is responsive, flexible and dynamic in order to respond to changes in the context within which the Travel Plan is delivered and assessed.
- 7.1.2 This means that the Travel Plan would draw from a range of potential measures, identifying those which are appropriate for each location and are likely to be most effective. Over the life of the project, it may be appropriate to add, remove or amend measures in the PFTP or SSTPs to respond to changing requirements and travel patterns.
- 7.1.3 Travel Plan measures which at this stage are considered to be suitable for the Thames Tideway Tunnel project fall into the following broad categories:
- a. Travel awareness.
 - b. Walking
 - c. Cycling
 - d. Public and worker transport
 - e. Car travel and parking.

7.2 Travel awareness

- 7.2.1 Travel awareness measures are aimed at ensuring that the purpose and objectives of the Travel Plan are communicated to all workers, including subcontractors and suppliers, and to visitors. These measures are primarily to do with the promotion of the Travel Plan in a visible, consistent and continuous way from start to finish of the project.
- 7.2.2 Travel awareness measures would therefore include:
- a. A briefing on the Travel Plan and travel options as part of the induction process for construction site staff and visitors.
 - b. Continuous promotion of the Travel Plan, associated measures and benefits (including those to health) throughout the project, through a range of appropriate media.
 - c. Providing travel information packs to construction staff.
 - d. Providing notice boards at each construction site containing travel information, contact details for those responsible for the Travel Plan and updates on progress.
- 7.2.3 In addition to these measures, contractors and TWUL staff would be encouraged to consider the use of video and telephone conferencing facilities to reduce the need for individuals to travel between sites.

7.3 Walking

- 7.3.1 Walking represents a healthy travel option without incurring significant travel cost to the individual. Walking measures can be targeted particularly on journeys around 1km or less (equivalent to about 15 minutes' walk), whether that represents the whole or just part of a journey.
- 7.3.2 Measures to encourage workers to walk to and from the sites would be underpinned by the provision of plans illustrating walking routes in the area around each site. This will ensure that workers can familiarise themselves with local routes quickly and easily.
- 7.3.3 Workers wishing to walk to and from sites could also be supported by measures to enhance personal security, such as:
- a. Providing a safety briefing during the induction process and reflective bands to increase visibility for those travelling during hours of darkness.
 - b. Promoting schemes such as 'walkbudi', which place people who are making the same journey in contact with each other enabling them to walk in groups if they choose to do so).
 - c. Providing secure storage on site for equipment and tools to avoid workers having to carry expensive or heavy items to and from the site.

7.4 Cycling

- 7.4.1 Cycling is also a healthy travel option and typically can be attractive for distances in the order of 5km.
- 7.4.2 Measures to support cycling would be based on providing plans illustrating cycle routes (including National and London Cycle Network routes and other 'quiet' streets suitable for cycling), together with public cycle parking locations including the Barclays Cycle Hire scheme.
- 7.4.3 Supporting measures to encourage cycle use could also include some or all of the following:
- a. Providing secure cycle parking spaces on sites, together with shower and changing facilities and space for cycle equipment storage.
 - b. Providing bicycle repair kits and reflective bands and a safety briefing on cycling as part of the induction process.
 - c. Establishing arrangements with local cycle shops to attract discounts on equipment or repairs.
 - d. Setting up a project-wide bicycle user group (bug) to allow cycling information to be shared and/or co-operate with existing local cycling groups.
 - e. Participating in wider cycle promotion schemes such as the 'bike2work' scheme and events such as 'bike week'.
 - f. Promoting a 'bikebudi' scheme to allow cyclists making the same journey to ride together if they choose.

7.5 Public and worker transport

- 7.5.1 Public transport is likely to play a significant role in transporting workers to and from construction sites. Some sites are more accessible from existing public transport services than others and thus measures will vary from one SSTP to another.
- 7.5.2 Public transport information would be provided to all workers as part of the induction process. This would include bus, rail and river service timetables as appropriate together with plans showing the locations of these services relative to each site.
- 7.5.3 Similar information would be displayed on notice boards at each site (and via other media if appropriate) and would be kept up to date. Information on any disruption to local or wider services would also be displayed in this way.
- 7.5.4 Workers would also be advised of sources to assist in planning journeys (whether regular or disrupted), including web-based journey planners such as those provided by TfL, National Rail and the DfT.
- 7.5.5 Where sites are located further from public transport services, contractors would be required to provide group transport (for example a worker shuttle bus service) to and from defined pick-up points, for example rail or Underground stations.

7.6 Car travel and parking

- 7.6.1 No worker parking will be allowed on a construction site unless specifically identified in the CoCP Part B or provision has been agreed with the local authority. On this basis it is expected that the demand for worker travel by car would be very low at most sites.
- 7.6.2 Measures associated with car travel and parking would therefore draw from:
- a. Managing access to sites by car or light vehicle, whether by visitors or for operational purposes during construction, using a permit system or similar approach.
 - b. Providing visitors with advance information on travel routes to the site.
 - c. Monitoring the use of on-street car parking around the site to discourage workers from parking in such locations, and working with the local authorities to deter such activity. If additional parking controls are required to address workers parking in surrounding streets, the details and funding for those controls would be discussed and agreed with the TPLG and the relevant LHA and the controls would be implemented by the LHA.
 - d. Promoting car sharing (for Instance via the 'liftshare' scheme) where no other sustainable transport option is practicable
 - e. Providing information on options for a 'guaranteed lift home' service for occasions when car sharers are unable to obtain a lift home with a regular driving partner. These options could include use of an

7 Travel plan measures

employee shuttle bus or a taxi. Contact details for local taxi companies would be displayed on site.

8 Monitoring, review, and funding

8.1 Monitoring

- 8.1.1 Monitoring is an important part of achieving Travel Plan success. Monitoring offers the evidence base to inform the review and evaluation of Travel Plan measures on a continuous basis. Setting specific monitoring requirements is a key principle promoted in Travel Plan guidance from a number of sources.
- 8.1.2 The PFTP and SSTPs would be actively implemented throughout the construction of the proposed development sites. TWUL, contractors, subcontractors and suppliers would all be obliged to commit to the monitoring and review process.
- 8.1.3 Employee travel surveys would be conducted by the TPCs at each site within the first three months of construction and then on a regular basis as needed (at an interval to be agreed with the TPLG), thereafter during the construction phase. A single common survey structure would be set by the TPM to enable common information to be captured across the project. This would be supplemented by discussions with the TPCs to ensure that relevant site-specific information is collected in each location. These surveys would be iTrace compliant and would allow progress towards targets within the PFTP and SSTPs to be reviewed.
- 8.1.4 Engagement with the TPLG would be on-going and regular. Amongst others, following the receipt of information from the TPCs, the progress on the effectiveness of the PFTP and SSTP action plans would be reviewed, audited and reported to TWUL by the TPM every six months throughout the duration of construction.
- 8.1.5 During the operational phase of the project, the sites would not be permanently occupied and there would be only infrequent site visits for maintenance purposes. As such, the on-going implementation and formal monitoring of the PFTP and SSTPs would be reviewed on completion of the construction phase, with an appropriate approach for the operational phase then determined.

8.2 Review

- 8.2.1 The TPLG would be responsible for reviewing the operation of the Travel Plan, based on the targets and indicators identified and the regular reporting from the TPM.
- 8.2.2 In the event of the PFTP and SSTP targets not being met, the TPLG would decide if the degree of shortfall is significant (ie. it is possible that failure to achieve a mode share target may be offset by lower overall trip generation or better performance in another area of the plan).
- 8.2.3 If the degree of shortfall is considered to be significant, the TPM, along with TWUL and the relevant TPC, would agree a package of measures designed to address the shortfall. These measures would be presented to

the TPLG for agreement, including a timescale over which the success of these measures should be reviewed.

- 8.2.4 Proposals may include further use of measures set out in the Travel Plan or drawing on measures in TfL and local authority Local Implementation Plans or other sources, and may be implemented directly by TWUL if appropriate. The emphasis of addressing any target shortfall would be to consider 'soft' measures first, including incentives or disincentives designed to address the shortfall.

8.3 Funding

- 8.3.1 TWUL would fund the preparation, implementation and operation of the Travel Plan, including the TPM role and activities related to the implementation of the PFTP and the TPLG.
- 8.3.2 The provision of the TPC roles, preparation of the SSTPs and the implementation and monitoring of SSTP measures would be a requirement of contractors' appointments which would be funded by the contractors.

Glossary

Term	Description
Project Framework Travel Plan (PFTP)	<p>An overarching framework for managing the travel patterns of construction personnel during the construction period, for all sites. The PFTP will be prepared in line with the overarching Transport Strategy.</p> <p>The PFTP and SSTPs together are referred to as the Travel Plan</p>
Site Specific Travel Plan (SSTP)	A document, prepared by the contractor, which sets out measures to proactively manage the effects of worker trips to and from a project worksite
Travel Plan Coordinator (TPC)	Appointed by the contractor to develop and implement the relevant SSTPs. A contractor may choose to appoint a single TPC with responsibility for a number of construction sites
Travel Plan Liaison Group (TPLG)	Group comprising stakeholder representatives such as public transport operators, TfL, and local authorities, together with the Travel Plan Manager and TWUL representatives. The TPLG would be responsible for providing high level support to, and critical review of, travel planning across the project, supporting efforts towards achieving greater sustainable travel, monitoring and reviewing progress and agreeing new or amended initiatives
Travel Plan Manager (TPM)	<p>Appointed by TWUL, the TPM role is to:</p> <ol style="list-style-type: none"> a. ensure standards and best practice are applied across the project through coordination and information sharing with the appointed contractors b. issue and explain the PFTP and the requirement to produce SSTPs to each of the appointed contractors c. review and ensure the PFTP and SSTP action plans are identified, appropriate and implemented d. support procurement and implementation of measures set out in the PFTP and SSTPs in conjunction with contractors e. assess, collate and report progress on Travel Plan performance and determine amendments and further initiatives where required

Term	Description
	<ul style="list-style-type: none"> f. liaise and consult with the Travel Plan Liaison Group (TPLG) g. update the PFTP on a regular basis before and during construction.
Travel Plan Representative (TPR)	Appointed by all subcontractors and suppliers which are likely to have a significant presence on site, required to act as a key interface between the contractor’s TPC and the subcontractor’s workers and to ensure that their own staff comply with their Travel Plan responsibilities

Appendices

List of figures

	Page number
Figure B.1 The 'Seven Stages of Behavioural Change'	35
Figure C.1 Document hierarchy	37
Figure D.1 Document hierarchy	39

This page intentionally left blank

Appendix A: Policy review

A.1 National policy

- A.1.1 The National Policy Statement (NPS) for Waste Water⁴ was published in 2012 and states in Paragraph 4.13.4 that “where appropriate, the applicant should prepare a travel plan including demand management to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts”.
- A.1.2 Section 104 (2) of the Planning Act 2008 indicates that the decision maker must have regard to any NPS that has effect and to any other matters which it thinks are both important and relevant to its decision. This may require some consideration of the National Planning Policy Framework (NPPF), published on 27 March 2012. The NPPF now replaces the majority of the Planning Policy Guidance Notes and Statements, with the exception of a small number of documents including PPS 10: Planning for Sustainable Waste (2011).
- A.1.3 The NPPF does not contain specific policies for Nationally Significant Infrastructure Projects (NSIPs) for which particular considerations apply. Paragraph 3 states:
- “These are determined in accordance with the decision-making framework set out in the Planning Act 2008 and relevant national policy statements for major infrastructure, as well as any other matters that are considered both important and relevant (which may include the National Planning Policy Framework). National policy statements form part of the overall framework of national planning policy, and are a material consideration in decisions on planning applications”.*
- A.1.4 In preparing local plans paragraph 162 of the NPPF states that “authorities should work with other authorities and providers to assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment”, and to “take account of the need for strategic infrastructure including nationally significant infrastructure within their areas”
- A.1.5 In other words, the NPPF does not set policies or tests for a Waste Water NSIP. It does advise, however, that planning authorities must take into account plans for nationally significant infrastructure in preparing their plans and that policies in an NPS will be material considerations in the determination of town and country planning applications.

A.2 Regional policy

- A.2.1 The London Plan - the Spatial Development Strategy for Greater London⁵ was adopted in July 2011 and replaced the previous London Plan (consolidated with alterations since 2004)⁶ which was published in February 2008.

- A.2.2 The London Plan's objectives of greatest relevance to travel planning are outlined in Paragraph 1.57: *"to ensure that London is a city where everyone has to access jobs, opportunities and facilities with an efficient and effective transport system which actively encourages more walking and cycling"*.
- A.2.3 Chapter 6 of the London Plan addresses transport and its associated policies. Importantly, Policy 6.3 of the London Plan asserts that:
- a. *"Workplace and/or residential travel plans should be provided for planning applications exceeding the thresholds in, and produced in accordance with, the relevant TfL guidance"*
 - b. *Construction logistics plans and delivery and servicing plans should be secured in line with the London Freight Plan and should be coordinated with travel plans"*
 - c. *LDFs should include policies requiring transport assessments, travel plans, construction logistics and delivery/servicing plans"*.
- A.2.4 The Mayor's Transport Strategy (MTS)⁷ is a document developed alongside the London Plan as part of a strategic policy framework to support and shape the economic and social development of London over the next 20 years. Similarly to the London Plan, the MTS emphasises the importance of integrating land-use planning and transport to support the use of sustainable modes.
- A.2.5 The vision contained within the MTS is that London's transport system should excel in providing access to opportunities for all its people and enterprises. There are six goals outlined on how the vision should be implemented. Three of those set the context which this PFTP incorporates. They are:
- a. *"Enhance the quality of life for all Londoners"*
 - b. *Improve transport opportunities for all Londoners"*
 - c. *Reduce transport's contribution to climate change and improve its resilience"*.
- A.2.6 The London Freight Plan⁸ was produced by TfL to support sustainable development in London by giving clear guidance and direction to complement the freight policies in the MTS and to support the Climate Change Action Plan. The vision for sustainable freight distribution in London is for *"the safe, reliable and efficient movement of freight and servicing trips to, from, within and, where appropriate, through London to support London's economy, in balance with the needs of other transport users, the environment and Londoners' quality of life"*.
- A.2.7 Whilst the above quote is more relevant to the Construction Logistics Strategy and CoCP, it still forms part of the wider context of managing travel demand to each of the sites.
- A.2.8 The Walking Plan for London⁹ sets out the '5C's' that indicate walkability as follows:
- a. Connected: the extent to which the walking network is connected to key 'attractors' like public transport interchanges, homes, places of

work and leisure destinations in addition to the degree that the routes themselves connect.

- b. Convivial: the extent to which walking is a pleasant activity in terms of interaction with people and the built and natural environment, including other road users.
- c. Conspicuous: the extent to which walking routes and public spaces are safe and inviting, with attention paid to lighting, visibility and surveillance.
- d. Comfortable: the extent to which walking is made more enjoyable through high quality pavement surfaces, attractive landscaping and architecture, the efficient allocation of road space and control of traffic.
- e. Convenient: the extent to which walking is able to compete with other modes of transport in terms of efficiency through the implementation of the above factors.

A.3 Travel Plan best practice

A.3.1 A range of key guidance documents produced by national and regional authorities have been consulted in preparation of the PFTP. These include (but are not limited to) the following:

- a. Transport Energy Best Practice – A Travel Plan Resource Pack For Employers (DfT, 2002)¹⁰
- b. Smarter Choices - Changing the way we travel (DfT, 2005)¹¹
- c. Making Personal Travel Plans Work (DfT, 2007)¹²
- d. Guidance on Transport Assessment Appendix B (DfT, 2007)¹³ – this contains guidance thresholds for when Travel Plans are required
- e. Guidance for Workplace Travel Planning for Development (TfL, 2008)¹⁴
- f. Good Practice Guide: Delivering Travel Plans through the Planning Process (DfT, 2009)³
- g. Travel Planning for new development in London¹ (TfL, 2011).

This page intentionally left blank

Appendix B: Influencing travel behaviour

- B.1.1 The initiatives presented within the draft PFTP focus on increasing awareness and the use of sustainable travel modes by construction personnel through the use of the '4i' approach. The 4i approach considers the need to:
- a. Supply information - the provision of accurate sustainable travel information through a variety of means
 - b. Pursue initiatives - instigating new or linking up with existing schemes to promote sustainable travel options, guidance or advice
 - c. Provide incentives - encouraging participation in initiatives for example the provision of discounts or gifts to raise awareness of sustainable transport or providing external incentives such as tax benefits
 - d. Continue to influence modal choice towards sustainable travel.
- B.1.2 Seven stages of behavioural change have been identified through various research into travel choices and decision-making.' The diagram below highlights the seven stages of behavioural change'. It shows that once a person is aware of the implications of a particular travel choice (for example, the negative impacts of private car use), they generally go through five thought processes of; accepting responsibility, acknowledging alternatives, evaluating the alternatives, deciding on an alternative and trying an alternative before they actually make a sustained change to a different mode of travel.

Figure B.1 The 'Seven Stages of Behavioural Change'



- B.1.3 By understanding this process, it is possible to design measures that best influence people at each of the different stages of decision-making.

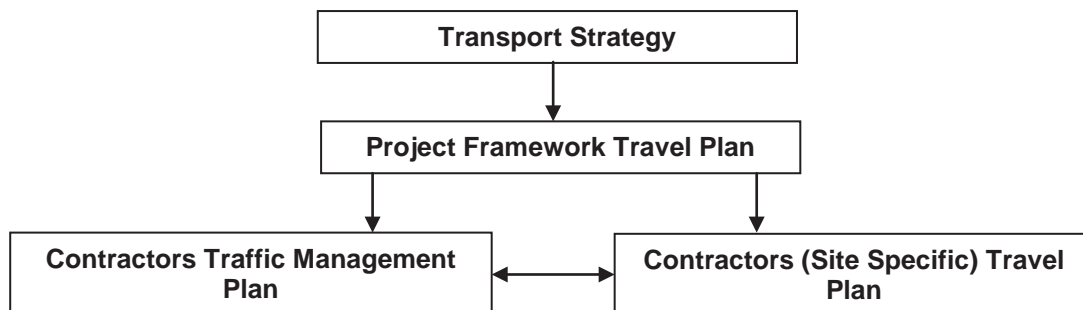
This page intentionally left blank

Appendix C: Guidelines for project travel plan contractual requirements

C.1 Introduction

- C.1.1 The purpose of this document is to provide guidelines in relation to Project Travel Plan contractual requirements to Thames Tideway Tunnel Contractors and promote good practice during the construction phase of the Thames Tideway Tunnel project.
- C.1.2 The Contractor shall develop and implement a Travel Plan in line with the Traffic Management Plan for the construction works, setting out how to actively manage workers access to the construction site to limit traffic movement and to reduce disruption in the vicinity of the site.
- C.1.3 The Contractor's Travel Plan shall be produced in compliance with the Project Framework Travel Plan (PFTP) prepared to provide an overarching framework for managing the travel patterns of construction personnel during the construction period, for all sites. The PFTP is to be prepared in line with the overarching Transport Strategy. More detailed information on Travel Plan guidelines is provided in Appendix D of this draft PFTP.

Figure C.1 Document hierarchy



C.2 Plan requirements

- C.2.1 The Contractor is required to produce site specific Travel Plans. The plans shall include:
- C.2.2 No workers parking on site unless agreed otherwise with the Local Authorities.
- a. Operational vehicles on site are to be limited and a permit system to approve individual vehicle access is required.
 - b. All sites more than 960 metres away from the nearest public transport station shall supply group transport from agreed pick up points at appropriate times throughout the day. This includes shuttle bus/mini bus services.

- c. Induction to all on site staff providing sustainable travel information.
- d. An appropriate number of safe and secure cycle parking spaces will be provided. For example, lockable cycle racks will be installed.
- e. The Thames Water Project Manager and Contractor will cooperate with Local Authorities in developing reasonable measures to deter fly parking by workers around the construction site.
- f. An employee travel survey will be completed after 3 months of site set-up, then on a regular basis as needed (at an interval to be agreed with the Travel Plan Liaison Group, consisting of key stakeholders such as representatives from TfL and Local Authorities (see section 10, Appendix D).
- g. An action plan will be outlined to identify site specific actions, measures, associated timescales and responsibilities.
- h. Review, audit and report to Thames Water at least every 6 months on the progress and effectiveness of the action plan.
- i. Arrangements to ensure that all subcontractors and suppliers on site are to comply with the requirements of the Travel Plan, including appointment of a Travel Plan Representative for contractor employing 25 staff or more on site.

C.3 Contractor responsibilities

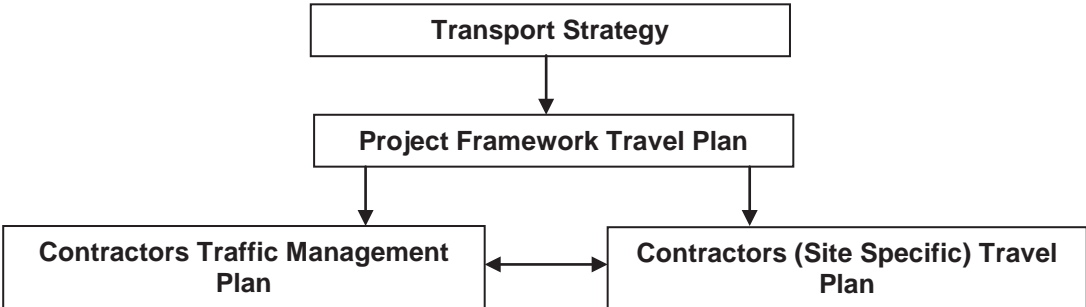
- C.3.1 The Contractor shall appoint a Travel Plan coordinator (TPC) to implement the Travel Plan. The appointed TPC is required to:
- a. Consult and liaise with the Clients Travel Plan Manager, Local Authorities and TfL on the preparation and execution of the Travel Plans. Consultations and updates will be made when necessary.
 - b. Develop the Travel Plan relevant to each individual site, unless agreed otherwise. Site specific Travel Plans should be developed in accordance with the requirements and guidance set out in the PFTP.
 - c. Implement and actively promote sustainable travel measures and provide relevant information to employees, subcontractors and suppliers as appropriate.
 - d. Manage the monitoring, audit and review of the Travel Plan process.

Appendix D: Project travel plan guidelines

D.1 Introduction

- D.1.1 The purpose of this document is to provide guidance to Thames Tideway Tunnel Contractors and promote good practice during the construction phase of the Thames Tideway Tunnel project. It is a minimum guideline to the appointed Contractors by which they must abide. This includes demonstrating to Local Authorities the arrangements to proactively manage workers access to site. This guideline document supports the requirements for the Contractors Traffic Management Plan and is written in conjunction with the Guidelines for Project Travel Plan Contractual Requirements, set out in Appendix C of this draft PFTP.
- D.1.2 The purpose of the Project Framework Travel Plan (PFTP) is to provide guidance and information to inform the development of individual site specific Contractor Travel Plans. Contractor Travel Plans should also be developed in line with relevant national, regional and local travel planning policies and guidance.
- D.1.3 The Thames Tideway Tunnel PFTP forms part of a suite of documents, including the Transport Strategy, which seeks to manage the movement of people and goods/material to and from the sites.

Figure D.1 Document hierarchy



D.2 Objectives

- D.2.1 The purpose of a Travel Plan is to proactively manage trips to and from the site, to minimise local impacts by reducing the number of single occupancy vehicle trips and encouraging the uptake of sustainable modes of travel. The workers/employees are the primary target audience. However, measures to encourage visitors to travel to and from the site sustainably should also be considered.
- D.2.2 Thames Tideway Tunnel is committed to sustainable journeys which will benefit the work force, local residents and commuters. The benefits include:
 - a. Minimising traffic disruption and improving road safety

- b. Improving local air quality
- c. Reducing noise and congestion on public roads
- d. Improved health and wellbeing of employees due to active forms of travel
- e. Potential cost saving due to cheaper alternative options
- f. Reduced stress
- g. Reduced travel time to site

D.2.3 It should be noted that the travel planning process for Thames Tideway Tunnel focuses on the movement of workers and visitors. The movement and management of HGV trips are considered within the Transport Strategy.

D.3 Client responsibilities

D.3.1 The Client will appoint a Travel Plan Manager (TPM) to:

- a. Ensure standards and best practices are applied across the project as a whole through regular reviews.
- b. Coordinate and share best practice between the appointed Contractors on a project wide basis.
- c. Assess, collate and report data on Travel Plan performance and determine amendments and further initiatives.
- d. Establish a Travel Plan Liaison Group which may consist of key stakeholders including representatives from TfL and Local Authorities.
- e. Liaise and consult with the Liaison Group on a regular basis.
- f. Ensure the plan content, which will set out the actions and measures to support the Travel Plan is identified, implemented, adjusted and non-conformance detected and dealt with where required.
- g. Liaise and consult with the contractors Travel Plan Coordinator (TPC) on a regular basis.

D.4 Contractors responsibilities

D.4.1 The Contractor shall appoint a Travel Plan Coordinator (TPC) to implement the Travel Plan. The appointed TPC is required to:

- a. Manage and liaise with other coordinators and representatives in order to share ideas, coordinate efforts and reviewing progress. For example, TPCs would be responsible for distributing Travel Surveys and implementing actions such as collecting staff postcodes to inform mini-bus routes and collection points.
- b. Ensure subcontractors and suppliers comply with their role and where appropriate appoint Travel Plan Representatives. This requirement should be included in the subcontract, supply contracts and orders.

- c. Develop plans which meet the appointed contractors and subcontractors company policies and initiatives. Contractors' site specific Travel Plans will also need to accord with the client's policies, requirements and initiatives.
- d. Ensure suitable equipment, arrangements and resources are in place to produce and implement the Travel Plan.
- e. Cooperate and report regularly to the Travel Plan Manager.

D.5 Subcontractor and supplier responsibilities

D.5.1 All subcontractors and suppliers that are likely to have a presence of 25 workers or more on site shall appoint a Travel Plan Representative.

D.5.2 The appointed Travel Plan Representative for each subcontractor is required to:

- a. Liaise with the Contractors TPC to monitor and review the progress of the Travel Plan and the efficiency of the measures put in place to encourage sustainable travel by the employees of the subcontractors and suppliers, where appropriate.
- b. Liaise with the TPC to share ideas and coordinate efforts.
- c. Act as a key interface between workers and Contractors and provide support to both.
- d. Ensure the workers comply with their responsibilities.

D.6 Workers responsibilities

D.6.1 Each individual working on the Thames Tideway Tunnel project is required to uphold and abide by the Travel Plan requirements and objectives. Their roles are as follows:

- a. To consider all alternative routes and transportation modes to the worksite.
- b. To ensure they have all the necessary equipment to travel by alternative methods safely, for example cycle helmets and high visibility jackets.
- c. To ensure they give themselves adequate travel time to arrive on site on time.
- d. To report on the effectiveness of the Travel Plan and raise concerns about any problems that arise, throughout the entire Travel Plan process.
- e. To report any ideas on how to improve/modify the plan to suite the workforce to their appointed representative.

D.7 Site assessment

- D.7.1 A site assessment will be undertaken by the appointed contractor prior to commencement of construction works. The site assessment will determine:
- a. Location in respect to local walking, cycling routes, surrounding public transportation station/stops, and cycle parking facilities including the Barclays Cycle Hire scheme.
 - b. The number of employees predicted per shift, where appropriate.
 - c. Site specific details on site operation (e.g. hours of work, vehicle access and movement arrangements).
 - d. Any specific requirements such as facilities capable of accommodating Travel Plan initiatives, such as cycle parking spaces and changing/shower facilities.
 - e. Car parking facilities on site and surrounding areas.

D.8 Travel plan content

- D.8.1 The plan content will include site specific actions and measures, and details of associated timescales and responsibilities. The following transportation mode specifics will be considered when preparing a site specific Travel Plan.

Walking

- a. Provide illustrative walking routes linking the construction site and surrounding public transport stations/stops.
- b. Promote WalkBUDi scheme (similar to Liftshare, WalkBUDi matches up people who are making the same journey).
- c. Provide reflective bands for night time commutes.
- d. Promote the health benefits of walking.
- e. Include safety briefing during induction.

Cycling

- a. Provide illustrative cycle routes, showing national and London cycle network routes, and cycle parking locations including the Barclays Cycle Hire scheme.
- b. Provide shower and changing facilities.
- c. Provide bicycle repair kits and pumps.
- d. Provide reflective bands for night time commutes.
- e. Promote the health benefits of cycling.
- f. Include safety briefing during induction.
- g. Participate in the bike2work scheme.
- h. Encourage BikeBUDi scheme.

Public transport

- a. Provide bus, tube and rail timetables, where applicable.
- b. Identify nearest bus and rail stops and their distance to site.
- c. Provide information on travel disruption and delays to be readily available on notice boards prior to shift end.
- d. Provide employee shuttle bus/mini bus where the site is more than 960 metres away from the closest public transport station.

Car

- a. To promote car sharing, if no other option is practicable.
- b. Provide video conferencing between sites, contractors and clients.

D.9 Travel Plan site information

- D.9.1 The following information is to be produced and provided:
- a. All employees will be briefed on the Travel Plan policy in their induction.
 - b. Contractors must provide all information relevant to site including walking, cycling and public transportation routes and stations/stops, cycle parking locations (including the Barclays Cycle Hire scheme), and public transport timetable information.
 - c. Copies of travel packs are to be readily available to all staff.
 - d. Information boards should be provided detailing contact details of those responsible in order for any queries to be met.
 - e. First aid facilities on site.

D.10 Management and monitoring

- D.10.1 The management, monitoring and review of the Travel Plan are key aspects in ensuring that the Travel Plan remains a dynamic document. The management team for the Thames Tideway Tunnel Travel Planning process will include the Client's Travel Plan Manager, Contractors Travel Plan Coordinators, Subcontractors Travel Planning Representatives and the Liaison Group (consisting of key stakeholders such as representatives from TfL and Local Authorities).
- D.10.2 Monitoring will take shape in the form of surveys and reports. The survey will be undertaken initially after 3 months and then at 6 monthly intervals, unless agreed otherwise, throughout the duration of the construction period to enable an understanding of how employees get to work, their travel patterns and any restrictions on travelling more sustainably. One generic template for such survey will be provided by the Thames Water Travel Plan Manager. The Travel Plan Coordinators for each contractor will then be responsible for distributing the surveys to its employees, conduct an analysis of the data, and to provide a review of the findings.

- D.10.3 The Contractor will be accountable for submitting reports to Thames Water for the purpose of informing and reviewing workers travel arrangements at least biannually, unless agreed otherwise. Subcontractors will provide input into the reports during meetings with the Contractor's Travel Plan Coordinator.

Appendix E: Site specific travel plan example template

[Site Name]

Site Specific Travel Plan

Full address of the site:

.....
.....
.....

The Travel Plan Coordinator is responsible for preparing and implementing this SSTEP. The Travel Plan Coordinator for *[insert site name]* is:

Name:.....

Organisation:.....

Address:.....

.....
.....

Tel. No:

E-mail:.....

The client (TWUL) Travel Plan Manager has overall responsibility for the Project Framework Travel Plan. The Travel Plan Coordinator will liaise regularly with the Travel Plan Manager, who is *[ensure this is kept up to date]*:

Name:.....

Organisation:.....

Address:.....

.....
.....

Tel. No:

E-mail:.....

Introduction

The SSTP should be developed in accordance with the requirements and guidance set out in the PFTP.

Provide a brief introductory paragraph which explains the purpose of this Site Specific Travel Plan (SSTP) and how it fits within the Project Framework Travel Plan (PFTP).

For example: *“to actively manage and control workers travel to and from the construction site to limit traffic movement and reduce disruption in the vicinity of the site”*.

Site details

Provide a summary of the site location and size of the site.

Provide information on the relevant construction details such as the phases of development, anticipated outline programme and site access arrangements.

Provide a breakdown of the anticipated number of construction workers and TWUL client staff, working hours and details of shift patterns. Complete Table 1 below.

Where appropriate, provide this information for different phases of the construction work.

Table 1 Total Workforce Numbers at [insert site name]

Contractor								TWUL		Total
Staff		Labour						Staff		
0800-1800	1800-0800	0700-1900	0800-1800	0800-1500	1500-2300	1900-0700	2300-0800	0800-1800	1800-0800	

Local authority policy

Provide a brief summary of relevant GLA, TfL and local authority transport, development, and environment policies.

Contractor policy

Provide a brief summary of relevant contractor company policy in relation to transport, the environment and sustainability.

Existing transport conditions

Describe the local transport network (walking and cycling facilities, public transport services and their location and the nature of the highway network).

Provide information on the baseline mode split for site workers (this will initially be based on the latest available Census Journey to Work data for the site location but will be updated after initial travel surveys are conducted at each development site).

Represent on a bar or pie chart.

Figure 1 Travel to work in [insert name of Local Authority]

[insert bar or pie chart]

Objectives

Set site specific objectives. These need to align with the aims and objectives of the PFTP. The objectives must also have regard to:

- a. Mayoral policy & strategic guidance.
- b. Local authority policy and guidance.
- c. Contractor company policy.
- d. The challenges & opportunities specific to the site.

Site-specific targets

Set interim site-specific targets which link directly to each objective. These will be in addition to targets included within the PFTP.

The site specific targets should be based on the baseline mode share data and should be developed in line with the programme of construction at each individual site.

Develop indicators by which the targets will be monitored. These should align with indicators included within the PFTP but also be relevant to this site.

Site-specific measures

Develop site-specific measures which support the objectives and therefore enable the targets to be met.

Some measures are already mentioned in the PFTP and in the Project Travel Plan contractual requirements and guidelines documents. Relevant measures should be detailed according to each specific site.

Action Plan

Tabulate the measures and implementation programme in an Action Plan (see Table 2 below) which is split according to short, medium and long term activities.

Explain how each of the measures in the SSTP will be secured in terms of funding and implementation responsibilities.

Table 2 Action Plan for [insert site name]

Details of measures	Timescale for implementation	Responsibility for implementation
Short term (<3 months)		
Measure 1		
Measure 2		
Measure 3		
Medium term (3-12 months)		
Measure 4		
Measure 5		
Measure 6		
Long term (>12 months)		
Measure 7		
Measure 8		
Measure 9		

Management and Monitoring

Summarise the management and monitoring requirements described in the PFTP, but in the context of the site. This should include the relationships between the Travel Plan Coordinator, the client’s Travel Plan Manager, subcontractors’ Travel Plan Representatives and all site workers.

Make clear who is responsible for monitoring at this site (normally this would be the nominated Travel Plan Coordinator for the site).

Confirm the scope of the monitoring programme for this site.

Provide information on the schedule of surveys (to match the requirements of the PFTP – every six months).

Set out the mechanism for reviewing measures and targets regularly and revising them where necessary, particularly after the first employee travel survey for the site which will provide more accurate information on workers’ travel patterns.

References

- ¹ Transport for London. *Travel planning for new development in London*. Transport for London (2011)
- ² Transport for London. *Assessment Tool for Travel Plan Building, Testing and Evaluation (ATTrBuTE) v3 User Guide*. Transport for London (2011)
- ³ Department for Transport. *Delivering Travel Plans through the Planning Process*. Department for Transport (2009)
- ⁴ Department for Environment, Food and Rural Affairs. *National Policy statement for Waste Water*. Department for Environment, Food and Rural Affairs (2012)
- ⁵ Greater London Authority. *The London Plan – Spatial Development Strategy for London*. Greater London Authority (2011)
- ⁶ Greater London Authority. *The London Plan – Spatial development Strategy for Greater London Consolidated with Alterations since 2004*. Greater London Authority (2008)
- ⁷ Greater London Authority. *The Mayor’s Transport Strategy*. Greater London Authority (2010)
- ⁸ Transport for London. *London Freight Plan – Sustainable Freight Distribution: a plan for London*. Transport for London (2007)
- ⁹ Transport for London. *The Walking Plan for London*. Transport for London (2004)
- ¹⁰ Department for Transport. *Transport Energy Best Practice – A Travel Plan Resource Pack for Employers*. Department for Transport (2002)
- ¹¹ Department for Transport. *Smarter Choices – Changes in the way we travel*. Department for Transport (2005)
- ¹² Department for Transport. *Making Personal Travel Plans Work*. Department for Transport (2007)
- ¹³ Department for Transport. *Guidance on Transport Assessment*. Department for Transport (2007)
- ¹⁴ Transport for London. *Guidance for Workplace Travel Planning for Development*. Transport for London (2008)

Copyright notice

Copyright © Thames Water Utilities Limited January 2013.
All rights reserved.

Any plans, drawings, designs and materials (materials) submitted by Thames Water Utilities Limited (Thames Water) as part of this application for Development Consent to the Planning Inspectorate are protected by copyright. You may only use this material (including making copies of it) in order to (a) inspect those plans, drawings, designs and materials at a more convenient time or place; or (b) to facilitate the exercise of a right to participate in the pre-examination or examination stages of the application which is available under the Planning Act 2008 and related regulations. Use for any other purpose is prohibited and further copies must not be made without the prior written consent of Thames Water.

Thames Water Utilities Limited

Clearwater Court, Vastern Road, Reading RG1 8DB

The Thames Water logo and Thames Tideway Tunnel logo are © Thames Water Utilities Limited. All rights reserved.

DCO-DT-000-ZZZZZ-071100

