

Appendix B: Journey Times

The Minutes to the Additional Authority Meeting of 16th June 2016 include a table of train and tube travel times between both Lea Bridge and Eton Manor and a list of typical locations in and around London. But these figures are of little value in assessing how accessible the two sites are by public transport.

It would appear (by comparing with information on the TFL website) that these are *minimum* journey times. In other words, they are the times that would be spent travelling if one timed the start of each journey to coincide precisely with the train's departure time. But this is not realistic, because it takes no account of service frequencies. You might have a very fast service to your desired destination, but if it only runs once in a blue moon then that is going to be of no practical use to you. What we need to know is the *most probable* total journey time for *any* departure time, in other words including time spent waiting on platforms. Obviously it would be quite impractical to compute all these times for every possible time of the day and day of the week. However, a reasonable approximation may be achieved by selecting just *one* typical time, and using that consistently as the start time for every journey. In some cases this method will probably overstate the most probable total journey time, and in other cases it will probably understate it; but on average it should give a reasonably representative result. Also, to reduce the amount of data, it should not be necessary to compute both outward and inward journey times – one should be pretty much the same as the other.

I have therefore used the TFL Journey Planner to recalculate all of the journey times subject to this principle. The start time that I have used is noon on a Wednesday (a weekday rather than a weekend, because there are often service disruptions on a weekend). And I have only considered journeys *from* the two sites. If you suspect that I have selected this time in order to favour Eton Manor at the expense of Lea Bridge, then you are welcome to repeat the analysis using some other time. (The TFL Journey Planner is at <https://tfl.gov.uk/>). However, there are a couple of issues with the TFL Journey Planner.

Firstly, at the time of writing (early August 2019) there is an error in the data. The Planner thinks that the 55 bus takes less than a quarter of an hour to travel from Lea Bridge to central London. This is clearly wrong: according to the timetable it takes an hour and a quarter for the 55 bus to travel this distance. This error introduces a systematic bias into the results. So any journey that the Planner comes up with that includes this part of the 55's route must be excluded.

Secondly, the Planner does not seem to consider walking for more than a very few minutes, even though I specified among the preferences "I only want to walk for a maximum of 40 mins" and "I'd rather walk if it makes my journey quicker". For both the Lea Bridge and the Eton Manor sites, there are two nearby stations: Lea Bridge and Clapton for the former, and Leyton and Stratford International for the latter. To ensure that these are properly considered, I have used the Planner to get journey times from each of these stations as well as from the two sites. To incorporate these results correctly, it is necessary to know the actual walking times between the sites and their nearest stations, so I have measured them *in situ* (and I can also provide GPX traces if required). They are as follows.

From	To	Time (minutes)	Distance (miles)
Lea Bridge site	Lea Bridge station	10	0.54
Lea Bridge site	Clapton station	13	0.70

From	To	Time (minutes)	Distance (miles)
Eton Manor site	Leyton station	12	0.66
Eton Manor site	Stratford International	13	0.82

So this has meant to each location I have had to calculate six different journey times: from the Lea Bridge site using the Planner's recommended route, from the Lea Bridge site via Lea Bridge station, from the Lea Bridge site via Clapton station, from the Eton Manor site using the Planner's recommended route, from the Eton Manor site via Leyton station, and from the Eton Manor site via Stratford International station. The earliest arrival time for the first three gives the total journey time for Lea Bridge (but as mentioned above, journeys subject to the 55 bus problem have to be ignored), and the earliest arrival time for the second three gives the total journey time for Eton Manor. These total journey times are summarized below, together with the LVRPA's original figures.

	Correct figures			LVRPA's figures			Key
	Lea Bridge	Eton Manor	Difference	Lea Bridge	Eton Manor	Difference	
Tottenham Hale	00:22	00:43	21	00:09	00:38	29	Lea Bridge is better
Stratford	00:40	00:16	-24	00:11	00:25	14	Eton Manor is better
Cheshunt	00:48	00:52	4	00:22	00:51	29	LVRPA's time is understated
Bishops Stortford	01:14	01:17	3	00:49	01:18	29	LVRPA's time is overstated
Chelmsford	01:22	00:52	-30	00:45	00:52	7	
Southend Central	01:40	01:28	-12	01:05	01:16	11	
Southend Victoria	01:52	01:34	-18				
Ealing Broadway	01:11	01:02	-9	01:05	01:08	3	
Liverpool Street	00:37	00:26	-11	00:25	00:35	10	
Wimbledon	01:13	01:03	-10	01:10	01:30	20	
Epping	01:12	00:41	-31	00:45	00:53	8	
Brixton	00:54	00:50	-4	00:42	00:57	15	
North Acton	01:06	00:56	-10	00:55	00:58	3	
Clapton	00:13	00:43	30	00:52	01:03	11	
Hertford East	01:31	01:31	0	00:54	01:26	32	
Average (mins)			-7			16	

It will be seen that the LVRPA's claim that the journey times for Eton Manor are on average 16 minutes greater than those for Lea Bridge is completely wrong. The truth is quite the opposite: the journey times for Lea Bridge are on average 7 minutes greater than those for Eton Manor.

The details from the Planner are shown on the next page.

from	to	route	leg 1	leg 2	leg 3	leg 4	leg 5	leg 6	leg 7	leg 8	leg 9
Ice Centre	Tottenham Hale	best	start 12:00 walk	Lee Valley Ice Centre 12:03 bus 55	Holles Street 12:16 walk	Oxford Circus 12:24 tube	Tottenham Hale 12:39 arrive				
		LB	start 12:00 walk	Lea Bridge 12:36 rail	Tottenham Hale 12:43 arrive						
		Clapton	start 12:00 walk	Lee Bridge 12:13 rail	Walthamstow Central 12:18 walk	Tottenham Hale 12:22 arrive					
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:02 W15, 308	Glyn Road 12:13 walk	Homerton 12:21 rail	Highbury & Islington 12:42 tube	Tottenham Hale 12:50 arrive			
		SI	start 12:00 walk	Leyton 12:21 tube	Stratford 12:30 rail	Tottenham Hale 12:43 arrive					
		LB	start 12:00 walk	Stratford International 12:20 DLR	Stratford 12:30 rail	Tottenham Hale 12:43 arrive					
Ice Centre	Stratford	best	start 12:00 walk	Lea Bridge 12:31 rail	Stratford 12:30 arrive						
		LB	start 12:00 walk	Lea Bridge 12:31 rail	Stratford 12:40 arrive						
		Clapton	start 12:00 walk	12:24 rail	Hackney Downs 12:28 walk	Hackney Central 12:40 rail	Stratford 12:51 arrive				
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:03 bus W15	Leyton High Road 12:17 walk	Leyton 12:24 tube	Stratford 12:26 arrive				
		SI	start 12:00 walk	Stratford International 12:20 DLR	Stratford 12:14 tube	Stratford 12:16 arrive					
		LB	start 12:00 walk	Stratford International 12:20 DLR	Stratford 12:23 arrive						
Ice Centre	Cheshunt	best	start 12:00 walk	Lea Bridge 12:36 rail	Cheshunt 12:52 arrive						
		LB	start 12:00 walk	Lea Bridge 12:36 rail	Cheshunt 12:52 arrive						
		Clapton	start 12:00 walk	Clapton 12:13 rail	St James' St 12:21 bus 230	Tottenham Hale 12:35 walk	Tottenham Hale 12:40 rail	Cheshunt 12:48 arrive			
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:17 W15, 308	Glyn Road 12:28 walk	Homerton 12:36 rail	Hackney Central 12:40 walk	Hackney Downs 12:48 rail	Cheshunt 13:09 arrive		
		SI	start 12:00 walk	Leyton 12:21 tube	Stratford 12:30 rail	Cheshunt 12:52 arrive					
		LB	start 12:00 walk	Stratford International 12:20 DLR	Stratford 12:30 rail	Cheshunt 12:52 arrive					
Ice Centre	Bishops Stortford	best	start 12:00 walk	Lea Bridge 12:36 rail	Tottenham Hale 12:52 rail	Bishops Stortford 13:17 arrive					
		LB	start 12:00 walk	Lea Bridge 12:36 rail	Tottenham Hale 12:52 rail	Bishops Stortford 13:17 arrive					
		Clapton	start 12:00 walk	Clapton 12:13 rail	St James' St 12:21 bus 230	Tottenham Hale 12:35 walk	Tottenham Hale 12:40 rail	Bishops Stortford 13:14 arrive			
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:02 W15, 308	Glyn Road 12:13 walk	Homerton 12:21 rail	Highbury & Islington 12:38 tube	Tottenham Hale 12:52 rail	Bishops Stortford 13:17 arrive		
		SI	start 12:00 walk	Leyton 12:21 tube	Liverpool St 12:40 rail	Bishops Stortford 13:17 arrive					
		LB	start 12:00 walk	Stratford International 12:20 DLR	Stratford 12:30 rail	Tottenham Hale 12:52 rail	Bishops Stortford 13:17 arrive				
Ice Centre	Chelmsford	best	start 12:00 walk	Lea Bridge 12:31 rail	Stratford 12:55 rail	Chelmsford 13:22 arrive					
		LB	start 12:00 walk	Lea Bridge 12:31 rail	Stratford 12:55 rail	Chelmsford 13:22 arrive					
		Clapton	start 12:00 walk	Clapton 12:39 rail	Hackney Downs 12:43 walk	Hackney Central 12:48 rail	Stratford 13:09 rail	Chelmsford 13:34 arrive			
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:16 bus W15	Leyton High Road 12:28 walk	West Ham 12:35 rail	Stratford 12:36 rail	Chelmsford 13:02 arrive			
		SI	start 12:00 walk	Leyton 12:16 tube	Stratford 12:25 rail	Chelmsford 12:52 arrive					
		LB	start 12:00 walk	Stratford International 12:22 308, 97	Stratford 12:29 walk	Stratford 12:38 rail	Chelmsford 13:02 arrive				
Ice Centre	Southend Central	best	start 12:00 walk	Lee Valley Ice Centre 12:07 bus 55	Great Titchfield St 12:19 walk	Oxford Circus 12:28 tube	Mill End 12:45 tube	Barking 13:03 rail	Southend Central 13:40 arrive		
		LB	start 12:00 walk	Lee Bridge 12:13 rail	Walthamstow Central 12:27 walk	Stratford 12:31 rail	Southend Central 13:08 arrive				
		Clapton	start 12:00 walk	Clapton 12:13 rail	Walthamstow Central 12:27 walk	Walthamstow Queens Road 12:39 rail	Barking 13:03 rail	Southend Central 13:40 arrive			
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:08 bus 308	Stratford International 12:28 walk	Stratford International 12:30 DLR	West Ham 12:43 rail	Southend Central 13:28 arrive			
		SI	start 12:00 walk	Leyton 12:26 tube	Stratford 12:33 tube	West Ham 12:43 rail	Southend Central 13:28 arrive				
		LB	start 12:00 walk	Stratford International 12:29 rail	Stratford 12:30 DLR	West Ham 12:43 rail	Southend Central 13:28 arrive				
Ice Centre	South Victoria	best	start 12:00 walk	Lee Valley Ice Centre 12:07 bus 55	Great Titchfield St 12:19 walk	Oxford Circus 12:28 tube	Mill End 12:45 tube	Barking 13:03 rail	Southend Central 13:40 walk	South Victoria 13:52 arrive	
		LB	start 12:00 walk	Lea Bridge 12:31 rail	Stratford 13:02 rail	Southend Victoria 13:54 arrive					
		Clapton	start 12:00 walk	Clapton 12:13 rail	Walthamstow Central 12:27 rail	Walthamstow Queens Road 12:39 rail	Barking 13:03 rail	Southend Central 13:40 walk	South Victoria 13:52 arrive		
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:13 bus W15	Leyton High Road 12:27 walk	Leyton 12:34 tube	Stratford 12:42 rail	Southend Victoria 13:34 arrive			
		SI	start 12:00 walk	Stratford International 12:20 DLR	Stratford 12:42 rail	Southend Victoria 13:34 arrive					
		LB	start 12:00 walk	Stratford International 12:20 DLR	Stratford 12:42 rail	Southend Victoria 13:34 arrive					
Ice Centre	Ealing Broadway	best	start 12:00 walk	Lee Valley Ice Centre 12:25 bus 55	Great Titchfield St 12:37 walk	Oxford Circus 12:46 tube	Paddington 12:54 walk	Paddington 13:03 rail	Ealing Broadway 13:11 arrive		
		LB	start 12:00 walk	Lea Bridge 12:16 bus 55	Great Titchfield St 12:27 walk	Oxford Circus 12:36 tube	Ealing Broadway 13:02 arrive				
		Clapton	start 12:00 walk	Lea Bridge 12:13 rail	Walthamstow Central 12:27 rail	Oxford Circus 12:46 tube	Paddington 13:03 rail	Ealing Broadway 13:11 arrive			
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:02 308, W15	Glyn Road 12:13 walk	Homerton 12:21 rail	Highbury & Islington 12:35 tube	Oxford Circus 12:46 tube	Paddington 13:03 rail	Ealing Broadway 13:11 arrive	
		SI	start 12:00 walk	Leyton 12:14 tube	Ealing Broadway 13:02 arrive	King's Cross 12:48 tube	Oxford Circus 12:56 tube	Paddington 13:03 rail	Ealing Broadway 13:19 arrive		
		LB	start 12:00 walk	Stratford International 12:29 rail	St Pancras 12:36 walk	King's Cross 12:48 tube	Oxford Circus 12:56 tube	Paddington 13:03 rail	Ealing Broadway 13:19 arrive		
Ice Centre	Liverpool Street	best	start 12:00 walk	Lee Valley Ice Centre 12:10 bus 55	Holles Street 12:20 walk	Oxford Circus 12:28 tube					
		LB	start 12:00 walk	Lea Bridge 12:10 bus 55	Holles Street 12:20 walk	Oxford Circus 12:28 tube					
		Clapton	start 12:00 walk	Clapton 12:24 rail	Liverpool St 12:37 arrive						
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:03 bus W15	Leyton High Road 12:17 walk	Leyton 12:24 tube	Liverpool Street 12:36 arrive				
		SI	start 12:00 walk	Stratford International 12:20 DLR	Liverpool St 12:14 tube	Liverpool Street 12:38 arrive					
		LB	start 12:00 walk	Stratford International 12:20 DLR	Stratford 12:29 tube	Liverpool Street 12:38 arrive					
Ice Centre	Wimbledon	best	start 12:00 walk	Lee Valley Ice Centre 12:21 bus 55	Great Titchfield St 12:34 walk	Oxford Circus 12:43 tube	Vauxhall 12:50 walk	Vauxhall 13:01 rail	Wimbledon 13:13 arrive		
		LB	start 12:00 walk	Lea Bridge 12:12 bus 55	Great Titchfield St 12:23 walk	Oxford Circus 12:32 tube	Vauxhall 12:40 walk	Vauxhall 12:51 rail	Wimbledon 13:03 arrive		
		Clapton	start 12:00 walk	Clapton 12:13 rail	Walthamstow Central 12:23 tube	Vauxhall 12:50 walk	Vauxhall 13:01 rail	Wimbledon 13:13 arrive			
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:03 bus W15	Leyton High Road 12:17 walk	Leyton 12:24 tube	Stratford 12:31 tube	Waterloo 12:57 rail	Wimbledon 13:13 arrive		
		SI	start 12:00 walk	Leyton 12:14 tube	Stratford 12:31 tube	Waterloo 12:47 rail	Wimbledon 13:03 arrive				
		LB	start 12:00 walk	Stratford International 12:20 DLR	West Ham 12:31 tube	Waterloo 12:57 rail	Wimbledon 13:13 arrive				
Ice Centre	Epping	best	start 12:00 walk	Lea Bridge 12:31 rail	Stratford 12:45 tube	Epping 13:12 arrive					
		LB	start 12:00 walk	Lea Bridge 12:31 rail	Stratford 12:45 tube	Epping 13:12 arrive					
		Clapton	start 12:00 walk	Clapton 12:13 rail	Highams Park 12:33 bus 275	Woodford 12:57 tube	Epping 13:12 arrive				
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:02 bus W15	Leyton High Road 12:16 walk	Leyton 12:23 tube	Epping 12:46 arrive				
		SI	start 12:00 walk	Leyton 12:18 tube	Epping 12:48 arrive						
		LB	start 12:00 walk	Stratford International 12:23 308, 97	Stratford 12:28 walk	Stratford 12:35 tube	Epping 13:01 arrive				
Ice Centre	Brixton	best	start 12:00 walk	Lee Valley Ice Centre 12:02 bus 55	Holles Street 12:15 walk	Oxford Circus 12:23 tube	Brixton 12:34 arrive				
		LB	start 12:00 walk	Lea Bridge 12:11 bus 55	Holles Street 12:21 walk	Oxford Circus 12:29 tube	Brixton 12:41 arrive				
		Clapton	start 12:00 walk	Clapton 12:13 rail	Walthamstow Central 12:25 walk	Brixton 12:58 arrive					
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:02 308, W15	Glyn Road 12:13 walk	Homerton 12:21 rail	Highbury & Islington 12:40 tube	Brixton 12:58 arrive			
		SI	start 12:00 walk	Leyton 12:14 tube	Bank 12:35 tube	Stockwell 12:48 tube	Brixton 12:50 arrive				
		LB	start 12:00 walk	Stratford International 12:29 rail	St Pancras 12:36 walk	King's Cross 12:48 tube	Brixton 13:04 arrive				
Ice Centre	North Acton	best	start 12:00 walk	Lee Valley Ice Centre 12:28 bus 55	Great Titchfield St 12:40 walk	Oxford Circus 12:49 tube	North Acton 13:09 arrive				
		LB	start 12:00 walk	Lea Bridge 12:14 bus 55	Great Titchfield St 12:14 tube	Oxford Circus 12:34 tube	North Acton 12:53 arrive				
		Clapton	start 12:00 walk	Clapton 12:13 rail	Walthamstow Central 12:23 tube	Oxford Circus 12:46 tube	North Acton 13:06 arrive				
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:03 bus W15	Leyton High Road 12:17 walk	Leyton 12:24 tube	North Acton 13:06 arrive				
		SI	start 12:00 walk	Leyton 12:14 tube	North Acton 12:56 arrive						
		LB	start 12:00 walk	Stratford International 12:29 DLR	Stratford 12:29 DLR	North Acton 12:29 tube					
Ice Centre	Clapton	best	start 12:00 walk	Mount Pleasant Hill 12:11 bus 393	Clapton 12:14 arrive						
		LB	start 12:00 walk	Lea Bridge 12:10 bus 55	Clapton 12:28 253, 254, 106						
		Clapton	start 12:00 walk	Clapton 12:13 arrive							
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:10 W15, 308	Glyn Road 12:21 walk	Homerton 12:29 rail	Hackney Central 12:32 walk	Hackney Downs 12:40 rail	Clapton 12:43 arrive		
		SI	start 12:00 walk	Leyton 12:14 tube	Liverpool St 12:33 rail	Stratford 12:43 arrive					
		LB	start 12:00 walk	Stratford International 12:23 308, 97	Stratford 12:25 walk	Stratford 12:32 tube	Liverpool Street 12:48 rail	Clapton 12:58 arrive			
Ice Centre	Hertford East	best	start 12:00 walk	Lea Bridge 12:36 rail	Cheshunt 13:09 rail	Hertford East 13:31 arrive					
		LB	start 12:00 walk	Lea Bridge 12:36 rail	Cheshunt 13:09 rail	Hertford East 13:31 arrive					
		Clapton	start 12:00 walk	Clapton 12:36 rail	Hackney Downs 12:48 rail	Hertford East 13:31 arrive					
Eton Manor	Lepton	best	start 12:00 walk	Ruckholt Road Bridge 12:17 W15, 308	Glyn Road 12:28 walk	Homerton 12:36 rail	Hackney Central 12:40 walk	Hackney Downs 12:48 rail	Hertford East 13:31 arrive		
		SI	start 12:00 walk	Leyton 12:24 tube	Liverpool St 12:42 rail	Hertford East 13:31 arrive					
		LB	start 12:00 walk	Stratford International 12:20 DLR	Stratford 12:40 rail	Cheshunt 13:09 rail	Hertford East 13:31 arrive				