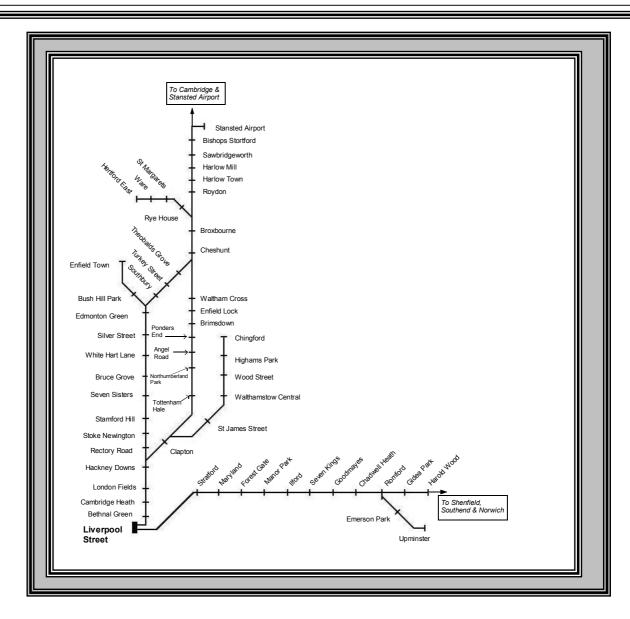


Speaking for transport users in and around London

Requirements for Train Services Route Supplement

Liverpool Street Routes

(Greater Anglia Franchise)



London Transport Users Committee

Speaking for transport users in and around London



LTUC is the official watchdog for transport users in and around London.

The Committee's role is to:

- Investigate suggestions and complaints from users who are dissatisfied with the response received from the service provider;
- Conduct independent research and produce publications on issues affecting transport users;
- Maintain a regular dialogue with operators on differing aspects of their services;
- Assess the impact and make recommendations if proposals are made for the closure of a railway line or a station.

Our remit covers transport in and around London including the Underground, the National Rail network, London's bus network, Docklands Light Railway, Croydon Tramlink, taxis and other users of the Greater London Road Network. To find out more about us see our website www.ltuc.org.uk

Who should read this paper?

Chief Executives, Commercial/Business Directors, Operations/Production Directors and all timetable planning staff of the following organisations.

- Strategic Rail Authority
- Train Operating Companies involved with the Liverpool Street routes
- Network Rail
- Office of the Rail Regulator
- Transport for London

And

- Department for Transport
- Office of the Deputy Prime Minister
- Mayor of London
- London Assembly members
- Rail Passenger Committees

For the areas served by the Liverpool Street routes:

- Members of Parliament
- Members of European Parliament
- London Boroughs and Local Authorities
- Rail User Groups

What is the paper about?

These proposals outline LTUC's requirements for the type and frequency of train services on the Liverpool Street routes.

The paper focuses solely on what the timetable should offer to the passenger. There are many other issues necessary to make up a quality service for the passenger and these are dealt with in other LTUC papers, (see Appendix 2). They are all described in general terms in LTUC's policy document 'London on the Move.'

This paper shows the extent to which present services on the Liverpool Street route comply with the requirements set out by LTUC in 'Requirements for Train Services – Principles'. It includes suggestions on how progress should be made towards closing the gap between present provision and the LTUC requirements.

EXECUTIVE SUMMARY

This paper presents the principles that need to be applied to gain an adequate level of service for the passengers who travel on the Liverpool Street routes.

It shows in detail how present services match up to the London Transport Users Committee's (LTUC) Requirements for good timetables, which are attractive to passengers and meet their needs. The paper is not just a 'wish list', it should be considered as a reference document for those who make decisions on when and where trains run.

The key points which emerge from the paper are:

- The Great Eastern metro service (Liverpool Street Shenfield) is one of the best in London, probably the best.
 - First and Last trains comply fully with LTUC's Requirements.
 - Inadequate frequencies on the Great Eastern line at Maryland, Forest Gate and Manor Park can be solved by timetable adjustments.
 - Late evening and Sunday services also need to be increased
- West Anglia services largely fail to comply with LTUC's Requirements. In part this is due to infrastructure limitations, but some worthwhile improvements should be achievable if the will is there. The priorities should be to:
 - Lift the Enfield Town and Chingford Services to 4tph all day.
 - To increase stations with 1tph to 2tph, and to improve first and last trains.
 - Stops at Bethnal Green, London Fields and Cambridge Heath should be redistributed to provide a more equal level of service at each of the stations.
- Journey opportunities on the Great Eastern line to stations outside of the LTUC area are seriously worsened in the Strategic Rail Authority's (SRA) specification for the Greater Anglia Franchise. Planned cuts in Norwich trains calling at Stratford and in the mainline trains calling at Romford must not be allowed to occur.
- The West Anglia route to Stratford is an under used asset, particularly in light
 of Stratford's increasing importance as a local, regional and international
 interchange. We look to the industry to work with LTUC at an early date to
 identify short and longer term options for development of this route.

CON	TENTS		Page No				
1.	Introd	luction	1				
2.	Princi	ples					
3.	Great	Eastern Metro					
	3.1	Weekday midday off peak services	3				
	3.2	Weekday evening off peak services	5				
	3.3	Weekday peak services	7				
	3.4	Saturday daytime services	9				
	3.5	Saturday evening services	11				
	3.6	Sunday daytime and evening services	13				
	3.7	Weekday first train	15				
	3.8	Weekday last train	17				
	3.9	Saturday first train	19				
	3.10	Saturday last train	21				
	3.11	Sunday first train	23				
	3.12	Sunday last train	25				
4.	West	Anglia					
	3.1	Weekday midday off peak services	27				
	3.2	Weekday evening off peak services	31				
	3.3	Weekday peak services	35				
	3.4	Saturday daytime services	39				
	3.5	Saturday evening services	43				
	3.6	Sunday daytime and evening services	47				
	3.7	Weekday first train	51				
	3.8	Weekday last train	55				
	3.9	Saturday first train	59				
	3.10	Saturday last train	63				
	3.11	Sunday first train	67				
	3.12	Sunday last train	71				

5.	Journ	ey opportunities to/from stations outside the LTUC area	75
6.	West	Anglia – The Stratford Route	77
7.	Other	LTUC Requirements	79
	7.1	Night Services	79
	7.2	Journey Times	79
	7.3	Interchange and Connections	79
	7.4	Stansted Airport Services	79
	7.5	Leaf Fall season	80
	7.6	Bank and Public Holidays	80
	7.7	Christmas Eve	80
	7.8	Christmas Day	81
	7.9	Boxing Day	81
	7.10	27 th – 30 th December	81
	7.11	New Year's Eve	81
Арр	endices		
Арре	endix 1	Route Supplements	I
Anne	andiv 2	Other LTIC nublications	

1 INTRODUCTION

- 1.1 This paper presents the London Transport Users Committee's (LTUC) Requirements for Train Services Route Supplements Liverpool Street Routes.
- 1.2 It shows the extent to which present services to and from Liverpool Street comply with the requirements set out by LTUC in 'Requirements for Train Services Principles'. It includes suggestions on how progress should be made towards closing the gap between present provision and the LTUC requirements.
- 1.3 The 'Principles' paper sets out the general aspirations of what LTUC believe London's rail services within the Greater London Assembly (GLA) area, in the wider LTUC area and links with the national rail network as a whole should be based. The Committee believes that these principles should inform all London area rail decision making, both short and long term, because the timetable is the core of the railway's product. Without a timetable which meets the needs and aspirations of both existing and potential users, investment in all other aspects of rail services (however important) will be ineffective. If the trains don't take people where they want to go, when they want to go, and with a degree of convenience and comfort which matches that of the private car, then Government targets for modal switch and for increasing patronage by 50% in ten years will not be achieved.
- 1.4 The Committee recognises that much of what it advocates requires investment and that it will take more than ten years to achieve the goals in full. Therefore this paper offers constructive proposals for specific improvements in the short and medium term. These enhancements will require little or no infrastructure investment and should therefore be achievable within the next few years.
- 1.5 'Requirements for Train Services Route Supplement for the Liverpool Street Routes' paper is a structured approach to attaining the improvements by looking closely at the routes in sections. In 2003/04, all of the routes in the LTUC area will have a comprehensive analysis of services and time-scales suggested for which aspirations should be attainable.
- 1.6 Questions and comments should be addressed to:

Rail Support Officer LTUC 6 Middle Street London EC1A 7JA

Telephone 020 7505 9000 Fax 020 7505 9003 E-mail railsupportofficer@ltuc.org.uk

Copies of this paper and the Requirements for Train Services – Principles paper can be downloaded from the LTUC website

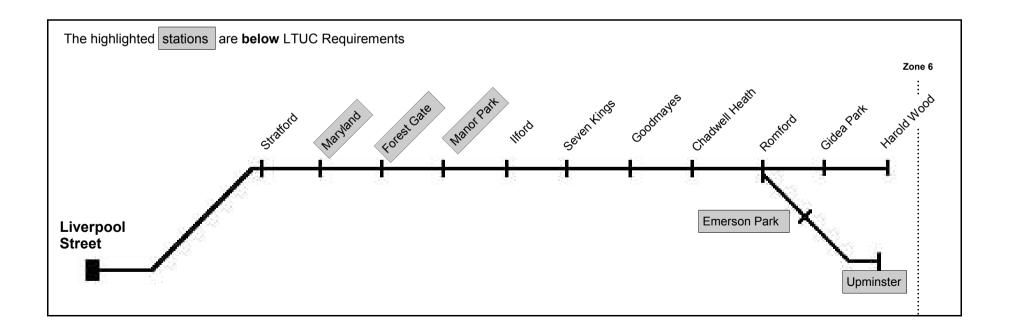
www.ltuc.org.uk

2. PRINCIPLES

- 2.1 This section of the paper compares how compliant the Liverpool Street routes are at present to the principles set out in the 'Requirements for Train Services Principles' paper.
- 2.2 The document has been divided into the Great Eastern section and West Anglia sections. These have been taken separately due to the different nature of the routes and also to enable ease of analysis and understanding.

3.1 Weekday midday off peak services — Great Eastern Metro

- The whole route a minimum of 6 trains per hour (tph), at regular 10 min. intervals where possible. (6 tph is the minimum standard for a 'turn up and go' metro service, i.e. one where passengers do not need to refer to the timetable when planning their journey.)
- Off-peak services and train lengths should be sufficient to provide seats for all passengers.



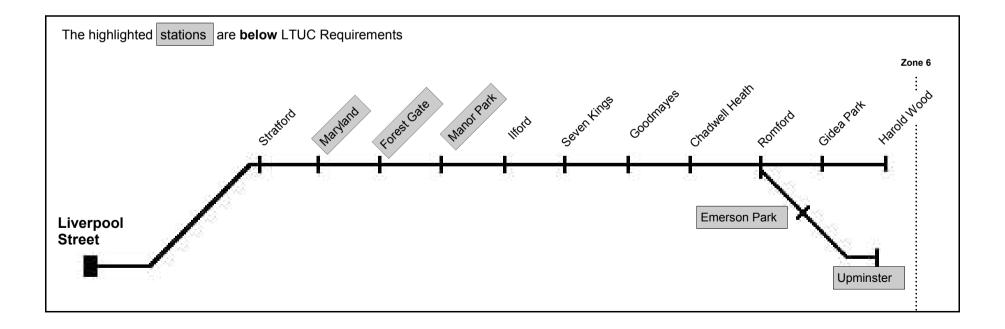
Weekday midday off peak services — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3	6tph	complies			
Maryland	3				Revise Greater Anglia timetable	
Forest Gate	3	6tph	4tph	2tph	specifications to remove Southend trains from the 'Electric' lines and enable all Metro	December 2004
Manor Park	3/4				trains to call at all stations.	
llford	4					
Seven Kings	4					
Goodmayes	4					
Chadwell Heath	5	6tph	complies			
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6				Increase to 3tph, operate trains with a driver at each end, if layover times would	December 2004
Upminster	6	6tph	2tph	4tph	be insufficient for conventional operation. For longer term this line could be considered for conversion to light rail/light transit.	

3.2 Weekday evening off peak services — Great Eastern Metro

LTUC Principles as applicable to Great Eastern Metro

• To be the same as weekday midday off peak

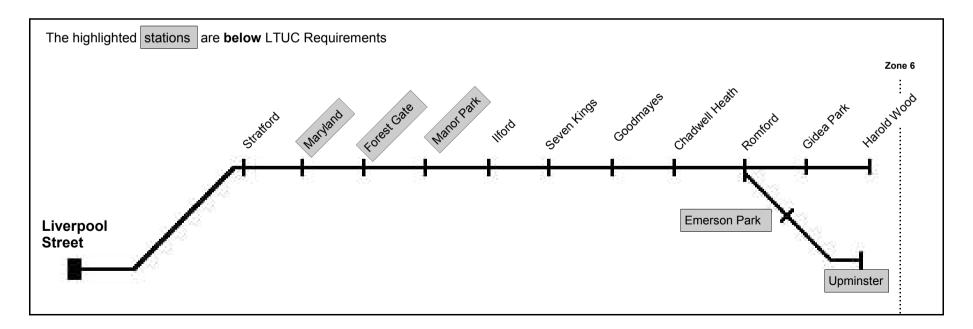


Weekday evening off peak services — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3	6tph	complies until 2200		Extend 6tph until 2400	December 2004
Maryland	3					
Forest Gate	3	6tph	4tph	2tph	As weekday midday off peak	December 2004
Manor Park	3/4					
Ilford	4					
Seven Kings	4					
Goodmayes	4					
Chadwell Heath	5	6tph	complies until 2200		Extend 6tph until 2400	December 2004
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6				Reinstate evening services at 3tph	December 2004
Upminster	6	6tph	No service	6tph	For longer term this line could be considered for conversion to light rail/light transit.	

3.3 Weekday peak services — Great Eastern Metro

- Peak hour frequency should be no less than off-peak.
- There should be sufficient capacity to ensure that no passengers have to stand involuntarily for more than 10 minutes, and to ensure compliance with PIXC (Passengers in excess of capacity) rules.
- Peak service timetables should be constructed so that off-peak patterns and timings apply all day and that peak services are made up by adding extra trains to the basic off-peak pattern. Exceptionally, where capacity constraints make it impossible to adhere exactly to this principle, every effort should be made to ensure that any broken links (i.e. journeys which can be made by through train in the off-peak) are provided with quick connections in lieu.
- Special consideration should be given to providing sufficient capacity for 'shoulder-peak' demand (generally arriving in London before 0730; 0900-1030 and returning from London 1530-1630 and 1830-2030).



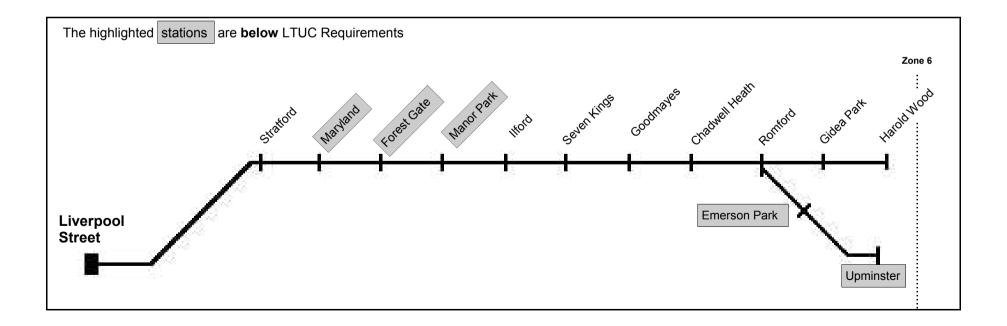
Weekday peak services — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3	6tph	complies			
Maryland	3	6tph	3tph (irregular intervals)	3tph	Examination of the peak timetable should	
Forest Gate	3	6tnh	4tnh	2tnh	address the poor peak services at Maryland, Forest Gate and Manor Park,	
Manor Park	3/4	6tph	4tph 2tph (irregular intervals)	Ζιριι	which are presently worse than the off peak. For the Shenfield metro service as a whole, serious consideration should be	December 2004
llford	4				given to switching from the present complex pattern whereby some train omit	
Seven Kings	4				certain stops (but with minimal time saving for passengers) to a simple 'all-stations'	
Goodmayes	4				pattern.	
Chadwell Heath	5	6tph	complies			
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6	6tph	2tph	4tph	As weekday midday off peak	December 2004
Upminster	6	otb.:	24011			- 33331

3.4 Saturday daytime services — Great Eastern Metro

LTUC Principles as applicable to Great Eastern Metro

The full weekday off-peak service should operate throughout the day.



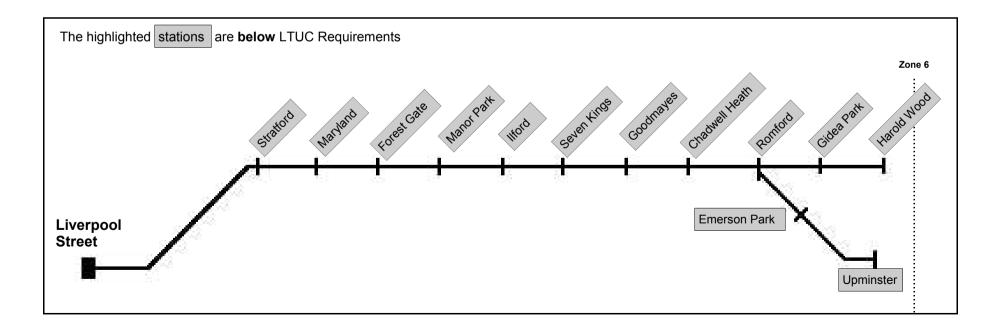
Saturday daytime services — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3	6tph	complies			
Maryland	3					
Forest Gate	3	6tph	4tph	2tph	As weekday midday off peak	December 2004
Manor Park	3/4					
Ilford	4					
Seven Kings	4					
Goodmayes	4					
Chadwell Heath	5	6tph	complies			
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6	6tnh	2tnh	4tnh	As weekday midday off peak	December 2004
Upminster	6	_ 6tph	2tph	4tph	As weekuay iiiluuay oii peak	December 2004

3.5 Saturday evening services — Great Eastern Metro

LTUC Principles as applicable to Great Eastern Metro

The full weekday off-peak service should operate throughout the day.

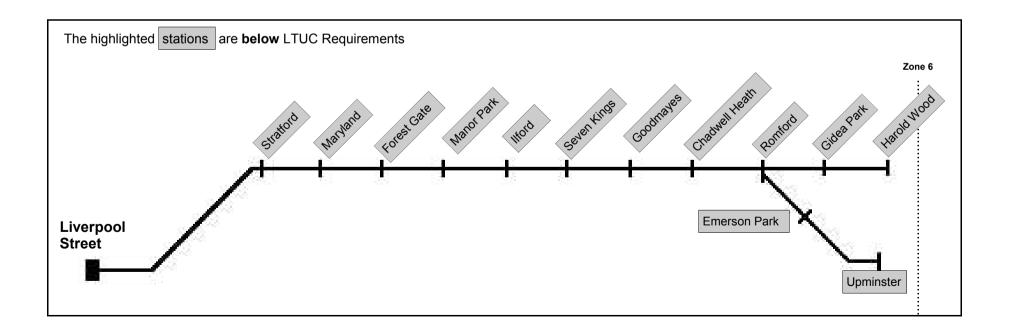


Saturday evening services — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3	6tph	4tph	2tph	As weekday midday off peak	December 2004
Maryland	3					
Forest Gate	3	6tph	2tph	4tph	As weekday midday off peak	December 2004
Manor Park	3/4					
llford	4	4				
Seven Kings	4		4tph			December 2004
Goodmayes	4					
Chadwell Heath	5	6tph		2tph	As weekday midday off peak	
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6	6tnh	No sorvice	6tnh	As wookday midday off nack	December 2004
Upminster	6	6tph	No service	6tph	As weekday midday off peak	December 2004

3.6 Sunday daytime and evening services — Great Eastern Metro

- Except for a later start-up, (see Sunday first and last services) Sunday frequency should be the same as Saturdays.
- It is recognised that the Network Rail's present maintenance practices lead to restricted Sunday services, particularly on multi-track routes, see Requirements for Train Services— Principles, Appendix 1. These maintenance practices should be reviewed and methods revised so that the train service standard described as above can be attained in the next five years, i.e. by 2008.

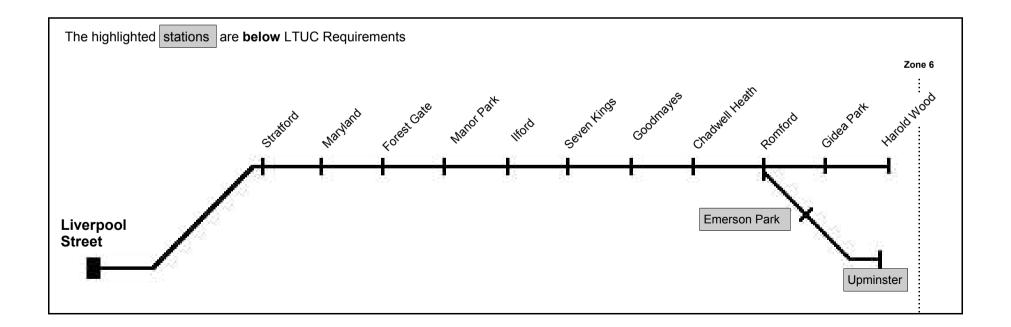


Sunday daytime and evening services — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3					
Maryland	3					
Forest Gate	3					
Manor Park	3/4					December 2004
llford	4				Increase service to 4tph	
Seven Kings	4	6tph	3tph	3tph		
Goodmayes	4					
Chadwell Heath	5					
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6	6tph	No service	6tph	As weekday midday off peak	December 2004
Upminster	6	σιρπ	NO Service	σιμπ	As weekday midday on peak	December 2004

3.7 Weekday first train — Great Eastern Metro

- All stations in the LTUC area should have first departures that facilitate connections with the first tranche of long-distance services from main London termini such as Paddington, Euston, King's Cross, Liverpool Street and Waterloo, and where possible to facilitate catching an early (pre-0630) Eurostar departure from Waterloo International. In general this means a first arrival in London by no later than 0600 on Mondays to Saturdays, 0730 on Sundays.
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1. It should be noted that most London routes requiring particularly intensive maintenance are either four track or have closely parallel lines (e.g. Lea Valley / Southbury Loop).

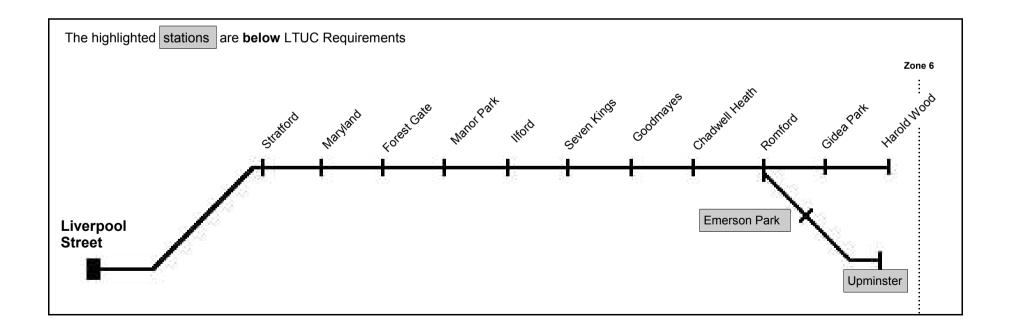


Weekday first train — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3					
Maryland	3					
Forest Gate	3					
Manor Park	3/4					
llford	4					
Seven Kings	4	Into London before 0600	complies			
Goodmayes	4					
Chadwell Heath	5					
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6		First train arrives		Start up time needs to be 1 hour earlier to arrive in London for 0600	December 2004
Upminster	6	Into London before 0600	in Romford at 0638 to connect to London	1 hour +	For longer term this line could be considered for conversion to light rail/light transit.	

3.8 Weekday last train — Great Eastern Metro

- For the benefit of both long-distance travellers and passengers visiting London for evening entertainment, last departures every day from Liverpool Street should be no earlier than **0030** (as applicable for Great Eastern Metro)
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1.

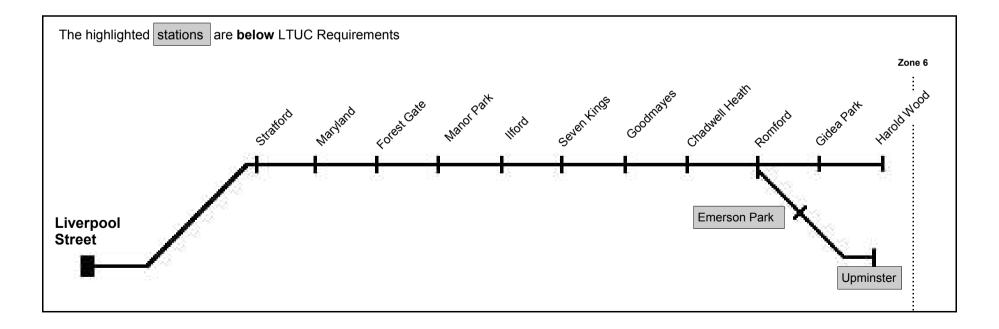


Weekday last train — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3					
Maryland	3					
Forest Gate	3					
Manor Park	3/4					
Ilford	4	Leave London after 0030				
Seven Kings	4		complies			
Goodmayes	4					
Chadwell Heath	5					
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6	Leave London	Last train from	41	Reinstate evening services at 3tph	December 2004
Upminster	6	after 0030	Romford is 1952	4 hours +	For longer term this line could be considered for conversion to light rail/light transit.	

3.9 Saturday first train — Great Eastern Metro

- All stations in the LTUC area should have first departures that facilitate connections with the first tranche of long-distance services from main London termini such as Paddington, Euston, King's Cross, Liverpool Street and Waterloo, and where possible to facilitate catching an early (pre-0630) Eurostar departure from Waterloo International. In general this means a first arrival in London by no later than 0600 on Mondays to Saturdays, 0730 on Sundays.
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1.

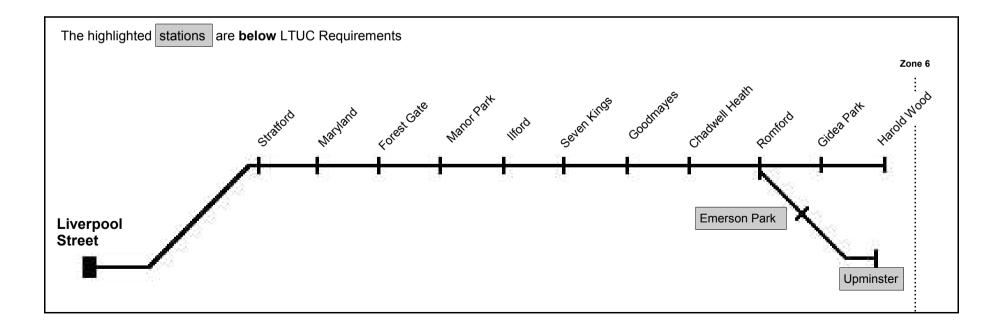


Saturday first train — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3					
Maryland	3					
Forest Gate	3					
Manor Park	3/4					
Ilford	4					
Seven Kings	4	Into London before 0600	complies			
Goodmayes	4					
Chadwell Heath	5					
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6		First train arrives in Romford at 0642 to connect to London		Start up time needs to be 1 hour earlier to arrive in London for 0600	December 2004
Upminster	6	Into London before 0600		For longer term this line could be considered for conversion to light rail/light transit.		

3.10 Saturday last train — Great Eastern Metro

- For the benefit of both long-distance travellers and passengers visiting London for evening entertainment, last departures every day from Liverpool Street should be no earlier than **0030** (as applicable for Great Eastern Metro)
- For engineering work issues arising from first and last train policy see Requirements for Train Services— Principles— Appendix 1.

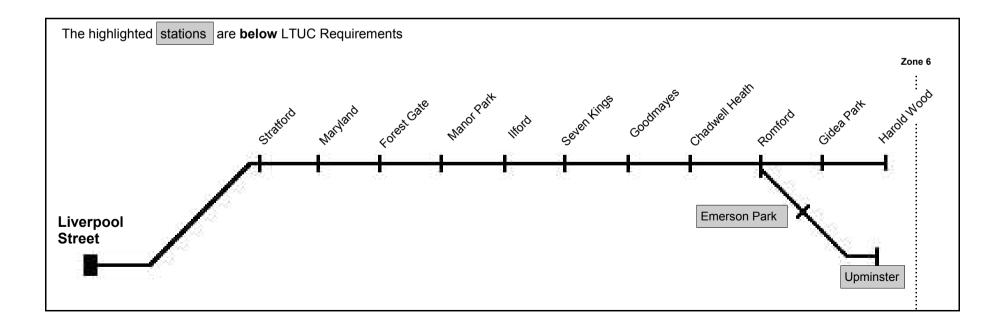


Saturday last train — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3					
Maryland	3					
Forest Gate	3					
Manor Park	3/4					
Ilford	4					
Seven Kings	4	Leave London after 0030	complies			
Goodmayes	4					
Chadwell Heath	5					
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6	Leave London	Last train from		Reinstate evening services at 3tph	December 2004
Upminster	6	after 0030	Romford is 1952	4 hours +	For longer term this line could be considered for conversion to light rail/light transit.	

3.11 Sunday first train — Great Eastern Metro

- All stations in the LTUC area should have first departures that facilitate connections with the first tranche of long-distance services from main London termini such as Paddington, Euston, King's Cross, Liverpool Street and Waterloo, and where possible to facilitate catching an early (pre-0630) Eurostar departure from Waterloo International. In general this means a first arrival in London by no later than 0730 on Sundays.
- In addition, on Sundays within the Zones, rail start-up times should be synchronised with the night bus network in such a way that for any locality with a direct night bus to central London there should be no more than a 30 min. interval between the departure of the last night bus and the departure of the first train.
- For engineering work issues arising from first and last train policy see Requirements for Train Services Principles Appendix 1.

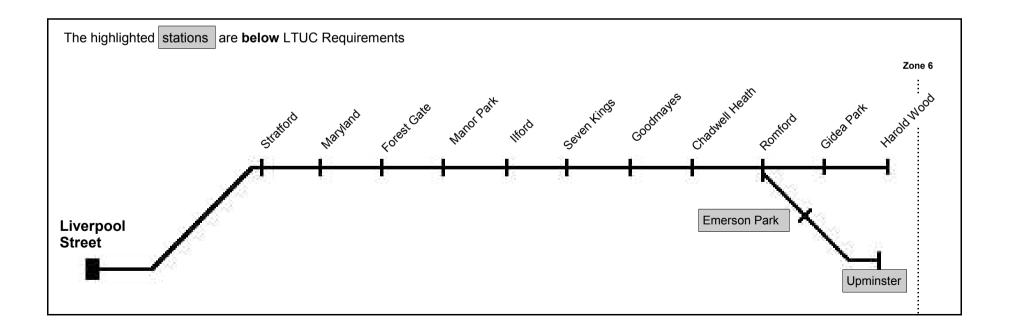


Sunday first train — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3					
Maryland	3					
Forest Gate	3					
Manor Park	3/4					
llford	4					
Seven Kings	4	Into London before 0730	complies			
Goodmayes	4					
Chadwell Heath	5					
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6	Into London before 0730	No service		Reinstate Sunday services at 3tph	December 2004
Upminster	6				For longer term this line could be considered for conversion to light rail/light transit.	

3.12 Sunday last train — Great Eastern Metro

- For the benefit of both long-distance travellers and passengers visiting London for evening entertainment, last departures every day from Liverpool Street should be no earlier than **0030** (as applicable for Great Eastern Metro)
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1.



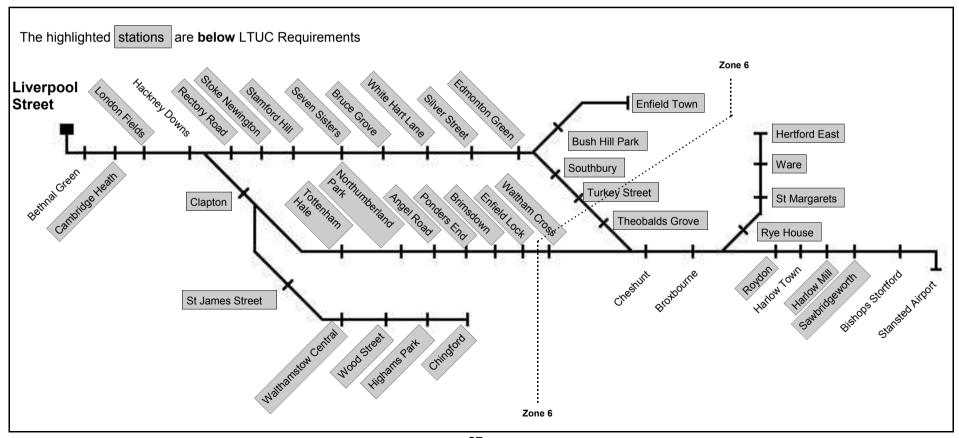
Sunday last train — Great Eastern Metro

Station	Zone	LTUC Requirement	Great Eastern actual	Difference	Suggested changes short/medium term	Timescale
Stratford	3					
Maryland	3					
Forest Gate	3					
Manor Park	3/4					
llford	4					
Seven Kings	4	Leave London after 0030	complies			
Goodmayes	4					
Chadwell Heath	5					
Romford	6					
Gidea Park	6					
Harold Wood	6					
Emerson Park	6	Leave London after 0030	No service		Reinstate evening services at 3tph	December 2004
Upminster	6				For longer term this line could be considered for conversion to light rail/light transit.	

4.1 Weekday midday off peak services — West Anglia

LTUC Principles as applicable to West Anglia

- Within Zones 1-6 a minimum of 6 trains per hour (tph), at regular 10 min. intervals where possible. (6 tph is the minimum standard for a 'turn up and go' metro service, i.e. one where passengers do not need to refer to the timetable when planning their journey.)
- At stations beyond the Zones and extending to the boundaries, (on this all route stations including and beyond Waltham Cross and Theobalds Grove) a minimum of 4tph at regular 15 min. intervals where possible.
- Off-peak services and train lengths should be sufficient to provide seats for all passengers.



Weekday midday off peak services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bethnal Green	2	6tph	complies			
Cambridge Heath	2	6tph	2tph	4tph	Consider redistributing existing stops at Bethnal Green, Cambridge Heath and London Fields to provide a more equal level of service at each station Greater Anglia Route Utilisation Strategy to identify any infrastructure requirements for 6tph	December 2004
London Fields	2					Route Utilisation Strategy Published Spring 2005
Hackney Downs	2	6tph	complies			
Rectory Road	2	6tph	4tph	2tph	Greater Anglia Route Utilisation Strategy to identify any infrastructure requirements for 6tph	Route Utilisation Strategy Published Spring 2005
Stoke Newington	2					
Stamford Hill	3					
Seven Sisters	3	6tph	4tph	2tph	Seven Sisters to Enfield Town R) Greater Anglia Route Utilisation	
Bruce Grove	3					D
White Hart Lane	3					December 2004
Silver Street	4					Route Utilisation Strategy
Edmonton Green	4					Published Spring 2005

Weekday midday off peak services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bush Hill Park	5	6tph	2tph	4tph	A) Introduce a 2tph shuttle service from Seven Sisters to Enfield Town	December 2004
Enfield Town	5				B) Greater Anglia Route Utilisation Strategy to identify any infrastructure requirements for 6tph.	Route Utilisation Strategy Published Spring 2005
Southbury	5	041.	2tph	4tph	Greater Anglia Route Utilisation Strategy to identify any infrastructure requirements for 6tph	Route Utilisation Strategy Published Spring 2005
Turkey Street	6	6tph				
Theobalds Grove	out	4tph*	2tph	2tph		
Clapton	2/3	6tph	4tph	2tph	Greater Anglia Route Utilisation Strategy to identify any infrastructure requirements for 6tph	Route Utilisation Strategy Published Spring 2005
St James Street	3					
Walthamstow Central	3					
Wood Street	4					
Highams Park	4					
Chingford	5					
Tottenham Hale	3	6tph	4tph	2tph	The deletion of the 'u' (stops to pick up only) and the 's' (stops to set down only on Stansted Express services will provide 8tph.	Immediate
Northumberland Park	3	6tph	1tph	5tph	Increase to 2tph by making all Waltham Cross line stopping trains call at Northumberland Park and Angel Road	December 2004
Angel Road	4					

^{*} Theobalds Grove track layout means that the service must be the same as Southbury and Turkey Street

Weekday midday off peak services — West Anglia

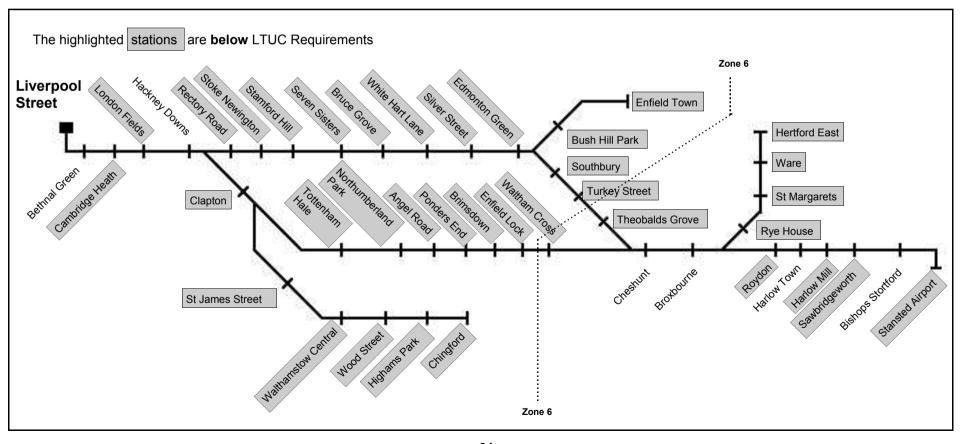
Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Ponders End	5					
Brimsdown	5	6tph	2tph	4tph	Greater Anglia Route Utilisation Strategy to identify any infrastructure	Route Utilisation Strategy
Enfield Lock	6				requirements for 6tph	Published Spring 2005
Waltham Cross	out	4tph *	2tph	2tph		
Cheshunt	out	4tph	complies			
Broxbourne	out	4tpn	complies			
Rye House	out				A) Introduce a new 2tph shuttle service	December 2004
St Margarets	out				from Broxbourne to Hertford East	
Ware	out	4tph	2tph	2tph	B) Greater Anglia Route Utilisation	Route Utilisation Strategy
Hertford East	out				Strategy to identify any infrastructure requirements for 6tph	Published Spring 2005
Roydon	out	4tph	1tph	3tph	Increase to 2tph by making all Waltham Cross line stopping trains call at Roydon	December 2004
Harlow Town	out	4tph	complies			
Harlow Mill	out	4tph	1tph	3tph	Increase to 2tph by making all Waltham Cross line stopping trains call at Harlow Mill	December 2004
Sawbridgeworth	out	4tph	3tph (irregular intervals)	1tph	Greater Anglia Route Utilisation Strategy to look at ways of providing a better balanced service.	Route Utilisation Strategy Published Spring 2005
Bishops Stortford	out	4tph	complies			
Stansted Airport	out	4tph	complies			

^{*} Waltham Cross track layout means that the service must be the same as Ponders End, Brimsdown and Enfield Lock

4.2 Weekday evening off peak services — West Anglia

LTUC Principles as applicable to West Anglia

To be the same as weekday midday off peak



Weekday evening off peak services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bethnal Green	2	6tph	complies			
Cambridge Heath	2	6tph	2tph	4tph	As weekday midday off peak	
London Fields	2	στριι	Σιρπ	4(þ11	As weekday illidday oil peak	
Hackney Downs	2	6tph	complies			
Rectory Road	2				As weekday midday off peak	
Stoke Newington	2					
Stamford Hill	3					
Seven Sisters	3					
Bruce Grove	3	6tph	4tph	2tph		
White Hart Lane	3					
Silver Street	4					
Edmonton Green	4					

Weekday evening off peak services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bush Hill Park	5	A 1	2tph			
Enfield Town	5	6tph		4tph	As weekday midday off peak	
Southbury	5	24 1	2			
Turkey Street	6	6tph	2tph	4tph	As weekday midday off peak	
Theobalds Grove	out	4tph*	2tph	2tph	- Ac Hookaay Illiaday oli poak	
Clapton	2/3		2tph	4tph	Increase services to 4tph until 2400 The rest of the services to be the same as weekday midday off peak	
St James Street	3					December 2004
Walthamstow Central	3	6tph				Beccinisci 2004
Wood Street	4					
Highams Park	4					
Chingford	5					
Tottenham Hale	3	6tph	4tph	2tph	As weekday midday off peak	
Northumberland Park	3	Cám h	4 24mb	4 Etmb	As weakday midday off me-ly	
Angel Road	4	6tph	1-2tph	4-5tph	As weekday midday off peak	

^{*} Theobalds Grove track layout means that the service must be the same as Southbury and Turkey Street

Weekday evening off peak services — West Anglia

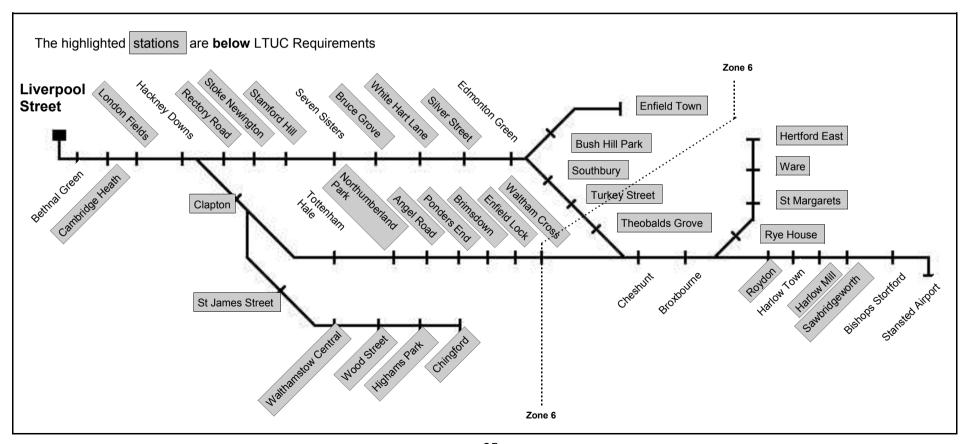
Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Ponders End	5					
Brimsdown	5	6tph	2tph	4tph	As weekday midday off peak	
Enfield Lock	6				As weekday midday on peak	
Waltham Cross	out	4tph*	2tph	2tph		
Cheshunt	out	4tob	aomaliaa			
Broxbourne	out	4tph	complies			
Rye House	out					
St Margarets	out		2tph	A 4 1		
Ware	out	4tph		2tph	As weekday midday off peak	
Hertford East	out					
Roydon	out	4tph	1-2tph	2-3tph	As weekday midday off peak	
Harlow Town	out	4tph	complies			
Harlow Mill	out	4tph	1-2tph	2-3tph	As weekday midday off peak	
Sawbridgeworth	out	4tph	3tph	1tph	As weekday midday off peak	
Bishops Stortford	out	4tph	complies			
Stansted Airport	out	4tph	3-4tph	0-1tph	Stansted Express to operate 4tph all evening	December 2004

^{*} Waltham Cross track layout means that the service must be the same as Ponders End, Brimsdown and Enfield Lock

4.3 Weekday peak services — West Anglia

LTUC Principles as applicable to West Anglia

- Peak hour frequency should be no less than off-peak.
- There should be sufficient capacity to ensure that no passengers have to stand involuntarily for more than 10 minutes, and to ensure compliance with PIXC (Passengers in excess of capacity) rules.
- Peak service timetables should be constructed so that off-peak patterns and timings apply all day and that peak services are made up by adding extra trains to the basic off-peak pattern. Exceptionally, where capacity constraints make it impossible to adhere exactly to this principle, every effort should be made to ensure that any broken links (i.e. journeys which can be made by through train in the off-peak) are provided with quick connections in lieu.
- Special consideration should be given to providing sufficient capacity for 'shoulder-peak' demand (generally arriving in London before 0730; 0900-1030 and returning from London 1530-1630 and 1830-2030).



Weekday peak services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bethnal Green	2	6tph	complies			
Cambridge Heath	2	6tph	4tph	2tph	As weekday midday off peak	
London Fields	2	οι _μ	П		, , , , , , , , , , , , , , , , , , , ,	
Hackney Downs	2	6tph	complies			
Rectory Road	2					
Stoke Newington	2	6tph	4tph	2tph	As weekday midday off peak	
Stamford Hill	3					
Seven Sisters	3	6tph	complies			
Bruce Grove	3		4tph**		Run 'PIXC busters' throughout the peak to provide 6tph	December 2004
White Hart Lane	3	6tph		2tph		
Silver Street	4					
Edmonton Green	4	6tph	complies			
Bush Hill Park	5				Greater Anglia Route Utilisation Strategy to	Route Utilisation Strategy
Enfield Town	5	6tph	4tph	2tph	identify any infrastructure requirements for 6tph.	Published Spring 2005
Southbury	5	C4l-	04 l- ++	44m la	Run 'PIXC busters' throughout the peak to	
Turkey Street	6	6tph	2tph**	4tph		December 2004
Theobalds Grove	out	4tph*	2tph**	2tph	- provide 6tph	December 2004

^{*} Theobalds Grove track layout means that the service must be the same as Southbury and Turkey Street

^{**} Plus 'PIXC busters' trains from Cheshunt—Seven Sisters (2 trains AM, 1 train PM)

Weekday peak services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Clapton	2/3	6tph	5tph	1tph	As weekday midday off peak	
St James Street	3					
Walthamstow Central	3	6tph	4tph	2tph		
Wood Street	4			,	As weekday midday off peak	
Highams Park	4					
Chingford	5					
Tottenham Hale	3	6tph	complies			
Northumberland Park	3	6tph	tph 2tph	4tph	Greater Anglia Route Utilisation Strategy to identify any infrastructure requirements for 6tph.	December 2004
Angel Road	4					
Ponders End	5					
		6tph	2tph	4tph		
Brimsdown	5				As weekday midday off peak	
Enfield Lock	6	6tph	4tph**	2tph		
Waltham Cross	out	4tph	2tph*	2tph		

^{*} Waltham Cross track layout means that the service must be the same as Ponders End, Brimsdown and Enfield Lock

^{**} Trains are flighted in pairs, so in frequency terms (as distinct from capacity) service is effectively only 2tph

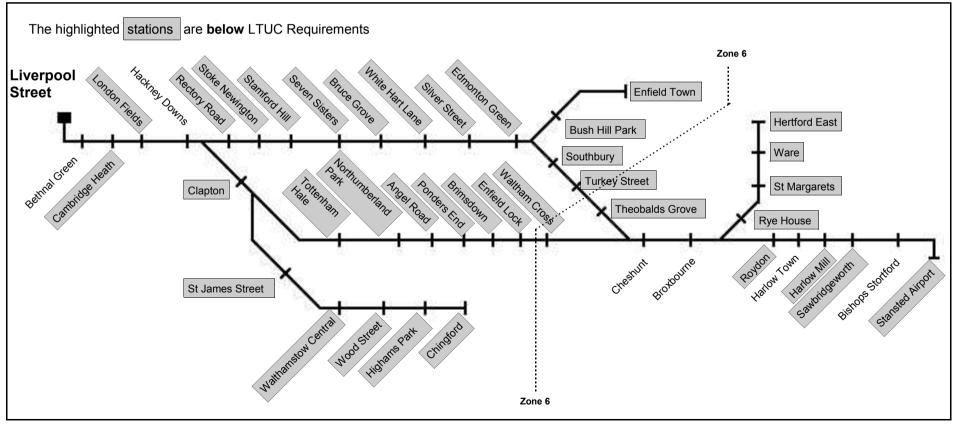
Weekday peak services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Cheshunt	out	4tph	complies			
Broxbourne	out	4tph	complies			
Rye House	out					
St Margarets	out	At Is	041.	Otala		
Ware	out	4tph	2tph 21	2tph	As weekday midday off peak	
Hertford East	out					
Roydon	out	4tph	1-2tph	2-3tph	As weekday midday off peak	
Harlow Town	out	4tph	complies			
Harlow Mill	out	4tph	1-2tph	2-3tph	As weekday midday off peak	
Sawbridgeworth	out	4tph	2tph - AM 3-4 tph - PM	2tph- AM 0-1tph- PM	AM Existing 2tph stopping trains to be supplemented by calls in 2tph fast trains PM 1633, 1703 and 1903 from Liverpool Street to call at Sawbridgeworth	December 2004
Bishops Stortford	out	4tph	complies			
Stansted Airport	out	4tph	complies			

4.4 Saturday daytime services — West Anglia

LTUC Principles as applicable to West Anglia

• To be the same as weekday midday off peak



Saturday daytime services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bethnal Green	2	6tph	complies			
Cambridge Heath	2	C4mh	24nh	44mb	As weekday midday off peak	
London Fields	2	6tph	2tph	4tph	As weekday iiidday oii peak	
Hackney Downs	2	6tph	complies			
Rectory Road	2					
Stoke Newington	2					
Stamford Hill	3					
Seven Sisters	3					
Bruce Grove	3	6tph	4tph	2tph	As weekday midday off peak	
White Hart Lane	3					
Silver Street	4					
Edmonton Green	4					

Saturday daytime services — West Anglia

Station	Zone	LTUC Require- ment	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bush Hill Park	5	6tph	Otark	4tph	As weekday midday off peak	
Enfield Town	5	σιριί	2.1011	2tph 4tph	no wookaay maaay on poak	
Southbury	5	6tph	2tph	Atob		
Turkey Street	6	erbii	Ζιρπ	4tph	As weekday midday off peak	
Theobalds Grove	out	4tph*	2tph	2tph	, , , , , , , , , , , , ,	
Clapton	2/3		6tph 3tph		As weekday midday off peak	
St James Street	3			2tph		
Walthamstow Central	3	6tph				
Wood Street	4					
Highams Park	4					
Chingford	5					
Tottenham Hale	3	6tph	4tph	2tph	As weekday midday off peak	
Northumberland Park	3	6tph	1tph	5tph	As weekday midday off peak	
Angel Road	4					

^{*} Theobalds Grove track layout means that the service must be the same as Southbury and Turkey Street

Saturday daytime services — West Anglia

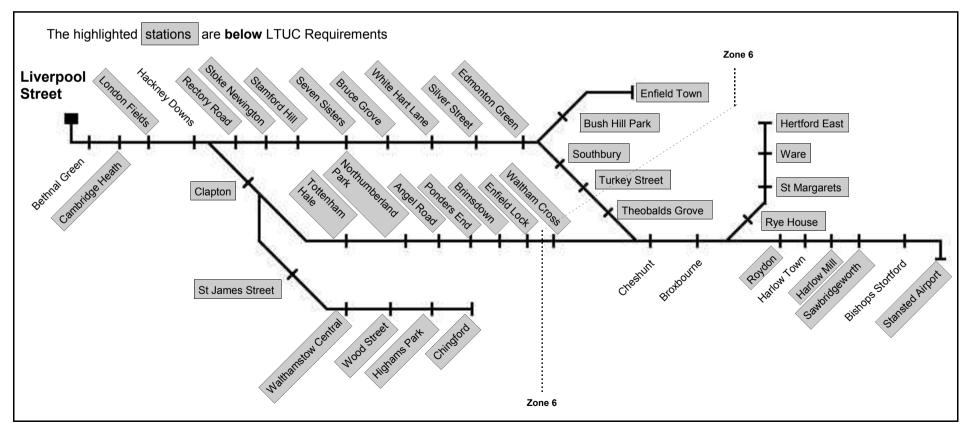
Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Ponders End	5					
Brimsdown	5	6tph	2tph	4tph	A a succeledas emiddas aff a calc	
Enfield Lock	6				As weekday midday off peak	
Waltham Cross	out	4tph*	2tph	2tph		
Cheshunt	out	4tph	complies			
Broxbourne	out	4tph	complies			
Rye House	out		4tph 2tph			
St Margarets	out	A4la		04h	A alada	
Ware	out	4tpn		2tph	As weekday midday off peak	
Hertford East	out					
Roydon	out	4tph	1tph	3tph	As weekday midday off peak	
Harlow Town	out	4tph	complies			
Harlow Mill	out	4tph	1tph	3tph	As weekday midday off peak	
Sawbridgeworth	out	4tph	3tph	1tph	As weekday midday off peak	
Bishops Stortford	out	4tph	complies			
Stansted Airport	out	4tph	2tph	2tph	Services to Stansted should be increased as necessary in line with demand	As required

^{*} Waltham Cross track layout means that the service must be the same as Ponders End, Brimsdown and Enfield Lock

4.5 Saturday evening services — West Anglia

LTUC Principles as applicable to West Anglia

• To be the same as weekday midday off peak



Saturday evening services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bethnal Green	2	6tph	complies			
Cambridge Heath	2	Church	Otals	44	As we shall a self-us off us also	
London Fields	2	6tph	2tph	4tph	As weekday midday off peak	
Hackney Downs	2	6tph	complies			
Rectory Road	2					
Stoke Newington	2					
Stamford Hill	3					
Seven Sisters	3					
Bruce Grove	3	6tph	4tph	2tph	As weekday midday off peak	
White Hart Lane	3					
Silver Street	4					
Edmonton Green	4					

Saturday evening services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bush Hill Park	5		2tph 4tph			
Enfield Town	5	6tph		As weekday midday off peak		
Southbury	5	C4b	O4h	44 m ln		
Turkey Street	6	6tph	2tph	4tph	As weekday midday off peak	
Theobalds Grove	out	4tph*	2tph	2tph	7.6 Hookaay Illiaaay on poak	
Clapton	2/3		4tph	2tph	As weekday midday off peak	
St James Street	3					
Walthamstow Central	3	6tph				
Wood Street	4					
Highams Park	4					
Chingford	5					
Tottenham Hale	3	6tph	4tph	2tph	As weekday midday off peak	
Northumberland Park	3	6tph	1tph	5tph	As weekday midday off peak	
Angel Road	4					

^{*} Theobalds Grove track layout means that the service must be the same as Southbury and Turkey Street

Saturday evening services — West Anglia

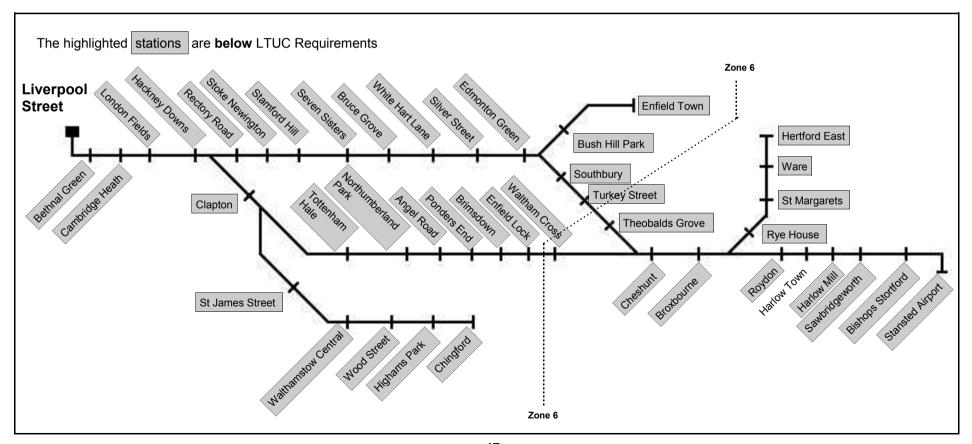
Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Ponders End	5					
Brimsdown	5	6tph	2tph	4tph	As weekday midday off peak	
Enfield Lock	6				As weekday illidday off peak	
Waltham Cross	out	4tph *	2tph	2tph		
Cheshunt	out	4tph	complies			
Broxbourne	out		complies			
Rye House	out	4tph	2tph		As weekday midday off peak	
St Margarets	out			2tph		
Ware	out	4ιρπ		2(pii		
Hertford East	out					
Roydon	out	4tph	1tph	3tph	As weekday midday off peak	
Harlow Town	out	4tph	complies			
Harlow Mill	out	4tph	1tph	3tph	As weekday midday off peak	
Sawbridgeworth	out	4tph	3tph (irregular intervals)	1tph	As weekday midday off peak	
Bishops Stortford	out	4tph	complies			
Stansted Airport	out	4tph	2tph	2tph	Same as Saturday daytime	December 2004

^{*} Waltham Cross track layout means that the service must be the same as Ponders End, Brimsdown and Enfield Lock

4.6 Sunday daytime and evening services — West Anglia

LTUC Principles as applicable to West Anglia

- Except for a later start-up, (see Sunday first and last services) Sunday frequency should be the same as Saturdays.
- It is recognised that the Network Rail's present maintenance practices lead to restricted Sunday services, particularly on multi-track routes, see Requirements for Train Services— Principles, Appendix 1. These maintenance practices should be reviewed and methods revised so that the train service standard described as above can be attained in the next five years, i.e. by 2008.



Sunday daytime and evening services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term Timescale
Bethnal Green	2	6tph	5tph	1tph	Increase service to 6tph December 2004
Cambridge Heath	2				A) Introduce a 4tph service December 2004
London Fields	2	6tph	no service	6tph	B) Greater Anglia Route Utilisation Strategy to identify any infrastructure requirements for 6tph Route Utilisation Strategy Published Spring 2005
Hackney Downs	2	6tph	5tph	1tph	Increase service to 6tph December 2004
Rectory Road	2				
Stoke Newington	2				
Stamford Hill	3		2tph	4tph	
Seven Sisters	3				
Bruce Grove	3	6tph			
White Hart Lane	3				A) Increase service to 4tph. December 2004 B) Greater Anglia Route Utilisation Route Utilisation
Silver Street	4				Strategy to identify any infrastructure Strategy requirements for 6tph Published
Edmonton Green	4				Spring 2005
Bush Hill Park	5	C4h	44m h	F4 m lm	
Enfield Town	5	6tph	1tph	5tph	
Southbury	5	C4h	44m h	Finh	
Turkey Street	6	6tph	1tph	5tph	
Theobalds Grove	out	4tph*	1tph	3tph	

^{*} Theobalds Grove track layout means that the service must be the same as Southbury and Turkey Street

Sunday daytime and evening services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Clapton	2/3	6tph	3tph	3tph		
St James Street	3					
Walthamstow Central	3				Increase service to 4tph Greater Anglia Route Utilisation	Route Utilisation
Wood Street	4	6tph	2tph	4tph	Strategy to identify any infrastructure requirements for 6tph	Strategy Published
Highams Park	4					Spring 2005
Chingford	5					
Tottenham Hale	3	6tph	3tph	3tph	The deletion of the 'u' (stops to pick up only) and the 's' (stops to set down only on Stansted Express services will provide 6tph	Immediate
Northumberland Park	3	6tph	no service	6tph	As weekday midday off peak	
Angel Road	4	,			,,	
Ponders End	5					December 2004
Brimsdown	5	6tph	1tph	5tph	A) Increase service to 2tph	Route Utilisation
Enfield Lock	6				B) Greater Anglia Route Utilisation Strategy to identify any infrastructure requirements for 6tph	Strategy Published
Waltham Cross	out	4tph*	1tph	3tph	- requirements for dipir	Spring 2005

^{*} Waltham Cross track layout means that the service must be the same as Ponders End, Brimsdown and Enfield Lock

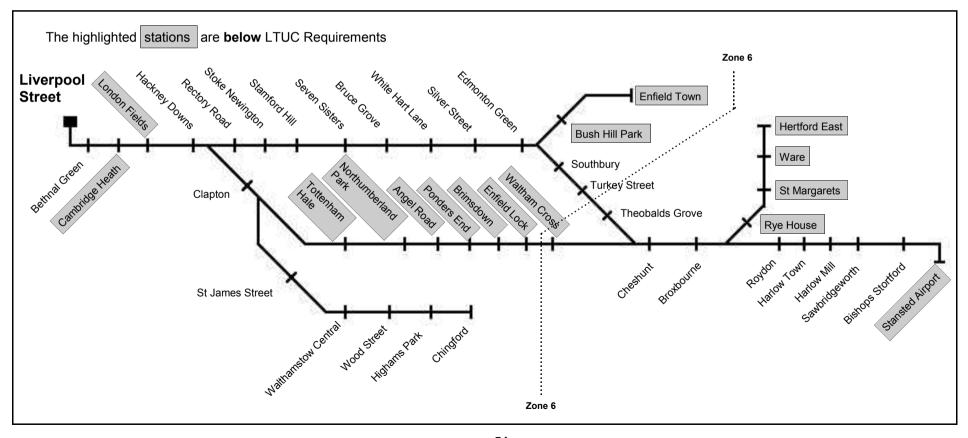
Sunday daytime and evening services — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Cheshunt	out	A4In	24mh	A4I.		D
Broxbourne	out	4tph	3tph	1tph	Increase service to 4tph	December 2004
Rye House	out	4tph				
St Margarets	out		Atrilia	Otal.		D
Ware	out		1tph 3tph	3tpn	Increase service to 2tph, the same as a Monday and Friday midday service	December 2004
Hertford East	out					
Roydon	out	4tph	1tph	3tph	As weekday midday off peak	
Harlow Town	out	4tph	complies			
Harlow Mill	out	4tph	1tph	3tph	As weekday midday off peak	December 2004
Sawbridgeworth	out	4tph	1tph	1tph	Increase service to 2tph	December 2004
Bishops Stortford	out	4tph	4tph	complies		
Stansted Airport	out	4tph	4tph	complies		

4.7 Weekday first train — West Anglia

LTUC Principles as applicable to West Anglia

- All stations in the LTUC area should have first departures that facilitate connections with the first tranche of long-distance services from main London termini such as Paddington, Euston, King's Cross, Liverpool Street and Waterloo, and where possible to facilitate catching an early (pre-0630) Eurostar departure from Waterloo International. In general this means a first arrival in London by no later than 0600 on Mondays to Saturdays, 0730 on Sundays.
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1.



Weekday first train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference		Suggested changes short/medium term	Timescale
Bethnal Green	2	Into London before 0600	complies				
Cambridge Heath	2	Into London before 0600	0630	30 mins			
London Fields	2	before 0600					
Hackney Downs	2	Into London before 0600	complies				
Rectory Road	2				A)	Extra trains from Enfield Town and call at all station to Liverpool Street,	
Stoke Newington	2		complies			arriving before c.0550 and c.0615	December 2004
Stamford Hill	3				В)		
Seven Sisters	3						
Bruce Grove	3	Into London before 0600					
White Hart Lane	3						
Silver Street	4						
Edmonton Green	4						
Bush Hill Park	5	Into London					
Enfield Town	5	before 0600	0630	30 mins			
Southbury	5						
Turkey Street	6	Into London before	complies				
Theobalds Grove	out	0600	3311171133				

Weekday first train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Clapton	2/3					
St James Street	3					
Walthamstow Central	3	Into London before	complies			
Wood Street	4	0600	pc			
Highams Park	4					
Chingford	5					
Tottenham Hale	3	Into London before 0600	0649	49 mins		
Northumberland Park	3	Into London	0707	1 hour 7 mins		
Angel Road	4	before 0600	0.01	i nour i nino	Chart up time for coming about he 4 hours	
Ponders End	5				Start up time for service should be 1 hour earlier	December 2004
Brimsdown	5	Into London	2010			
Enfield Lock	6	before 0600	0649	49mins		
Waltham Cross	out					

Weekday first train — West Anglia

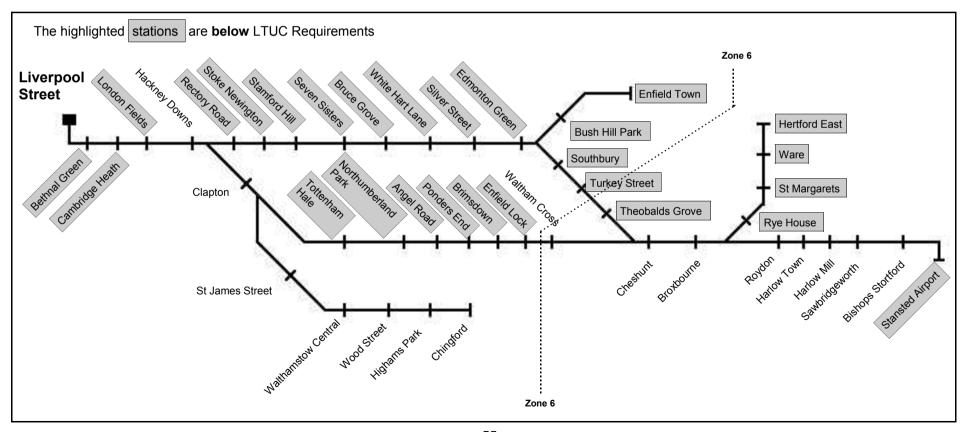
Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Cheshunt	out	Into London before	a a martia a			
Broxbourne	out	0600	complies			
Rye House	out					
St Margarets	out	Into London before 0600	0040	40 1	Start up time for service should be 1 hour	December 2004
Ware	out		0649		earlier ·	
Hertford East	out					
Roydon	out					
Harlow Town	out					
Harlow Mill	out	Into London before 0600	complies			
Sawbridgeworth	out					
Bishops Stortford	out					
Stansted Airport	out	Into London before 0600	0650*	50 mins	Services to Stansted should be increased as necessary in line with earlier flight times	As required

^{*} Additional train arrives at Liverpool Street 0613 Monday and Friday Only (MFO)

4.8 Weekday last train — West Anglia

LTUC Principles as applicable to West Anglia

- For the benefit of both long-distance travellers and passengers visiting London for evening entertainment, last departures every day from London termini should be no earlier than **0030 to stations in the Zones** and **2400 to other LTUC area stations**
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1.



Weekday last train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bethnal Green	2	Leave London after 0030	0023	7 mins		
Cambridge Heath	2	Leave London after 0030	2355	35 mins		
London Fields	2	aiter 0030				
Hackney Downs	2	Leave London after 0030	complies			
Rectory Road	2					
Stoke Newington	2		2355			December 2004
Stamford Hill	3				Extra train at 0025 from Liverpool Street calling at all stations.	
Seven Sisters	3					
Bruce Grove	3			35 mins		
White Hart Lane	3	Leave London after 0030				
Silver Street	4					
Edmonton Green	4					
Bush Hill Park	5					
Enfield Town	5					
Southbury	5	Leave London	00.40	50 min s		
Turkey Street	6	after 0030	2340	50 mins	Extra trains at 0010 and 0040 all stations to	December 2004
Theobalds Grove	out	Leave London after 2400	2340	20 mins	- Cheshunt	

Weekday last train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale	
Clapton	2/3						
St James Street	3						
Walthamstow Central	3	Leave London after 0030	complies				
Wood Street	4		-				
Highams Park	4						
Chingford	5						
Tottenham Hale	3	Leave London after 0030	0003	27 mins	Extra train at 0033 calling at all stations to Broxbourne	December 2004	
Northumberland Park	3	Leave London	2302	1 hour 28 mins	All Waltham Cross line stopping trains to call at Northumberland Park and Angel	December 2004	
Angel Road	4	after 0030	2002	1 110ai 20 1111110	Road	20001111201 200 1	
Ponders End	5	Leave London after 0030	2332	58 mins			
Brimsdown	5	Leave London		Bro	Extra train at 0033 calling at all stations to Broxbourne	December 2004	
Enfield Lock	6	after 0030	0003	27 mins			
Waltham Cross	out	Leave London after 2400	complies				

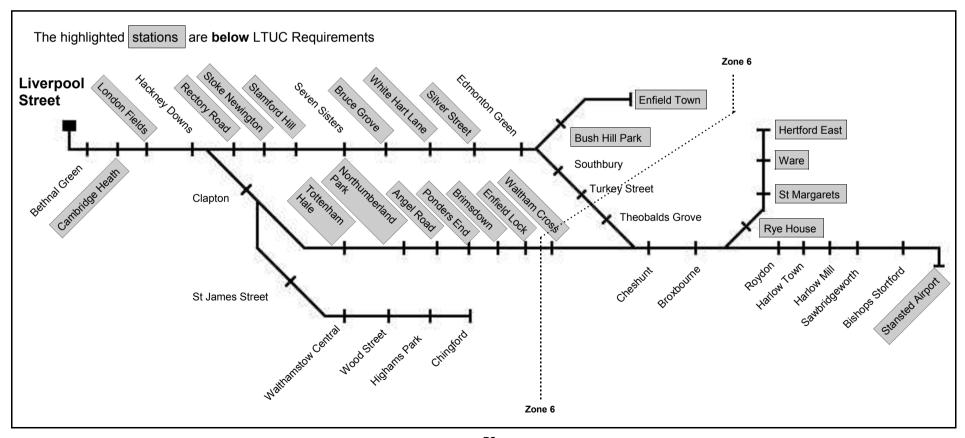
Weekday last train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Cheshunt	out	Leave London	!!			
Broxbourne	out	after 2400	complies			
Rye House	out					
St Margarets	out	Leave London after 2400	20.40		Extra train at 0010 all stations to Hertford	December 2004
Ware	out		2340	20 mins	East	
Hertford East	out					
Roydon	out					
Harlow Town	out					
Harlow Mill	out	Leave London after 2400	complies			
Sawbridgeworth	out					
Bishops Stortford	out					
Stansted Airport	out	Leave London after 2400	2330	30 mins	Services to Stansted should be increased as necessary in line with late flight times	As required

4.9 Saturday first train — West Anglia

LTUC Principles as applicable to West Anglia

- All stations in the LTUC area should have first departures that facilitate connections with the first tranche of long-distance services from main London termini such as Paddington, Euston, King's Cross, Liverpool Street and Waterloo, and where possible to facilitate catching an early (pre-0630) Eurostar departure from Waterloo International. In general this means a first arrival in London by no later than 0600 on Mondays to Saturdays, 0730 on Sundays.
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1.



Saturday first train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference		Suggested changes short/medium term	Timescale
Bethnal Green	2	Into London before 0600	complies				
Cambridge Heath	2	Into London	0636 30	36 mins			
London Fields	2	before 0600					
Hackney Downs	2	Into London before 0600	complies				
Rectory Road	2						
Stoke Newington	2	Into London before 0600	0636	36 mins	36 mins A)	A) Extra trains from Enfield Town and call at all stations to Liverpool Street, arriving before c.0550 and c.0615	December 2004
Stamford Hill	3						
Seven Sisters	3	Into London before 0600	complies	complies			
Bruce Grove	3			36 mins			
White Hart Lane	3	Into London before 0600	0636				
Silver Street	4						
Edmonton Green	4	Into London before 0600	complies				
Bush Hill Park	5	Into London	0000	2C mine			
Enfield Town	5	before 0600	0636	36 mins			
Southbury	5						
Turkey Street	6	Into London before 0600	complies				
Theobalds Grove	out	0000	·				

Saturday first train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Clapton	2/3					
St James Street	3					
Walthamstow Central	3	Into London before	complies			
Wood Street	4	0600	pc			
Highams Park	4					
Chingford	5					
Tottenham Hale	3	Into London before 0600	0641	13 mins	Start up time for the services should be 1 hour earlier	December 2004
Northumberland Park	3	Into London	0837	2 hour 37 mins	All Waltham Cross stopping trains to call at	December 2004
Angel Road	4	before 0600	0007	2 nour or mins	Northumberland Park and Angel Road	5000ms01 2004
Ponders End	5					
Brimsdown	5	Into London			Start up time for the service should be	
Enfield Lock	6	before 0600	0641	41mins	1 hour earlier	December 2004
Waltham Cross	out					

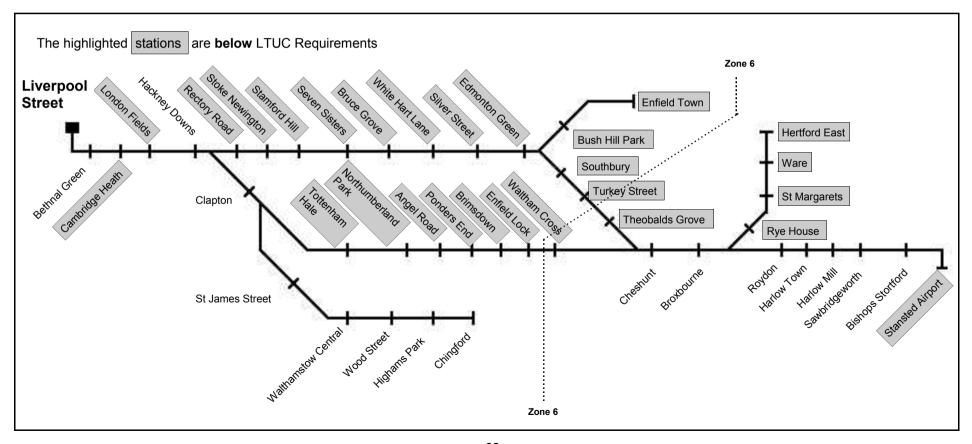
Saturday first train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Cheshunt	out	Into London before 0600	complies			
Broxbourne	out					
Rye House	out	Into London before 0600	0709	1 hour 11 mins	Start up time for the service should be 1 ½ hours earlier	December 2004
St Margarets	out					
Ware	out					
Hertford East	out					
Roydon	out	Into London before 0600	complies			
Harlow Town	out					
Harlow Mill	out					
Sawbridgeworth	out					
Bishops Stortford	out					
Stansted Airport	out	Into London before 0600	0613	13 mins	Services from Stansted should be increased as necessary in line with earlier flight times	As required

4.10 Saturday last train — West Anglia

LTUC Principles as applicable to West Anglia

- For the benefit of both long-distance travellers and passengers visiting London for evening entertainment, last departures every day from London termini should be no earlier than **0030 to stations in the Zones** and **2400 to other LTUC area stations**
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1.



Saturday last train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bethnal Green	2	Leave London after 0030	complies			
Cambridge Heath	2	Leave London after 0030	2355	35mins		
London Fields	2					
Hackney Downs	2	Leave London after 0030	complies			
Rectory Road	2	Leave London after 0030	2355	35 mins	As weekday last trains	
Stoke Newington	2					
Stamford Hill	3					
Seven Sisters	3					
Bruce Grove	3					
White Hart Lane	3					
Silver Street	4					
Edmonton Green	4					
Bush Hill Park	5					
Enfield Town	5					
Southbury	5	Leave London after 0030	2340	50 mins	As weekday last trains	
Turkey Street	6					
Theobalds Grove	out	Leave London after 2400	2340	20 mins		

Saturday last train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Clapton	2/3	Leave London after 0030	complies			
St James Street	3					
Walthamstow Central	3					
Wood Street	4					
Highams Park	4					
Chingford	5					
Tottenham Hale	3	Leave London after 0030	0003	27 mins	As weekday last trains	
Northumberland Park	3	Leave London after 0030	2133	2 hour 57 mins	As weekday last trains	
Angel Road	4					
Ponders End	5	Leave London after 0030 Leave London after 2400	2333	57 mins	As weekday last trains	
Brimsdown	5					
Enfield Lock	6					
Waltham Cross	out		2333	27 mins		

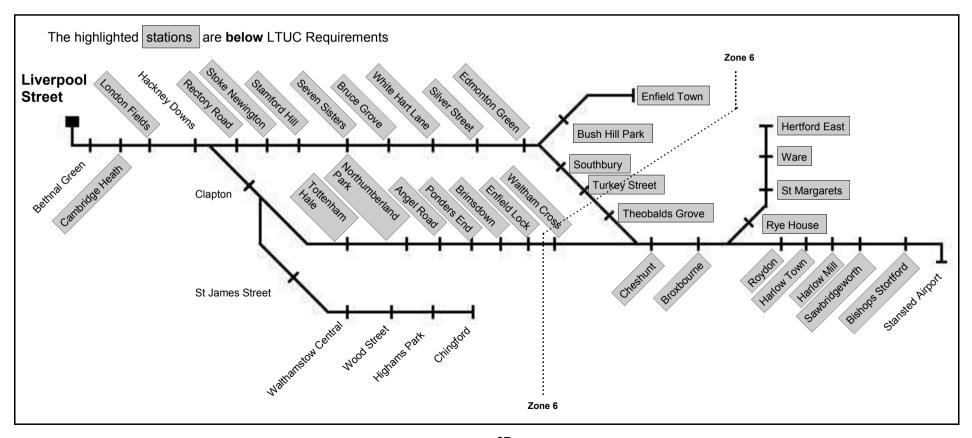
Saturday last train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Cheshunt	out	Leave London	a a martia a			
Broxbourne	out	after 2400	complies			
Rye House	out					
St Margarets	out	Leave London	2340 20 mins	As weekday last trains		
Ware	out	after 2400				
Hertford East	out					
Roydon	out		complies			
Harlow Town	out					
Harlow Mill	out	Leave London after 2400				
Sawbridgeworth	out					
Bishops Stortford	out					
Stansted Airport	out	Leave London after 2400	2330	30 mins	As weekday last trains	

4.11 Sunday first train — West Anglia

LTUC Principles as applicable to West Anglia

- All stations in the LTUC area should have first departures that facilitate connections with the first tranche of long-distance services from main London termini such as Paddington, Euston, King's Cross, Liverpool Street and Waterloo, and where possible to facilitate catching an early (pre-0630) Eurostar departure from Waterloo International. In general this means a first arrival in London by no later than 0730 on Sundays.
- In addition, on Sundays within the Zones, rail start-up times should be synchronised with the night bus network in such a way that for any locality with a direct night bus to central London there should be no more than a 30 min. interval between the departure of the last night bus and the departure of the first train.
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1.



Sunday first train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bethnal Green	2	Into London before 0730	complies			
Cambridge Heath	2	Into London				
London Fields	2	before 0730	no service			
Hackney Downs	2	Into London before 0730	complies			
Rectory Road	2					December 2004
Stoke Newington	2			44 mins	A) Introduce a Sunday service at Cambridge Heath and London Fields	
Stamford Hill	3					
Seven Sisters	3		0814		B) Start up time for the service should be 1 hour earlier	
Bruce Grove	3	Into London before 0730			Se i noui curio:	
White Hart Lane	3					
Silver Street	4					
Edmonton Green	4					
Bush Hill Park	5	Into London	0044			
Enfield Town	5	before 0730	0814	44 mins		
Southbury	5		1 112/16	1 hour 15 mins	Start up time should be 1 ½ hours earlier	December 2004
Turkey Street	6	Into London before 0730				
Theobalds Grove	out	Delote 0730				

Sunday first train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Clapton	2/3					
St James Street	3					
Walthamstow Central	3	Into London before	complies			
Wood Street	4	0730	-			
Highams Park	4					
Chingford	5					
Tottenham Hale	3	Into London before 0730	0850	1 hour 20 mins	Start up time for the services should be 1 ½ hours earlier	December 2004
Northumberland Park	3				A) Introduce a Sunday service at Northumberland Park and Angel	
Angel Road	4	Into London before 0730	No service		Road B) All Waltham Cross stopping trains to call at Northumberland Park and Angel Road	December 2004
Ponders End	5		0850			
Brimsdown	5	Into London before 0730		4 h a 00 m '	Start up time for the services should be 1 ½ hours earlier	December 2004
Enfield Lock	6			1 hour 20 mins		
Waltham Cross	out					

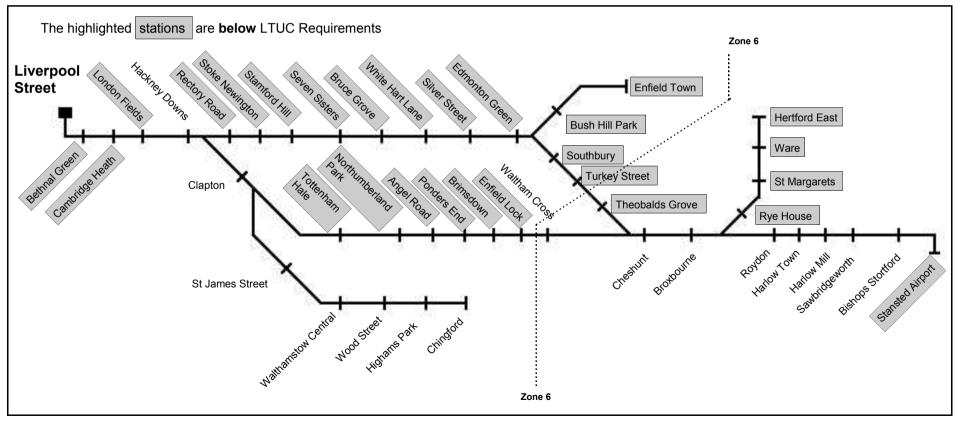
Sunday first train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Cheshunt	out					
Broxbourne	out					
Rye House	out	Into London		4 1, 45	Start up time for the services should be 1 ½	December 2004
St Margarets	out	before 0730	0845	1 hour 15 mins	hours earlier	
Ware	out					
Hertford East	out					
Roydon	out			1 hour 12 mins	Start up time for the services should be 1 ½ hours earlier	December 2004
Harlow Town	out					
Harlow Mill	out	Into London before 0730	0842			
Sawbridgeworth	out					
Bishops Stortford	out					
Stansted Airport	out	Into London before 0730	complies			

4.12 Sunday last train — West Anglia

LTUC Principles as applicable to West Anglia

- For the benefit of both long-distance travellers and passengers visiting London for evening entertainment, last departures every day from London termini should be no earlier than **0030** to stations in the **Zones** and **2400** to other LTUC area stations
- For engineering work issues arising from first and last train policy see Requirements for Train Services—Principles—Appendix 1).



Sunday last train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Bethnal Green	2	Leave London after 0030	2340	50 mins		
Cambridge Heath	2	Leave London after 0030	no service			
London Fields	2	atter 0030				
Hackney Downs	2	Leave London after 0030	complies			
Rectory Road	2					December 2004
Stoke Newington	2					
Stamford Hill	3					
Seven Sisters	3		2340	50 mins	A) Introduce a Sunday service at Cambridge Heath and London Fields	
Bruce Grove	3	Leave London after 0030			B) Extra services at 0010 and 0040 all	
White Hart Lane	3				stations. Cheshunt and connections at Seven Sisters to Enfield Town	
Silver Street	4					
Edmonton Green	4					
Bush Hill Park	5	Leave London				
Enfield Town	5	after 0030	2310	1 hour 20mins		
Southbury	5	efter 0030 2340	00.40	50 mins		
Turkey Street	6		2340			
Theobalds Grove	out	Leave London after 2400	2340	20 mins		

Sunday last train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Clapton	2/3					
St James Street	3					
Walthamstow Central	3	Leave London	complies			
Wood Street	4	after 0030				
Highams Park	4					
Chingford	5					
Tottenham Hale	3	Leave London after 0030	0003	27 mins	An extra train at 0033 from Liverpool Street calling at all stations.	December 2004
Northumberland Park	3	Leave London	no service		All Waltham Cross line stopping trains to call at Northumberland Park and Angel	December 2004
Angel Road	4	after 0030	complies 0003		Road	
Ponders End	5					
Brimsdown	5	Leave London after 0030 0003		27 mins	An extra train at 0033 from Liverpool Street calling at all stations.	December 2004
Enfield Lock	6					
Waltham Cross	out	Leave London after 2400	complies			

Sunday last train — West Anglia

Station	Zone	LTUC Requirement	West Anglia actual	Difference	Suggested changes short/medium term	Timescale
Cheshunt	out	Leave London	a a martia a			
Broxbourne	out	after 2400	complies			
Rye House	out					
St Margarets	out	Leave London	00.40		Extra trains at 0010	December 2004
Ware	out	after 2400	2340 20 mins	20 mins		
Hertford East	out					
Roydon	out		complies			
Harlow Town	out					
Harlow Mill	out	Leave London after 2400				
Sawbridgeworth	out					
Bishops Stortford	out					
Stansted Airport	out	Leave London after 2400	2300	1 hour	Services to Stansted should be increased as necessary in line with late flight times	As required

JOURNEY OPPORTUNITIES TO / FROM STATIONS OUTSIDE THE LTUC AREA

LTUC Principles (as applicable to Liverpool St. routes)

- Except as regards frequency, services to and from stations outside the London Transport Users Committee (LTUC) area should be organised on the same principles listed for journeys within the LTUC area.
- As a minimum, sufficient longer-distance services should call at key interchange stations in the LTUC area in order to provide the following:
 - a) Out and back day return journey opportunities
 - b) Out and back longer-stay journeys using reduced-price tickets such as Saver, SuperSaver and Apex on both weekdays and for 'Friday out Sunday return' journeys, with travel times suitable for leisure travellers, e.g. departures between 1000 & 1400
 - c) Avoiding the need to double-back via London terminals

The key interchange stations on the Liverpool St. routes are **Stratford** and **Bishops Stortford**.

Great Eastern

Present services on the Southend and Colchester lines broadly meet the LTUC Requirements, except that Sunday services from London finish earlier than on weekdays/Saturdays.

Stratford

- Services to Stratford, as the key interchange station, need to be significantly improved. With the growing importance of Stratford as a major transport interchange (particularly for Docklands), and in the longer term with the Channel Tunnel Rail Link and other developments, LTUC have the view that <u>all</u> trains should call at Stratford
- Anglia Railways have progressively introduced Stratford calls in several up Norwich trains. LTUC has been encouraging Anglia to introduce some Stratford calls in down Norwich trains. They have been precluded from doing this by constraint within the existing timetable structure.
- LTUC are greatly concerned that the new Great Eastern timetable for 2004 as specified by the SRA for the Greater Anglia Franchise—not only fails to include any calls by **down** Norwich trains but also withdraws all calls by **up** trains except those in the AM peak plus one afternoon train. This matter needs to be addressed urgently.

Romford

- LTUC is also highly critical of the SRA's proposed treatment of calls at **Romford** by outer area trains. Romford presently has 2 fast tph to supplement the metro service, which is a sensible provision for a large town and public transport node some 12 miles from Liverpool Street. It is also very sensible that one of the trains goes to **Colchester**, this being the major Essex town on the route
- The SRA consultation draft timetable reduced this service to 1tph, with the remaining trains going to Braintree which of all the destinations with a day-long through service from London is probably the least important. LTUC's response to the consultation was that Romford should retain 2tph, and that one should got to **Clacton** in view of the strong social links between east London and this fast-growing seaside area—and the other to **Ipswich**. This response has not been addressed by the SRA, and LTUC has made clear this is not acceptable.

Bury St. Edmunds

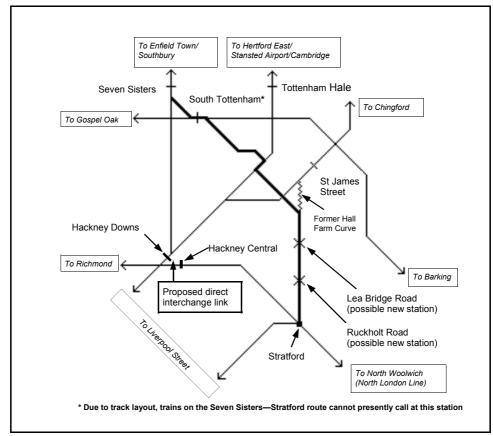
• LTUC is aware that in the past connections from London to Bury St. Edmunds have sometimes been poor. We consider it important that the timetable provides good connections to this important town by one or other of the two available routes (i.e. via Ipswich or Cambridge).

West Anglia

 Present services on the Cambridge line meet the requirements, except that Sunday services to London arrive rather later than is desirable for such a short distance, and <u>services from London finish earlier than on weekdays / Saturdays.</u>

6. WEST ANGLIA - THE STRATFORD ROUTE

The West Anglia Stratford route is presently served by one train each way on weekdays, operating from (am peak) / to (pm peak) the Southbury line via Seven Sisters. The route is shown in bold on the map



North of Seven Sisters the trains serve as 'PIXC busters' for passengers interchanging with the Victoria line.

In light of major and increasing importance of Stratford as a local, regional and international interchange, as an employment centre and as a gateway to employment opportunities in the Lea Valley - Stansted corridor and in Docklands, LTUC considers that bidders for the Greater Anglia franchise should develop proposals for providing new metro services and links to Stansted Airport.

There are several ideas for future use of the Stratford line, and these include:

Re-route Stansted Express via Stratford. Important both for airline passenger access to Stansted via the Stratford interchange, and for Stansted Airport employment issues.

Metro services (either direct or by interchange) to connect Stratford with Chingford, Tottenham Hale, Lea Valley and Enfield Town. To include full evaluation of:

- a) local authority aspirations for re-instatement of Hall Farm curve for direct link between Stratford and Chingford.
- aspirations for direct services between Stratford and Enfield Town via South Tottenham but taking account of the need for a minimum of 4 tph (preferably 6 tph) + freight on the Gospel Oak - Barking route

Metro services in whole or in part could be provided by Orbirail (projection of North London Line from Stratford) rather than Greater Anglia. This is particularly relevant if DLR takes over the Stratford - North Woolwich line as part of its proposal to serve Stratford International, as this would mean diverting NLL trains to platforms 11 / 12 at Stratford - which are the ones used by the West Anglia Stratford route.

Possible new stations at Lea Bridge Road and Ruckholt Road.

The potential value of a high quality pedestrian interchange link between Hackney Central and Hackney Downs should be taken into account as a possible means of providing metro type services between Stratford and the Enfield / Southbury / Chingford lines.

Careful consideration would be needed to ensure that improved services introduced in the short term are compatible with longer term developments.

LTUC requests bidders for the Greater Anglia franchise to commit to working with LTUC to prepare an agreed position paper within 6 months of the start of the franchise. The intent would be to identify short and longer term options for full feasibility, cost and business case analysis.

7 OTHER LTUC REQUIREMENTS

7.1 Night Services

7.1.1 All operators should consider running a 24-hour service, at least between Central London terminals and key interchange stations, particularly on multi-track and bi-directionally signalled routes where trains can operate around maintenance work.

7.2 Journey Times

- 7.2.1 The target maximum journey time between the appropriate central London terminal and all stations in the zones should be 30 minutes, achieved as appropriate by a mixture of fast/semi-fast services from more distant stations and all-stations services in the inner area.
- 7.2.2 For LTUC stations beyond the zones the target journey time should be equivalent to 60 mph average speed.

7.3 Interchange and Connections

- 7.3.1 Good inter-operator and inter-modal interchange is essential between all National Rail operators, London Underground (LUL), Docklands Light Railway (DLR), Tramlink and bus services, focusing on key interchange locations that offer convenience and frequency to the passenger. Integration of ticketing outside the Travelcard Zones should be a priority, and also within the Zones for ordinary (i.e. non-period) fares.
- 7.3.2 Key interchange locations for the Liverpool Street routes, which are particularly important for making non-central London journeys without having to travel via the central area are:
- Stratford
- Romford
- Upminster
- Tottenham Hale
- Walthamstow Central
- Seven Sisters
- Broxbourne
- 7.3.3 In outer areas where train services are less frequent, interchange with buses should be well co-ordinated.

7.4 Stansted Airport Services

7.4.1 All airports with direct rail access should be served by rail services at all times when flights (including night flights) are scheduled and should cater for the needs of airport workers.

- 7.4.2 LTUC would like to see the following services to Stansted Airport (excerpt from Reaching for the Skies, LTUC February 2002):
- Four fast trains per hour from Liverpool Street to Stansted Airport, all day every day. Two trains per hour should stop at Bishops Stortford, and all four should stop at Tottenham Hale.
- Two all-stations trains per hour from Liverpool Street to Stansted Airport. These should ideally call at Stratford and other stations in east London, in order to serve the Airport's strong recruitment base in East London better, and to connect with the Docklands Light Railway and the Jubilee Line. However, there may be knock-on effects of this that would need to be considered.
- A half-hourly Central Trains service to Cambridge and the Midlands, with improved journey times.
- The RPC for Eastern England aspires to an 06.00-midnight service, and improved reliability, on the Central Trains route.
- The last train departure from Stansted Airport to London in the evening should reflect the last flight arrival, and should be held if the flight is delayed. Once the upgrade of the West Anglia line is completed, an all-night service should be provided.

7.5 Leaf fall season

- 7.5.1 In the short term, on sections of line where autumn leaf fall is a problem, the principle of re-scheduling trains to depart slightly earlier (or arrive slightly later) than normal is accepted in the interests of maintaining overall service punctuality on the London network.
- 7.5.2 However in terms of integrated transport this practice is undesirable as it risks disrupting both rail-rail and bus-rail connections. In the longer term the industry is therefore expected to find environmental and technical solutions so that timetable adjustments of this type are no longer necessary.
- 7.5.3 The practice of some operators in simply adding time between the penultimate stop and the terminus (or issuing a general declaration that all trains will arrive at the terminus later than normal) is deplored as this provides no passenger benefit and can only be seen as an attempt to massage the punctuality statistics.

7.6 Bank and Public Holidays

- 7.6.1 The full Saturday service should operate.
- 7.6.2 Bank and Public Holiday services at present are a complete hotchpotch with different operators providing Sunday services, Saturday services and special services. This destroys connections between different operator' services and makes it very difficult for passengers to understand what services are available. System-wide standardisation on Saturday services should be an immediate priority for the industry.

7.7 Christmas Eve

7.7.1 Services should operate until the normal daily finishing times.

7.8 Christmas Day

- 7.8.1 All airport routes should operate train services as appropriate to flight times.
- 7.8.2 Within the Zones, rail operators should work in conjunction with Transport for London (TfL) to operate a day-long co-ordinated rail and bus network to provide a limited but strategic service across London. Each route should operate at least every 30 mins. This special Christmas Day network should be extended to serve other principal LTUC area stations at least hourly. Rail tickets should be valid on appropriate bus routes.

7.9 Boxing Day

- 7.9.1 All airport routes should operate train services as appropriate to flight times.
- 7.9.2 Within the Zones, trains should operate at a minimum of 2 tph with normal Sunday start and normal daily finishing times. The presumption should be that all stations should be open; where operators consider that any station should be closed this should be a matter for consultation with LTUC. This special Boxing Day timetable should be extended beyond the zones to serve other principal LTUC area stations at least hourly.

7.10 27th - 30th December

- 7.10.1 Services should operate as appropriate to the day of the week. Where an assessment of employers' intentions shows that the full Monday Friday peak services are not required, there should be a consistent policy throughout the LTUC area as regards the level of peak services to be operated. As with Bank and Public Holiday services, standardisation between operators should be an immediate priority for the industry.
- 7.10.2 Special events, such as horse racing meetings and football fixtures, should be taken into consideration when planning services.

7.11 New Year's Eve

7.11.1 On New Year's Eve, services within the LTUC area should be extended by at least one hour after midnight to allow passengers to travel home safely. These services need to be adequately publicised by the provider well in advance of New Year's Eve.

ROUTE SUPPLEMENTS

Over the course of 2003/04 route supplements will be published. These will show the extent to which present services comply with LTUC's Requirements and will include suggestions on how progress should to be made towards closing the gap between present provision and the Requirements.

The following route supplements will be issued.

- Fenchurch Street
- Liverpool Street ISSUED AUGUST 2003
- Kings Cross / Moorgate
- St Pancras / Thameslink North
- Euston
- Marylebone
- Paddington
- Waterloo
- Victoria / London Bridge (South Central/Thameslink South)
- Victoria / Blackfriars (South Eastern)
- Charing Cross / Cannon Street
- Orbital Routes
- Docklands Light Railway
- London Underground

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OTHER LTUC PUBLICATIONS

Publications directly relevant to train service provision

Requirements for Train Services – Principles (May 2003)

Which Street for Southend? - The choice of terminus for c2c late evening trains (LTUC, December 2001

Other publications

All Aboard - LTUC's submission to the Greater London Authority's scrutiny of 'Priority Bus Issues for London' (LTUC, March 2001)

Crossing the Border – A study of cross-boundary bus services (LTUC, December 2000)

Easing the Trip – Addressing the needs of disabled rail users (LTUC, March 2001)

Going Underground – LTUC's submission to the Greater London Authority's scrutiny of 'The Tube – Moving On (LTUC, October 2001)

Good riddance to bad rubbish – A guide to getting litter cleared from railway land (LTUC and RPC network, December 2002)

Inconvenience – A survey of lavatory facilities at London railway stations (LRPC, 1994)

London for the Continent – Public toilets at transport interchanges (LTUC, January 2003)

London on the Move – Transport policies for a liveable city (LTUC, March 2002)

Organising National Rail in London – A statement of evidence from LTUC to the Greater London Authority's scrutiny of mainline rail services in London (LTUC, January 2002)

There's more to Chiltern than the Chilterns - The case for the Chiltern Metro (LTUC, January 2001)

Who goes home? - A study of last trains from London (LRPC, April 2000)

The South London Overground – The case for enhanced suburban rail services (LRPC, July 1998)

Major Rail Construction Schemes in London - Results of a public consultation exercise, (March 1997 & March 1998)

Reaching the Skies – Policies for surface access to London's airports (LTUC, February 2002)

Times Tables – Making sense of when and where trains run (LTUC, March 2002)

Transport for all? – Dial-a-Ride and Taxicard users speaking (LTUC, May 2003)

What do Passengers Want from Public Transport in Outer London? – A note to the Greater London Authority's scrutiny of public transport in outer London. (LTUC, November 2001)

Where am I? – Street name signs in London (LTUC, May 2003)

Your Disgusted, yours Delighted – Case studies in complaint handling (LRPC, March 2000)

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