Business and Economics

To what extend has the Congestion Charge in London been successful?

Unit 3
Module 2/3

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Introduction

My investigation is based on the Congestion Charge placed in London on the 17 February 2003. I aim investigating how successful the Congestion Charge has been since is was placed in 2003, and to see the effects the charge has had on the environment, the traffic in London and the views of the people of London.

In order to see the effects of the Congestion Charge, and whether it has been a success, I first need to investigation the motive about why the Congestion Charge was set up.

Why a charging Scheme was needed?

There are many different views why the Major of London decided that the Congestion Charge was needed in Central London.

One of the many reason that a charging scheme was introduced was because London suffers the worst traffic congestion in the UK and amongst the worst in Europe. From the table below you can see that London has by the majority of road users, either on motorways or major roads in built and non-built up areas. This is a major concern as London

Thousand vehicles per day

Region	Motorway	Major roads		Minor roads		All Roads
		Non Built-up	Built-up	Non Built-up	Built-up	
North East	49.6	14.4	13.0	0.7	2.2	3.1
North West	67.2	10.7	15.3	0.8	1.7	3.7
Yorkshire & the Humber	62.5	12.1	15.5	0.9	1.8	3.3
East Midlands	96.9	13.2	13.4	0.8	1.5	3.3
West Midlands	86.6	11.5	16.4	0.8	2.3	3.9
East of England	90.8	17.5	13.8	1.0	2.0	3.6
London	102.5	58.3	24.1	0.0	2.1	5.6
South East (ex. London)	95.7	18.2	15.0	1.3	2.2	4.8
South West	61.4	10.5	12.4	0.6	1.9	2.4

is by far the smallest Region but with the most dense vehicle use. Every weekday morning, the equivalent of 25 busy motorway lanes of traffic tries to enter central London.

(www.statistics.gov.uk)

Another concern was the fact that Congestion was charging London approximately £2-4 million each week due to lose time. In a month, it costs London on average £12 million, in a year it costs on average £144 million.

Another increasing concern was that London had the most traffic flow in Great Britain, but the least number of roads, as you can see from the table below. On average, there is only 71 kilometres of motorway in London, whereas in the South east which has the second highest traffic flow there is 656 kilometres of Motorway, a dramatic 90% increase. Also London only has 14,415 kilometres in total of all roads; the South East

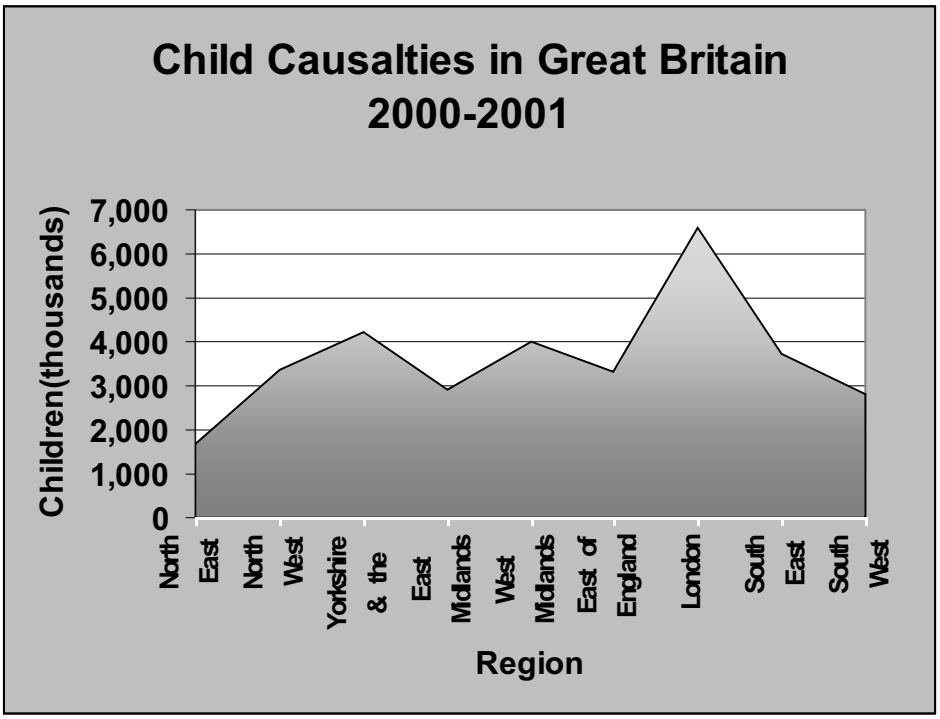
Kilometres

		Non built-up major			Built-up major			Minor roads			All
Region	Motorway	Trunk	Principal	Total	Trunk	Principal	Total	Non Built-up	Built-up	Total	
North East	58	424	825	1,249	12	492	504	5,544	8,476	14,021	15,832
North West	627	686	1,421	2,107	164	1,729	1,893	10,670	21,800	32,470	37,096
Yorkshire & the Humber	364	603	1,398	2,002	98	1,184	1,283	11,943	16,539	28,482	32,130
East Midlands	193	1,073	1,763	2,836	146	845	991	14,495	12,373	26,867	30,897
West Midlands	385	710	1,553	2,263	130	1,129	1,259	13,976	14,661	28,637	32,544
East of England	267	1,054	1,723	2,777	85	1,025	1,110	17,838	17,062	34,900	39,053
London	71	128	44	172	180	1,353	1,534	189	12,449	12,638	14,415
South East (ex. London)	656	766	2,583	3,348	86	1,745	1,831	17,697	23,455	41,152	46,987
South West	329	941	2,720	3,661	59	1,206	1,266	29,116	15,066	44,181	49,436

has over 4 times as much, but still comes second to London on the amount of traffic on the roads.

[(www.statistics.gov.uk)](http://www.statistics.gov.uk)

It could also be that the amount of causalities in London was a concern and a cause for the charging scheme. As from the graph below, London had the most child "killed or seriously injured "causalities in Britain in 2001.



In 2001, London had 6,597 reported child accidents in just one year. This figure had been the largest ever reported and was expected to rise even more by 2007 if nothing was done to prevent traffic.

Another reason for the need of a charging scheme is that drivers spent

	Cumulative percentage				
Area of workplace	<20 minutes	<40 minutes	<60 minutes	<90 minutes	Mean time (minutes)
North East	52	88	96	99	21
Tyne & Wear MC	46	84	95	99	23
Rest	58	92	97	99	19
North West	46	83	93	99	24
Gtr Manchester MC	40	78	90	98	26
Merseyside MC	43	83	94	99	24
Rest	51	88	96	99	21
Yorkshire & the Humber	49	84	94	98	22
South Yorkshire MC	48	87	96	100	21
West Yorkshire MC	46	80	91	98	25
Rest	57	89	95	98	20
East Midlands	53	89	96	99	20
West Midlands	49	83	93	98	23
West Midlands MC	40	78	91	98	26
Rest	58	88	95	99	20
East of England	53	85	93	98	22
London	22	50	68	90	42

up to 48% of their time crawling in jammed traffic. As you can see from the table below, London has the far greater mean time for time taken to travel to work. On average it takes 42 minutes to get to work or a destination, if u calculate the average number of cars and the length of roads in Greater London by the mean time it takes workers to travel, on average they will be travelling roughly 9 mph to get to work. Static and slow traffic generates more air pollution and produces more carbon dioxide, the greenhouse gas. This has resulted in a general loss of amenity for Londoners in terms of quality of life on the streets.

(www.statistics.gov.uk)

"In many cases it is very difficult to be specific about the extent of these costs but estimates can be made. In 1997, for example, Friends of the Earth reported that the estimate for the cost of traffic congestion in London was £37 million per week or over £2 billion per year. More recently, a report by a group put together by the Home Office called Telecommuting 2000, suggested the figures for the country as a whole were as follows:

They estimated the number of miles travelled by commuters in the UK to be 78.5 billion, making the cost of that travel to workers £13.5 billion, and the cost to UK business of congestion to be £20 billion."

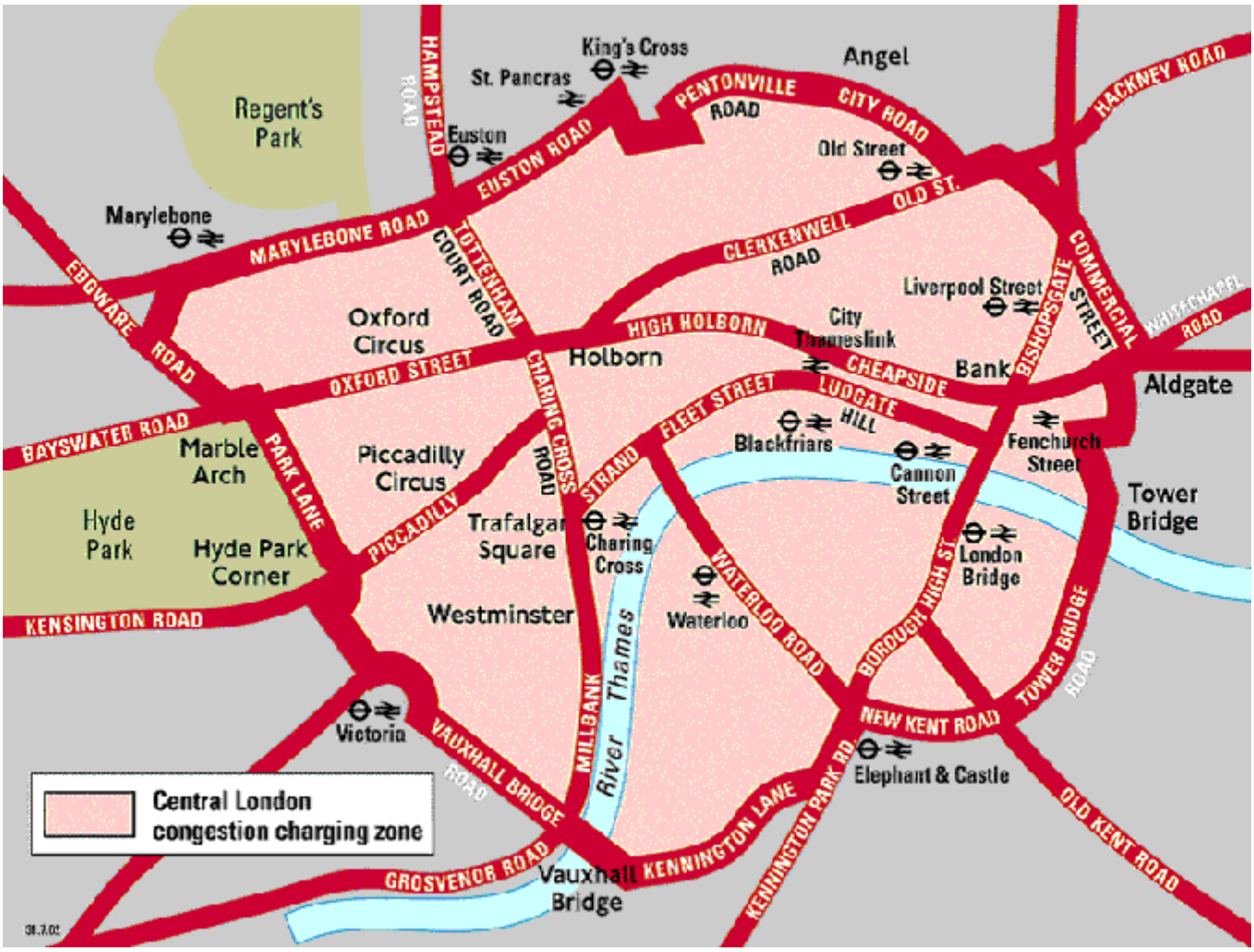
(Source of data: Telecommuting 2000, http://www.flexibility.co.uk/telecommuting2000/tc2002.htm).

Investigation: Was the Congestion Charge successful?

On the 17th February 2003 a charge was put in central London which cost £5 when it had first started, but since July 2005 the figure had risen to £8.

The main aims of the Congestion Charge were to:

- ***Reduce traffic where it is most congested by between 10-15% year-round, i.e. to school summer-holiday levels.***
- ***Reduce delays by 20-30%***
- ***Shorten journey times***
- ***Make delivery times more reliable***
- ***Save 2-3 million hours of journey time annually inside the zone and a further 4-7 million hours in the area between the zone and the North and South Circular roads***
- ***Raise £1.3 billion over the first 10 years for re-investment in all forms of transport in London, including roads, buses, local streets and railways***
- ***Increase public transport use in the central area by 1-2%***
- ***Pay for itself within 18 months of starting.***



[(http://www.tfl.gov.uk/tfl/)](http://www.tfl.gov.uk/tfl/)

In 2001 before congestion charging had began London was in chaos with the traffic and the amount it cost, child causalities and shortage of roads. The graph below shows how people travelled to work in the regions in Britain. As you can see in London, most people either drove or were passengers, apart from the North East London had the least

Trips per person per year 2001

Region	Walk	Bicycle	Car driver	Car passenger	Other private	Local bus	Rail	Taxi/ minicab	All modes
North East	312	*	365	223	*	92	*	15	1,035
North West	244	12	413	230	10	66	9	18	1,006
Yorkshire & the humber	307	19	394	214	8	67	8	13	1,032
East Midlands	249	29	416	221	12	54	*	10	998
West Midlands	278	13	417	233	8	70	*	9	1,039
East of England	246	21	476	254	11	22	19	7	1,058
London	**298**	**11**	**306**	**190**	**10**	**94**	**83**	**15**	**1,012**
South East (ex. London)	251	20	478	262	13	31	17	10	1,084
South West	255	19	422	239	15	39	*	*	1,001

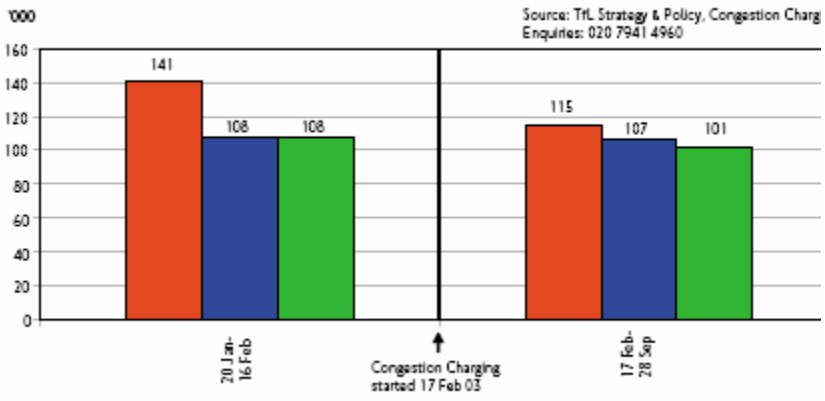
people who cycled to work. Nevertheless, London was the third highest region with people who walk to work.

To put that into perspective, 43% of people travelled by motor vehicles, 2% of people travelled by bicycle, 11% travelled by bus/coach, 18% travelled by National Rail, 15% of people travelled by the underground and only 11% of people walked to work.

Percentage

	Area of workplace		Area of residence
	All London	Great Britain	All London
Car & van	43	70	
Motorbike, etc	1	1	
Bicycle	2	3	
Bus and coach	11	8	
National Rail	18	4	
Underground	15	2	
Walk	9	11	
Total[2]	100	100	

Chart 10.1 Traffic entering the charging zone during charging hours and on weekends



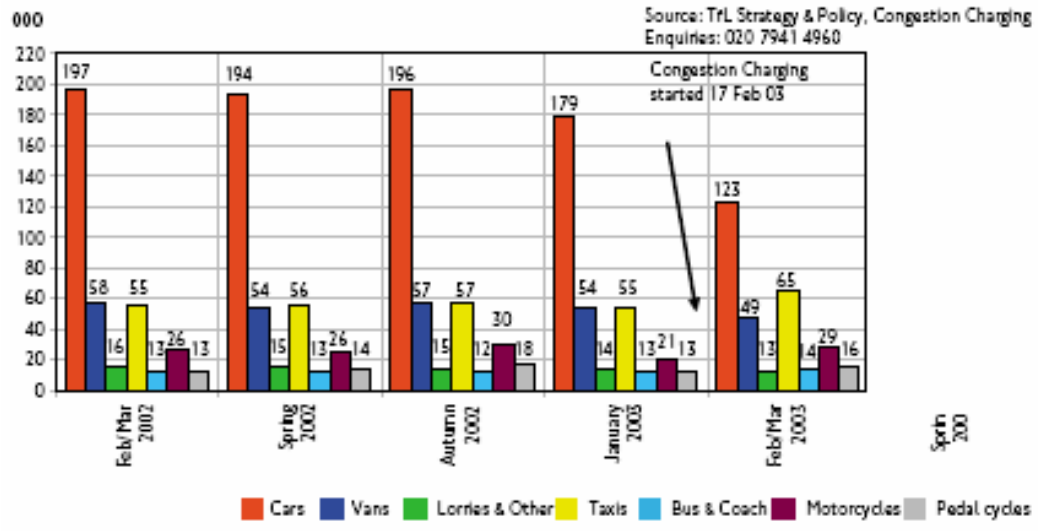
After one year of the congestion Charge, you can see a massive improvement in car travel from the table below.

(http://www.cclondon.com/index.shtmlwww.trl)

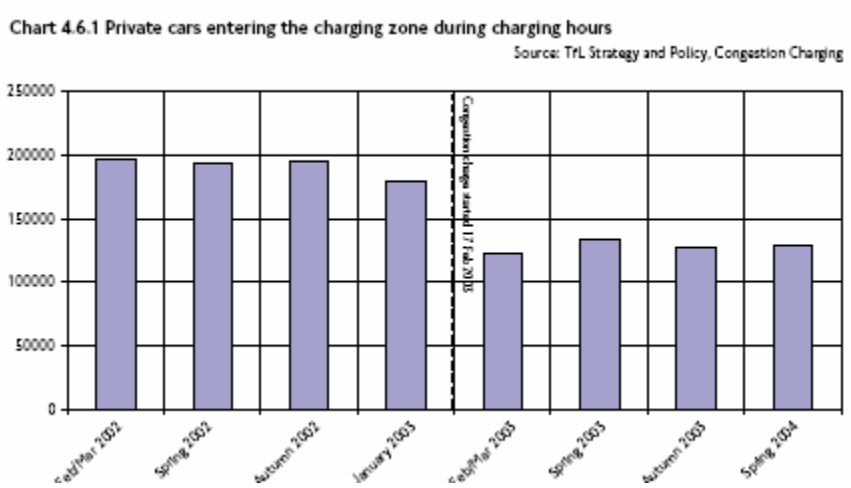
The amount of traffic entering the charging zone during the first year had decreased from 141,000 cars each weekday to 115,000 each weekday, on Saturday it had decreased by 1,000 cars and on Sunday/Bank Holidays traffic had decreased by 7,000 cars.

The table below shows the extend of the congestion charge when it first arrived and particularly the case for the amount of cars.

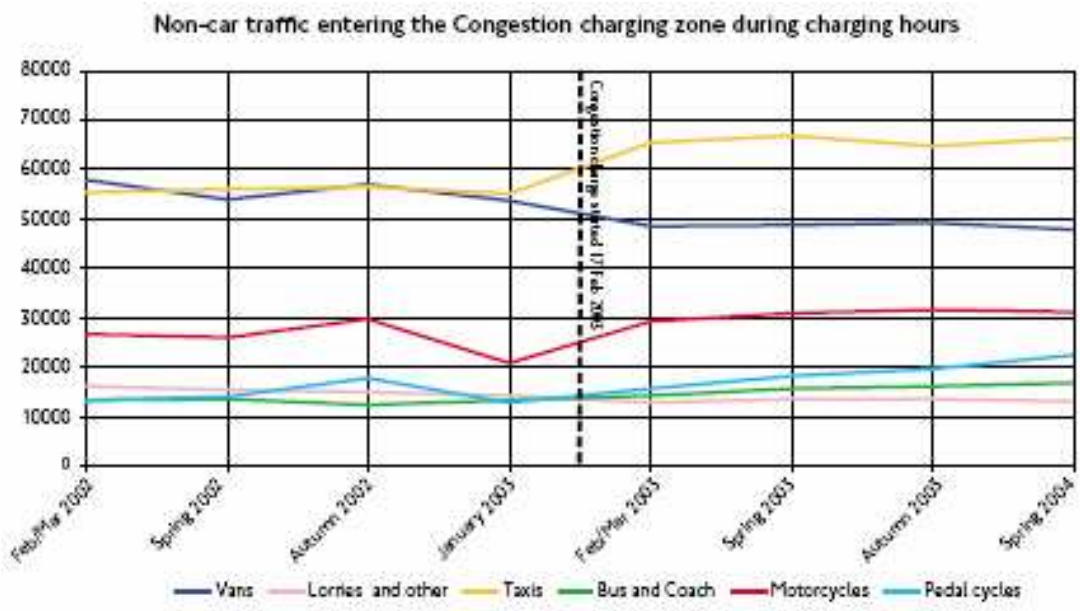
Chart 10.2 Total traffic entering the charging zone during charging hours



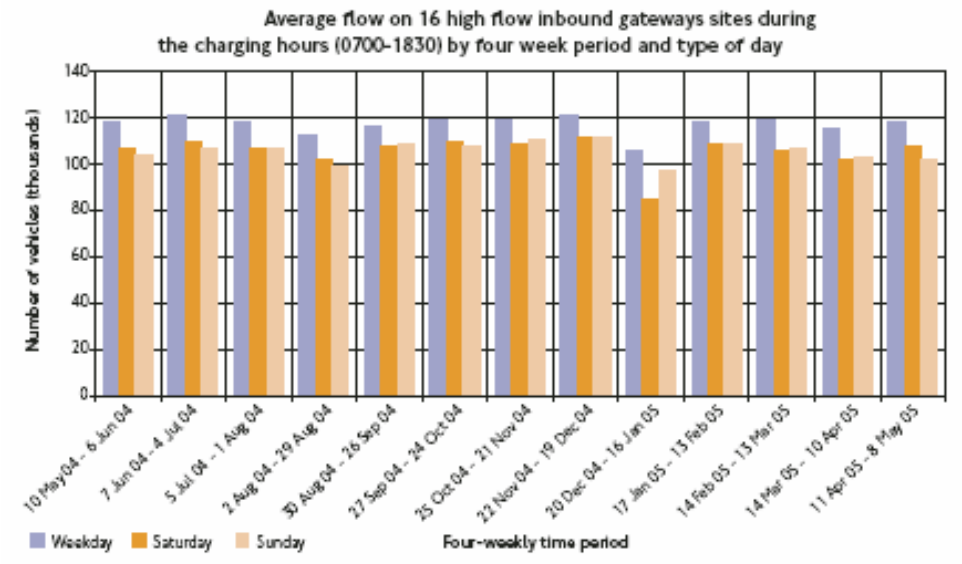
By 2003, 2 years after the congestion charge had commenced, the number of private cars entering the central London congestion charging zone during charging hours had fallen by 33%. On its introduction, the number of cars entering the zone dropped dramatically continuously a less dramatic downward trend that; began in autumn 2002. Since then, some minor fluctuations, the number of private cars entering the zone has remained at around 125,000 cars per day during charging hours.



Even though the number of private cars had fallen dramatically when the charging zones were introduced, not every kind of transport had followed the same trend. As you can see from the graph below, vans and lorries entering congestion charging zones had fallen by 11% since the introduction of the charge. However, the number of taxis that are exempt from the charge had increased by almost 20% and buses/coaches entering the charging zone had increased by nearly 25%. Increase can also be seen in the number of motorcycles by 12%.



In 2004 to 2005, the amount of cars on the roads during the charging hours has more or less been at a constant rate, as seen from the graph below.



So far, the results from congestion charging in London are summarised:

- **Congestion inside the charging zone reduced by 30%.**
- **Traffic levels reduced by 18%.**
- **30% reduction in number of cars and 65,000 fewer car movements.**
- **20% increase in movements by buses coaches and taxis.**
- **Increase of 29,000 bus passengers entering zone during morning peak.**

- **Bus reliability and journey times improved - additional time passengers wait at bus stops caused by service delays or missing buses improved by 20% across all of London and by 30% in and around charging zone.**
- **Bus routes serving charging zone experience 60% less disruption due to traffic delay.**

As you can see from the results, the congestion charge has helped slow down the amount of traffic entering the charging zone tremendously. For this matter, I believe that the congestion charge was a success.

However, was it just the congestion charge that helped to reduce the traffic in central London? Some other factors which could have relieved traffic are:

- **Increase supply of roads**
- **Increase supply of substitute(public transport)**

- **Decrease price of substitute(public transport)**

Supply of roads in London

In 2005

Road Lengths	Miles	Km
Motorways	37	60
Trunk and Principal roads	1,069	1,721
Minor roads	8,014	12,896

In 2004

Road Lengths	Miles	Km
Motorways	37	60
Trunk and Principal roads	1,069	1,721
Minor roads	8,014	12,896

In 2003

Road Lengths	Miles	Km
Motorways	37	60
Trunk and Principal roads	1,069	1,721
Minor roads	8,015	12,896

In 2002

Road Lengths	Miles	Km
Motorways	44	71
Trunk and Principal roads	1,060	1,706
Minor roads	7,855	12,638

From the data above, in 2002 motorways were at its longest in London standing at 44 miles, whereas in 2003 that number had decreased to 37 miles. In 2003 and 2005 the motorways in London had not changed length. From 2002 onwards minor roads and Principle roads had increased by 160 miles and 9 miles respectively. Even though there was an increase supple of roads after the congestion charge, there was not enough to make such a significant impact and not to reduce traffic levels by 18%. This proves that the decrease to congestion and traffic was not due to the increase supply of roods in Central London

Increase supply of Public Transport (substitute)

Daily average number of journeys — Millions

Year	Rail[3]	Underground	DLR	Bus	Taxi
2000	1.8	2.6	0.1	3.7	0.2
2001	1.8	2.6	0.1	3.9	0.2
2002	1.9	2.6	0.1	4.1	0.2
2003	1.9	2.6	0.1	4.5	0.2
2004	1.9	2.7	0.1	4.8	0.2

From the table above, you can see that from 2002-2004 since the congestion charge had started there was an increase in most public transport but the biggest increase was the amount of busses used in Central London. From 2002 the amount of bus

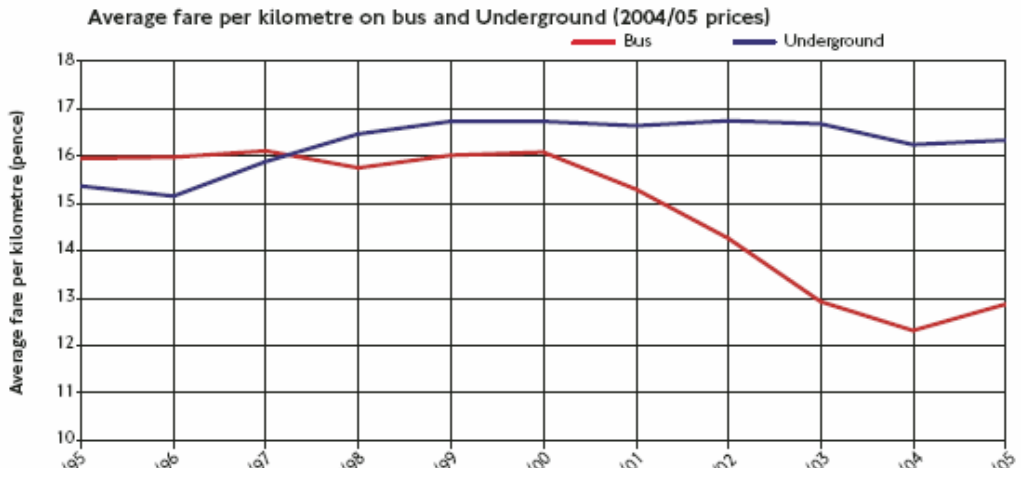
journeys stood at 4.1 million, by 2004 roughly 1 year after the congestion charge was introduced, that number had risen to 4.8 million bus journeys. This could be a factor why congestion decreased, or just that prices increased in other public transport such as taxis or the underground to the increase supply of bus journeys. Apart from bus journeys, the supply of most other transport had no real significant increase which could have cause the 18% reduction of traffic flow in Central London.

Decrease price of Public Transport

Bus key trends

Year	Passenger kilometres (m)	Passenger journeys (m)	Average fare per passenger kilometres at 2004/05 prices (pence)	Traffic revenue at 2004/05 prices (£m)	Bus kilometres operated (m)	Average number of passengers per bus	Average journey length (km)
2000/01	4,709	1,354	15.3	720	357	13.2	3.5
2001/02	5,128	1,430	14.3	731	373	13.8	3.6
2002/03	5,734	1,536	12.9	741	398	14.4	3.7
2003/04	6,431	1,702	12.3	792	437	14.7	3.8
2004/05	6,755	1,793	12.9	869	450	15.0	3.8

As you can from the table above, that bus tickets over the past 4 years had certainly decreased from when the congestion charge had been introduced. In 2002 one year before the charge introduced, the average passenger fare per kilometre was 14.3 pence, however by 2003 that number had decreased to 12.9 pence and the following year had decreased again by 12.3 pence. From a result of this, the amount of people travelling on busses increased, the amount of journeys made by busses increased and traffic revenue for busses also showed a 10% increase from 2004-2005. This could be a factor why congestion in Central London had decreased, but perhaps also another reason why more people chose to get the bus to work or to leisure places instead of driving.



When we compare fares from the underground to busses, you can see a major difference since 2000. The underground still cost roughly the same throughout the years 2000-2003 at roughly 16.8 pence per kilometre whereas bus fares we decreasing. When congestion charging had been introduced in 2003, there was a sudden fall by about ½ a pence in underground fares, but hardly enough to tempt more people into uses their transport than on busses.

London Underground key trends

Year	Passenger kilometres (m)	Passenger journeys (m)	Real average fare per passenger kilometres at 2005 prices (pence)	Real traffic revenue (£m)	Train kilometres operated (m)	Average journey length (km)
1999/00	7,171	927	16.7	1,198	63.1	7.7
2000/01	7,470	970	16.6	1,242	63.8	7.7
2001/02	7,451	953	16.7	1,247	65.4	7.8
2002/03	7,367	942	16.7	1,228	65.4	7.8
2003/04	7,340	948	16.2	1,191	67.7	7.7
2004/05	7,606	976	16.3	1,241	69.5	7.8

Did Everyone Benefit?

However, did the congestion charge benefit everyone in central London; for instance did businesses do as well if less people were entering central London?

As you can see from the two tables below, in 2001 on average 205,000 people were entering London for sopping purposes, however by 2004 that number had decreased by ¼, only 156,000 people were entering London for shopping purposes. Also the amount of people entering London for business reasons had decreased by 15,000 every day. Has this had a negative impact on how successful businesses have been in the charging zones in central London since the arrival of the charge?

Region	Commuting	Business	Education	Shopping	Personal business	Escort	Visiting friends	Sport & entertainment	Holidays & day trips	Other including just walk	All purposes
North East	163	24	78	236	73	116	214	57	27	46	1,035
North West	159	30	72	212	98	135	188	58	26	28	1,006

2004/2005

ooo's people per day

Region	Commuting	Business	Education	Shopping	Personal business	Escort	Visiting friends	Sport & enterta-inment	Holidays & day trips	Other including just walk	All purposes
North East	137	24	68	204	98	136	184	59	32	42	983
North West	144	32	65	202	107	141	173	66	34	39	1,004
Yorkshire and the Humber	145	27	63	193	101	131	157	62	33	38	950
East Midlands	149	36	65	200	103	141	185	73	40	45	1,037
West Midlands	154	36	74	198	104	155	164	65	31	39	1,019
East	151	30	64	193	105	162	153	73	32	34	997
London	142	28	80	156	93	115	134	57	27	26	858
South East	155	36	65	206	106	163	160	73	39	40	1,044
South West	147	45	68	201	108	146	163	70	53	54	1,056

1 Since the scheme started

	Yes	No
Have your takings fallen	70.2%	20.2%
Has your turnover fallen	76.1%	18.0%
Has the number of customers fallen	79.8%	15.5%

2 Do you attribute the fall to

	All	Most	Some	Little	None
Congestion charge	15.5%	32.0%	26.8%	6.4%	5.2%
Central line	4.1%	11.8%	31.4%	13.6%	15.7%
Terrorism	3.4%	12.0%	32.5%	16.8%	13.9%
Competition	2.0%	3.6%	11.4%	20.7%	36.4%
Economic decline	4.5%	17.7%	30.9%	20.0%	7.5%

3 Since the scheme started has your productivity increased through being able to make faster journeys

21.6% *Yes* 73.9% *No*

4 Since the scheme started has it made it easier for you to carry out your business activities

15.7% *Yes* 80.0% *No*

5 Since the charge as introduced have you experienced an increase in the number of telephone orders

Yes 84.1% *No*

11.1%

6 If your journey or your supplier's journey to you was made outside the hours of congestion charging would this add to your business costs

62.5% *Yes* 31.6% *No*

7 Are you considering relocating to a site outside the congestion charging zone?

24.8% *Yes* 69.1% *No*

8 How many people does your company employ

27.7%	*1-2*	1.8%	*51-100*
48.4%	*3-12*	2.0%	*101-250*
14.5%	*13-50*	4.1%	*250+*

9 Is your business located within the congestion charg zone

86.6% *Yes* 9.5% *No*

10 Are the goods you sell

20.5%	*Food*	23.4%	*Newspapers a*
22.3%	*Clothes*	35.2%	*Luxury goods*
15.9%	*Furniture and household goods*		

11 Do you support the introduction of congestion charg in some form in London

35.2% *Yes* 63.0% *No*

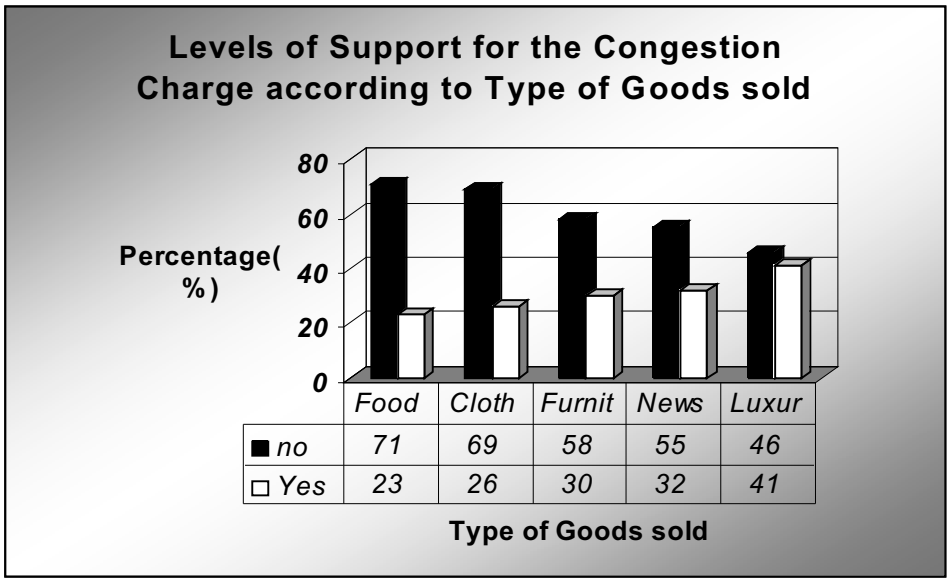
12 Have you changed your mind about supporting it sin was introduced

13.6% *Yes* 81.8% *No*

(A questionnaire by the London Chamber of Commerce and Industry.)

Business which support or oppose the congestion charge can be separated into different characteristics. These characteristics can determine whether a company supports or opposes the congestion charge.

The graph below looks at the support from the congestion Charge depending on the type of goods sold by businesses.



There is a greater correlation between support and opposition and the type of goods sold. The greater opposition comes from shops selling food and the least from those who sell luxury goods, where views are approaching a balance. This table suggests that the business which sell food or clothing products have had a greater fall in turnover or gross profits margins since the congestion charge started, and businesses which sell luxury goods have had no real impact on their turnover or gross profit margins.

From the next two tables below, you can see how many businesses (depending on the goods they sell or how many they employ) are

Break % Respondents		Are the goods you sell				
		Food	Clothes	Furniture and household goods	Newspapers and books	Luxury goods
Have your takings fallen						
Yes	72.6%	73.0%	75.5%	73.5%	71.8%	70.2%
No	20.7%	16.9%	17.0%	22.1%	22.3%	23.2%
Has your turnover fallen						
Yes	78.6%	80.9%	83.0%	83.6%	75.7%	75.5%
No	18.3%	14.6%	14.9%	16.2%	20.4%	21.2%
Has the number of customers fallen						
Yes	82.4%	86.5%	84.0%	88.2%	84.5%	77.5%
No	15.7%	11.2%	12.8%	11.8%	15.5%	20.5%

affected by the congestion charge 2 years after it started.

As you can see, the companies which sell food, clothes or household goods have had the most impact on takings, turnover and costumers, there is no surprise why their support for congestion charge are the lowest. On average, 72.6% of all companies have had their takings fallen, 78.6% on their turnover fallen and 82.4% of costumers have decreased just two years after the arrival of the congestion charge. Companies which sell luxury goods have been the least effected in each category, but still over 70% of all companies which sell luxury goods have still seen a decrease in their turnover, takings and costumers.

From the next table, the majority of companies in each category have still seen a decrease in takings, turnovers and costumers

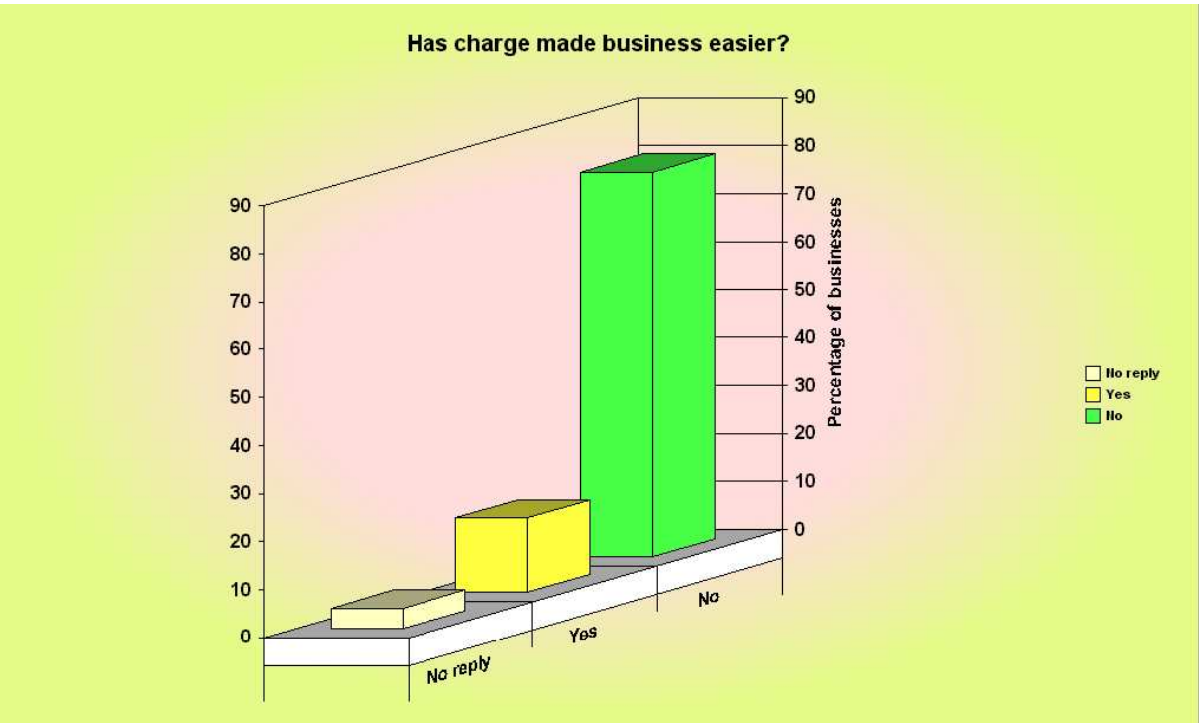
As you can see, the companies who employed between 51-100 people were most affected, all company asked in that category had seen a decrease in turnover and costumers. On average, 80% of all companies had a

Respondents		How many people does your company employ					
		1-2	3-12	13-50	51-100	101-250	250+
Have your takings fallen							
Yes	73.0%	74.4%	70.7%	76.2%	88.9%	75.0%	72.2%
No	20.6%	17.9%	22.1%	19.0%	11.1%	25.0%	27.8%
Has your turnover fallen							
Yes	79.0%	80.3%	77.4%	81.0%	100.0%	87.5%	66.7%
No	18.0%	14.5%	20.7%	15.9%	-	12.5%	27.8%
Has the number of customers fallen							
Yes	82.7%	83.8%	79.8%	87.3%	100.0%	87.5%	83.3%
No	15.4%	14.5%	17.3%	12.7%	-	12.5%	16.7%

decrease of turnover, and 82% had seen a decrease in costumers.

Overall, the least affected by the charge I believe was the companies who employed over 250 people, as only 67% of companies in that category saw a decrease in turnover and 72% saw a decrease in takings. Nevertheless, these figures are still extremely high, and shows that the majority of all business no mater their size or the products they sell still did not benefit from the introduction of the charge and saw their turnover and costumers decrease, which in the long term would bring profit down to a minimum.

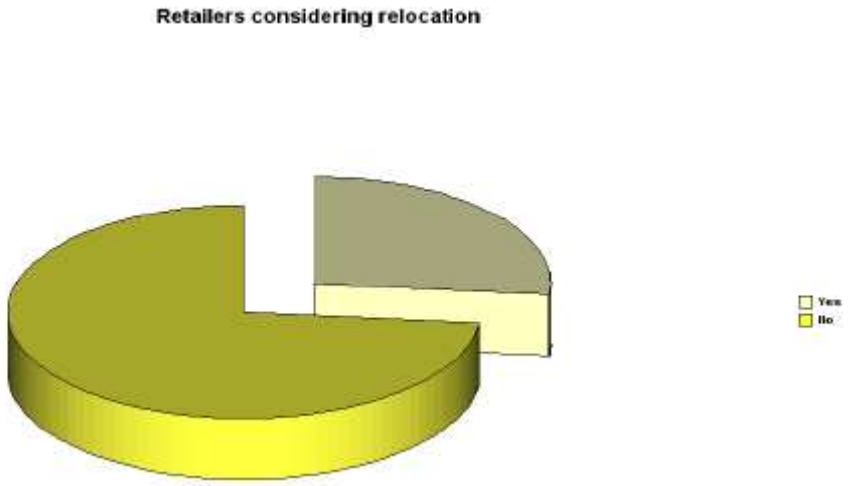
One last factor that businesses have seen a decrease is their productivity. Retailers were also asked if they have benefited from the charge in any way: increases in productivity levels, for example through faster delivery times resulting in a lower cost base. While takings might not have increased, profit margins could have improved. They were also asked a general question, more of a favorability rating, about the ease of doing business. Their answers did not reveal great improvements.



In all cases, the results show that over three quarters of all businesses have found that the congestion charge has not made any improvement on either their productivity.

Where retailers are considering what changes they can make that would offset the negative effects of the charge, one response could be to change the times of the deliveries it both receives and makes. Retailers were therefore asked if they could alter their activities in this way but without incurring costs, which would make it futile. Exactly two thirds of businesses said it would increase costs to make such changes. This was the lowest for those selling luxury goods, at 62.1 per cent, rising to 75 per cent or three quarters for those selling food.

Other possibilities for diversification would be to alter business plans by emphasizing sales over the telephone from loyal customers or an increase in business over the Internet. But this in turn may generate additional costs through delivery activity or may not be appropriate for the type of product sold.
Such changes might well take place where customers are loyal but who do not wish to incur the costs of the congestion charge.
A successful change to conducting business in a new way depends on the complete, or near complete, transfer of existing customers to the new pattern. Not all will follow those who do not have access to the Internet will be unable to follow where the new strategy relies on ecommerce.
Another change that retailers could make to avoid the charge is to relocate their store to a site outside the zone. This is clearly a much more drastic measure than the changes made to delivery times, with substantial cost and other site-related implications. The



answer was surprisingly high, with 26.7 per cent of respondents saying that they are considering relocating to a site outside the zone.

There are few options available to retailers to respond to the charge in the way they do business without incurring costs. This paucity could well be one reason for the following result the survey revealed when we asked if any of them were considering relocating. The most significant response a retailer can make to the negative effects experienced from the charge is to move to an area outside the congestion charging zone. The response from the survey revealed that, despite the obvious costs and implications such a response would represent, more than a quarter of retailers, some 26.7 per cent, said that they were considering relocating outside the zone.

This figure is worthy of further work, as it could hide an even higher number of those who wish to move but cannot for a variety of other reasons. There will be other, significant factors at play here. Many shops will be unable to relocate due to terms in their lease. Others may have additional reasons for their location, especially if they live above the premises or depend on the location as part of their marketing in some way.

Whatever the particular range of factors that any individual retail outlet would have to
consider when weighing this decision, what is clear is that the retailer is increasingly caught between being pulled in one direction by the charge and in another direction by other policies such as planning policy or leasehold law.

Conversely, those who have answered yes may, after reflecting fully, feel that this would be disproportionate or would come with other problems which nullify any gains that moving might produce

and so decide against it. This would have the effect of reducing the possible effect that relocations on this scale would have.

Analysing further those who answered yes, the highest proportions of those thinking of relocating were the micro retailers, which are frequently newsagents and corner stores, selling food: as many as 36.2 per cent and 36.9 per cent respectively were thinking of moving.
There is no doubt that the congestion charge is encouraging businesses to relocate to areas that are cheaper, as their site would no longer play such a significant role in attracting trade. The higher costs of premium or central locations become increasingly less justified.

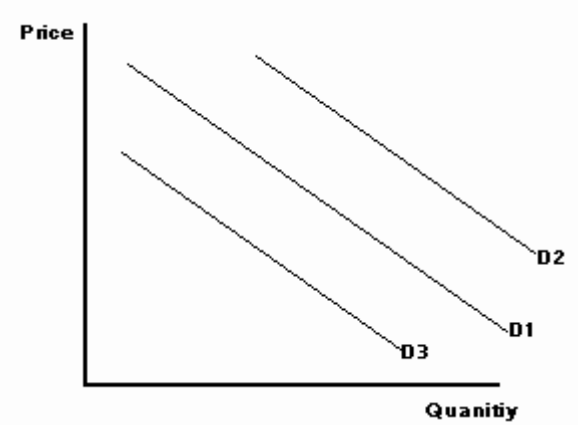
Is It Really The Congestion Charge?

There are multiple factors at work in the economy at any one time, all of which may have had an effect on the retail trade. Explanations as to the reason behind any changes which were experiencing in business activity are as follows:

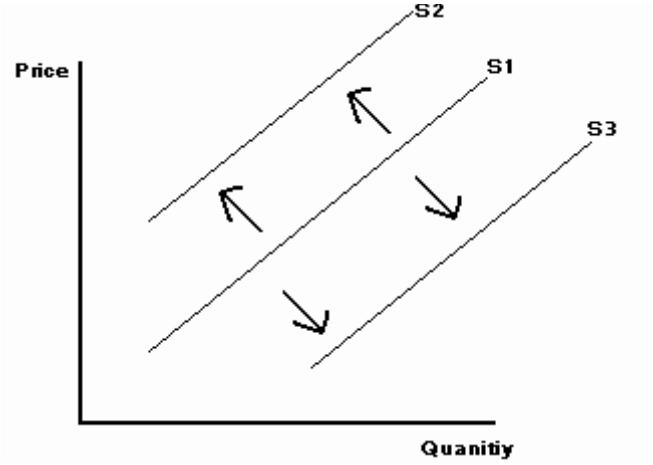
1. Closure of the central line
2. Fear of terrorism
3. Competition from other shopping centers
4. Economic downturn

Theory behind the charge

Congestion charging is one method that seeks to correct a *negative externality* by what is known as 'internalising' the externality. An externality is an impact on a third party of a decision. In this case, the decision is that of people who have chosen to use their cars as a means of transport into central London, causing congestion which has an impact on a wide range of other people - businesses, individuals, hospitals, emergency services, police and so on. The combined cost of all the third party effects is a considerable sum. One of the problems of working in this area of economics is calculating the costs of such decisions.



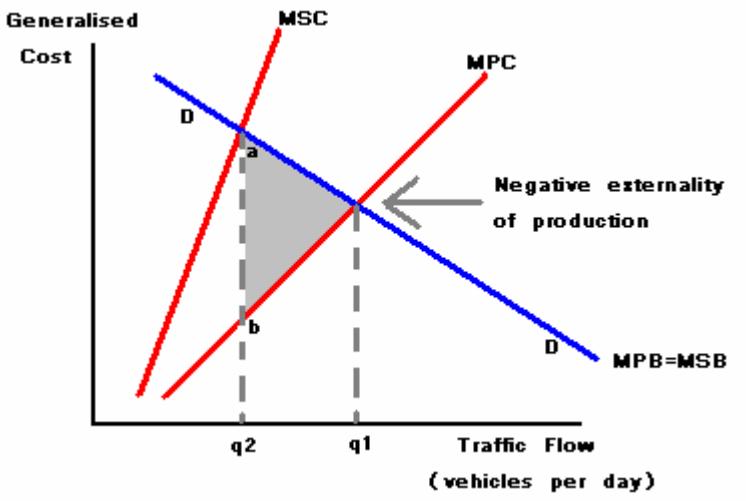
Supply and demand analysis can be used to consider the effect of such negative externalities. Price can be considered to be a measure of the benefit that a consumer derives from the consumption of a unit of a good or service. This is called the private benefit. Thus the demand curve (showing the price that people are prepared to pay for a good or service) can be referred to as the private benefit curve.



The supply curve represents the costs of the factors of production involved in the production of a good or service. Thus the supply curve can be referred to as the private cost curve. In the free market the equilibrium position occurs where the supply equals the demand - where the private costs and private benefits are equal.

If we now consider congestion charging where there are external costs due to a negative externality. If we look at the graph below, generalised costs of a road journey involves private costs and external costs. As the volume of traffic increases so the road will be reflected in an increase of the generalized cost of a journey; traffic congestion will increase journey time and petrol consumption through more stop/start traveling. The curve MPC shows the additional marginal costs of a journey and relates to the *Marginal Private Costs* (the cost directly incurred by each road user). If the demand for journey is shown by the demand curve DD, the predicted traffic flow will be at q1. This number however is not socially efficient.

The reason for this is that the road users do not allow for the "externality" which arises when each person's to make a journey by a car imposes costs on other road users occurring from each vehicle's contribution to road congestion. The line MSC shows the *marginal social cost* of an extra vehicle, when a vertical line between the MSC and MSB appears, this is counted for by the external cost of congestion. Social efficiency indicates an optimum traffic flow, q2.



The existence of road congestion raises two main policy concerns for the government. Firstly, it is associated of managing the existing road network. This suggests that road congestion is currently excessive because road users do not face the full social cost of their decisions. One major way of correcting this concern could be by the government to increase the cost of road journeys to users.

This could include raising motor fuel taxes; however, this is an imperfect policy as the same tax is paid per little whether the road users are on congested or uncongested roads.

This solution is often preferred by means of which there is direct charge for road space by means of tolls. In the graph above, a toll of "ab" should be imposed to equal the difference between MSB and MSC at the socially efficient traffic flow.

The second main concern associated with congestion is that of investments within new road capacity. The presence of large costs associated with congestion apparently creates more pressure to build new roads to ease the congestion. Proposals for such an expansion of new roads in the UK is subject to a cost-benefit analysis which compares the benefits of a new road by the amount

saved during generalised costs of journeys, with the costs of constructions for the new roads.

Conclusion

Overall, from my investigation I can clearly see that introducing a charging zone in central London has definitely reduced the amount of congestion on the roads by a large amount, even though the figure still remains high, over the last few years the number has stayed at a constant rate which is good for the road users. The charging zones had also had a positive impact on public transport as more people take advantage of their public transport and their cheap prices, as bus rates have fallen since the introduction of the charge. Another positive factor that has appeared since the introduction of the charge has been the reality of the busses and much better timetable for all passengers to enjoy.

However, as traffic has reduced by 30% businesses have found the impact of the charge must harder to support. Over 66% of businesses in the central charging zone do not support the charge as their sales and revenue have seen decreases, and over 26% of businesses have considered relocation, away from the charging zones. In this case, the charging zones have had a negative impact and could be considered as a failure. However, the charge was not set out to help business in the same way to help congestion in central London. The aims where achieved and congestion in central London has seen much improvement. Therefore, there is no reason why other Countries have chosen to adopt the same tax in their major cities to help tackle the problem of congestion and the externalities is has on their environment.

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