# Submission to Bills Committee of Legislative Council on Motor Vehicles (First Registration Tax) (Amendment) Bill 2011 6th May 2011

Dear Members,

Thank you for your invitation to attend the Bills Committee on 12-May-2011, which I accept. This paper, including the attached article "Traffic Truths" (13-Apr-2011), forms our submission. In addition to the points made in the Article, we wish to make the following observations on subsequent documents submitted to you by the Administration:

- 1. In the LegCo Brief, the Administration noted that in 2010, a total of 41,240 private cars were newly registered, an increase of 45% over 2009 and 20% over 2008 "before the financial tsunami". This is alarmist, false and misleading. False, because 2008 was not before the financial tsunami. Bear Stearns almost collapsed and was taken over by JP Morgan in March 2008. Lehman Brothers filed for bankruptcy on 15-Sep-2008. The Hang Seng Index dropped 48% in 2008.
- 2. A fairer comparison would be to look at new car registrations in 2-year periods, 2009-2010 compared with 2007-2008. The worst of the financial crisis was from Sep-2008 to Mar-2009, so each of these 2-year periods includes 3 months of the peak crisis. Then you will see that new registrations in 2007-2008 were 67,738 and in 2009-2010 they were 69,672, an increase of only 2.9%. The surge in 2010 was largely a catch-up effect due to people who delayed purchases from 2009.
- 3. Similarly, due to deregistrations, the net increase in registered private cars was 27,306 in 2007-08 and 28,338 in 2009-2010, an increase of only 3.8%.
- 4. We note from Annex VI of paper CB(1)1780/10-11(01) that the Government's fleet of cars, which are not included in the statistics, increased by 14.7% from 1,151 in 2008 to 1,320 in 2010, while the private car registered fleet grew 6.7% in the same period. Middle-ranking officials swanning around town in chauffeur-driven cars are hardly setting a good example towards reducing congestion. The Government is of course exempt from FRT, license fees and fuel taxes, because any tax is just a payment to itself.
- 5. In the same paper at paragraph 10 on page 4, the Administration dismisses the case for congestion pricing (or to use their loaded term, "congestion tax") as "weak", without substantiating that view. It claims that "[a] road pricing scheme that aims to relieve traffic congestion can only be implemented equitably and effectively with the availability of alternative routes that have adequate capacity for motorists to bypass the charging zone." We disagree. An alternative route is not necessary if the object is to encourage people to enter the zone on mass transport (rail or bus) or to enter it at different times of day (for example, deliveries to shops and supermarkets can be made outside busy hours). The Government says we have to wait for the Central-Wanchai Bypass (CWB) before introducing a congestion zone but clearly the CWB is not going to affect congestion in the Kowloon Peninsula. Congestion pricing is the key to limiting congestion and numerous "World Cities" have implemented it, but "Asia's

World City" has not.

- 6. Far from being weak, congestion pricing is the most sensible thing HK could do to reduce congestion. The Government's approach of increasing FRT to tackle congestion is incredibly weak and indirect, because it fails to tackle the core issue. It doesn't matter how many cars are registered, what matters is when and where people drive them. Once a person has bought a car, the decision on whether, when and where to use it is not affected by how much they paid for it, but on the costs of using it.
- 7. In the same paper at paragraph 19 on page 6, the Administration notes that commercial vehicles (presumably including buses) are the major source of roadside air pollution in HK, accounting for about 95% and 88% of total vehicular emission of respirable suspended particulates and nitrogen oxides respectively, and that private cars only contribute 1% and 5% respectively (although they account for some 39% of vehicle km). Why, then, does the Government set fuel duty at zero on Euro V Diesel, which almost all of these commercial vehicles use? A substantive tax would incentivise more efficient use of the diesel-powered fleet. If the Government wishes to incentivise "railway as the backbone" for public transport, then the cost of bus journeys must be raised, by taxing diesel at no less than the rate of tax on petrol (\$6.06 per litre) if not more.
- 8. In the paper CB(1)1827/10-11(01), the Government states without elaboration or evidence that "traffic congestion in Hong Kong is closely related to the number of private cars". As our research in the attached article shows, there is only a distant connection between the two. From 2000 to 2009 (the latest available data), despite a 17.7% increase in the licensed fleet of private cars, the total kilometres they covered increased by only 1.1%, while the length of public roads increased by 7.7%. So each km of road had 5.8% fewer private cars passing over it on an average day in 2009 than it did 9 years earlier.

We remind you that the above points are supplemental to our main article attached.

Sincerely,

David Webb Editor, Webb-site.com

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# **Traffic Truths**13th April 2011

In the 2011-12 budget proposals, the Government proposed an increase in First Registration Tax (**FRT**) for private cars. Under the heading of Easing Traffic Congestion, the Financial Secretary said:

"It is obvious that the continuous growth in the number of private cars has adversely affected the traffic conditions on our roads."

That "obvious" statement was repeated in a Government press release on Saturday evening (9-Apr-2011) after a protest organised by a political party. Actually, it's not obvious at all. It's not even true. What is true is that there have been more licensed private cars in HK each year since 2003 (when tax rates were last increased), but that doesn't necessarily mean that they are the cause of increased road congestion. That depends how much each vehicle is actually used and how much space there is not the roads, and as we will show below, the average private car does significantly less mileage than it used to, and there are, on average, fewer cars on each kilometre of roads than there used to be.

#### Distance covered

How many kilometres do all private cars and other classes of vehicles actually cover on our roads? To find those data, we turn to an unlikely source: the annual accident statistics published by the Transport Department, which include estimates of the distance covered by each class of vehicle in each year. Unfortunately, the 2010 accident data are not yet public, so we will have to base our study on the period 2000-2009. Keeping in mind that 2003 was the year in which SARS hit (reducing economic activity, tourism, and road traffic) as well as the year in which FRT was last raised (reducing sales of new cars), so it is hard to separate these factors from the results. Here is a summary of the distance covered in each of 2000, 20003, and 2009:

				Change	Change
Vehicle km (million)	2000	2003	2009	2000-9	2003-9
Private car	4,487	4,245	4,537	50	292
Light goods vehicle	2,343	2,194	2,256	(87)	62
Taxi	1,843	1,719	2,130	287	411
Med/heavy goods vehicle	1,365	1,398	1,191	(174)	(207)
Public bus	769	838	857	88	19
Public light bus	373	350	377	4	27
Motor cycle	247	298	322	75	24
Light rail vehicle	11	11	7	(3)	(3)
Tram	6	6	6	(0)	0
Others*	195	131	102	(94)	(30)
All motor vehicles	11,639	11,190	11,785	146	595

The table shows that after a dip in 2003, the distance covered by private cars was only 50m km or 1.1% higher in 2009 than in 2000. This is despite the fact that the number of licensed private cars, from mid-2000 to mid-2009, increased by 17.7%. A year earlier, in 2008, the distance covered by private cars was actually less than it was in 2000. So private cars are not the primary cause of an increase in the distance covered by vehicles in HK.

Looking at the other classes of vehicles, you can see that the distance covered by taxis has increased substantially, by 287m km or 15.6% from 2000 to 2009. **So the increase in road traffic from taxis has been more than 5 times the increase generated by private cars**. The number of road-licensed taxis has not materially changed (up 0.7% in the 9-year period), but they are covering much more distance. Meanwhile, there has been a reduction in traffic from Medium and Heavy goods vehicles (over 1.9 tonnes). However, most of that drop took place in the last 2 years of the study (2008-2009) during the global financial crisis when fewer container trucks were shuttling between our port and factories in the mainland.

Motor cycles are also covering more ground, up by 75m km or 30.4% in 9 years. They are more economical on fuel than cars and generally cheaper to park, so this might explain the increase in popularity. On-street parking for motor cycles is free of charge. Or maybe we are just all ordering more pizza. There were 52.6% more licensed motor cycles in mid-2009 than 9 years earlier.

Public buses (including franchised and non-franchised buses) are also up by 88m km or 11.4% in 9 years, and there were 7.8% more licensed public buses than 9 years earlier.

# Distance covered by cars per km of road space

The distance covered by vehicles should also be seen in the context of the increase in road space. The Government measures this rather crudely, in terms of public road length, which has increased from 1904 km in 2000 to 2050 km in 2009, an increase of 7.7%. So in fact, the average number of private cars per kilometre of public roads per day has actually dropped by 5.8%, from 6,439 in 2000 to 6,063 in 2009, as shown in the table below. We'll say it again: the average kilometre of road actually had 5.8% fewer private cars passing over it on an average day in 2009 than it did 9 years earlier.

Privat	te cars roa	d usage					
					Km/		Average
	Licensed	Vehicle	Km/	Days/	vehicle/	Public road	vehicles/
Year	mid-year	km (m)	vehicle	year	day	length (km)	day/km
2000	327,581	4,487	13,697	366	37.4	1904	6,439
2001	337,279	4,377	12,977	365	35.6	1911	6,275
2002	340,801	4,429	12,996	365	35.6	1924	6,307
2003	338,534	4,245	12,539	365	34.4	1934	6,014
2004	341,760	4,137	12,105	366	33.1	1944	5,814
2005	348,018	4,087	11,744	365	32.2	1955	5,727
2006	355,246	4,201	11,826	365	32.4	1984	5,801
2007	363,689	4,442	12,214	365	33.5	2009	6,058
2008	379,399	4,453	11,737	366	32.1	2040	5,964
2009	385,675	4,537	11,764	365	32.2	2050	6,063

The table also shows that private cars in 2009 averaged 32.2 km per day, down 13.9% from 37.4 km per day in 2000. The Government does not calculate road space in terms of kilometre-lanes, but it is worth noting that much of the increase in road length in the last decade is expressways and other roads with more than one lane in each direction, sometimes 3 lanes in each direction. So the percentage increase of road space in terms of lane-kilometres is probably even higher.

To be clear, we are not advocating that the Government continues to build roads, just stating the facts about road usage. It is also well-established overseas that the more you build, the more they come; the M25 London orbital road is a classic example of this. Hong Kong is the 4th most densely populated place in the world (after Macau, Monaco and Singapore) and each road comes at a high opportunity cost which is never properly recovered from road users. Fact: roads occupy 3.8% of HK's land area, while public and private residential housing (excluding village houses) occupy 3.7% and railways only 0.3%. Village housing is 3.1%. For a full breakdown of land usage, see page 480 of the 2009

#### yearbook.

Hong Kong certainly suffers from traffic congestion in certain places at certain times of day, and targeted measures can reduce it (see below). But the Government's claim that private cars have increased road congestion is contradicted by the facts.

#### Reasons for reduced car usage

There are several possible explanations for the reduction in distance travelled per private car. It is one thing to buy a car and pay the annual licence fee, but these are sunk costs. Once you have a licensed car, the economic choice of whether to use it on the roads, rather than just look at it lovingly in your private car park space, depends, amongst other things, on the cost of fuel and other consumables (such as tyres), which have risen sharply, the availability and cost of alternative transport, the time it takes to get anywhere, the level of convenience, and the cost of parking.

New lines have opened on the Mass Transit Railway in the last decade, and public transport fares have not increased as fast as private car costs. Car ownership (as a percentage of the population) is on the rise, but with increasing penetration of the population, you get increasingly marginal users - people who want the occasional convenience of a car but won't use it much. Finally, there is the deterrent effect of existing traffic - if you think it will take too long to get somewhere by road, then you try to use other modes of transport.

# Why do we have an FRT?

There is no logical reason to have FRT at all. The act of buying and owning a vehicle does not in itself take up road space or pollute the air. Driving it does. We should abolish FRT and instead charge higher duty on fuels to incentivise the reduction of vehicle usage, and introduce congestion charges to incentivise the avoidance of congested areas. FRT could be replaced with a simple flat fee to cover the administrative cost of registering the vehicle.

Even if we keep FRT, the *ad valorem* "progressive" rates of FRT on private cars are nonsensical. The first \$150k is taxed at 35%, the next \$150k at 65%, the next \$200k at 85% and everything above that at 100%. It amounts to a luxury tax which incentivises people to buy cheaper cars - but a Ferrari takes up just as much road space as a Toyota Corolla for any given journey, and if it burns more fuel, then it pays more fuel tax, so that's covered.

We don't have a retail tax in HK, and we don't tax other luxury goods, such as diamonds, antiques and watches, let alone at progressively higher rates. If there is any justification for taxing the registration of vehicles, rather than vehicle usage, then it should be a fixed amount per vehicle, not based on its value. But we see no justification.

The last time FRT was raised was in the 2003-4 budget. Then, the Government was more intellectually honest about its objectives. It was a pure revenue-raising measure. Then

Financial Secretary Antony Leung Kam-chung said in his speech:

"we shall make suitable adjustments to the tax bands and tax rates for revenue purposes. The adjustment in tax rates will be progressive and will have a greater impact on expensive vehicles. Detailed proposals concerning the adjustments are set out in the Supplement to this Speech....These new tax measures...will generate \$700 million additional revenue for the Government in a full year."

You won't find any mention of road congestion. Of course, he later backed down somewhat, introducing smaller increases in the tax rates before the budget was passed on 25-Jun-2003, but still, the purpose was revenue-raising, as the Government said then:

"Having reflected upon the views expressed by the motor trade and Members at the Bills Committee meeting, the Administration has decided to put forward a new proposal which strikes the most appropriate balance between the impact on the motor trade and the need to raise revenue from those who can afford it to help improve the budget deficit situation."

Of course, in recent years it has become clear that HK is running a structural budget surplus. There is no way that the Government could claim that it needs the money, so it claims that the FRT will reduce traffic congestion instead.

# Why do licence fees depend on engine size?

The annual licence fee based on engine size is also misguided. For sure, a car with an excessively large engine will generally consume more petrol and generate more pollution - but then, it will pay more in fuel duty for each kilometre it covers. There is no need to charge a higher licence fee for the engine size. What matters is whether you <u>use</u> that engine. The licence fee as it stands is really just a hidden luxury tax: cars with larger engines tend to cost more, so the Government figures it should charge higher fees on an "ability-to-pay" basis, or put simply, "because we can".

The only real justification for having an annual licence fee at all, rather than just recovering road costs from higher fuel duty and road pricing, is that if we didn't, then a small number of vehicles with mainland number plates which travel across the border regularly, would be able to fill up their tanks in the mainland and avoid paying higher fuel duties in HK. But that could be dealt with by charging a sufficiently high, but flat, rate of fuel duty on any vehicle that returns to HK with more than half a tank of fuel.

We would still need a process for ensuring road worthiness of vehicles and that insurance has been purchased, so annual licensing in that sense would still be needed, but there is no reason to charge more than its administrative cost.

In 2009-10, FRT raised \$4.82bn, up from \$3.02bn 9 years earlier, but fuel duties raised only \$2.84bn, down from \$4.02bn 9 years earlier. FRT rates increased in 2003-4. Revenue

from fuel duties dropped, partly because of the shift to LPG taxis and minibuses and partly because of the reductions in diesel duty until it reached zero (see below). So the Government seems more concerned about whether we own a vehicle than whether we drive it around. The incentives are all wrong.

# Taxi myths

Taxis are often included in sweeping statements by the Government about the desirability of public transport, but in reality, when a taxi is covering distance with one or more passengers, it takes the same amount of space on the road as a private car would, and when it is cruising around looking for a ride, or blocking a lane of traffic by queuing at a taxi rank on a public road, then it takes up additional road space. You seldom see private cars cruising around with no place to go (except chauffeurs trying to avoid the idling engine ban - another misguided piece of legislation). So purely with respect to road congestion, taxis are a worse form of road transport than private cars.

And guess what: the FRT on a taxi is only 3.7% of its value, compared with a minimum of 35% (proposed 40%) for private cars. The annual license fee on a taxi is only \$3,159, less than the smallest private petrol car (with an engine size up to 1500cc) at \$3,929. Yet in 2009, the average taxi covered 117,511 km of roads (enough to cover the 2050 km of roads in HK 57 times). That's almost 10 times the distance covered by the average private car of only 11,764 km.

Not only that, but consider the following: if a private car averages about 12 km per litre, then it consumes about 980 litres per year, paying fuel duty at \$6.06 per litre of unleaded petrol for a cost of \$5,939 in fuel duty alone. And how much fuel duty does a taxi pay? Zero. It uses Liquefied Petroleum Gas, or LPG. That hidden subsidy is the real reason why the Government will not allow LPG-powered private cars to be sold in HK (or the conversion of existing cars). The lower cost of fuel also incentivises taxis to go cruising the streets for fares, increasing traffic congestion.

#### Tax-free diesel

As a subsidy to the transport industry, the duty on Euro-V diesel (the only type sold at filling stations) is also set at zero. Although it is called "Euro-V", it can actually be used in all diesel vehicles. So next time you inhale some diesel particulates and an extra burst of smog-forming nitrous oxides, remember, they are tax-free. As Donald Tsang (then Financial Secretary, now Chief Executive) said in his final budget speech of 7-Mar-01:

"why do we continue to exempt franchised buses from duty on diesel and indirectly undermine the competitiveness of railways which are more environmentally friendly?...we must as a community understand that if our environmental sores are left to fester, inaction will, over time, result in far worse pain and far greater costs than will an early cure. Most of the world seems to have woken up to that fact. When will Hong Kong?"

We can see no good reason for taxing diesel at less than the rate of tax on petrol, and charging it to all vehicles. It doesn't matter what kind of vehicle burns it, it's the emission that counts.

# **Pricing the roads**

The proposed increase in FRT will certainly reduce new car sales, but that will only have a negligible effect on traffic congestion. A few marginal first-time buyers will delay making a purchase, but most will just choose a cheaper model or a second-hand car, marginally increasing demand for second-hand cars. Some people will delay replacing their cars, but that makes no difference to congestion, and a few people will opt for an electric or hybrid car which provides a discount on FRT. But a hybrid car takes just as much road space as a petrol-driven one for any given journey.

If the Government wishes to reduce traffic congestion (and we wish they would), then there is only one clear way to do it: increase the cost of using the roads in congested areas. We can't do that with FRT, fuel duty or licence fees, because that would target all roads rather than just the congested ones. It wouldn't provide any incentive for vehicles to avoid congested areas. So congestion pricing is the only way to achieve this. And we don't even need to do that 24x7, because the urban areas are not congested in the middle of the night.

We already price some of our roads, in the form of cross-harbour tunnels (Western, Central and Eastern), some of those that pass through mountains (Aberdeen, Lion Rock, Eagle's Nest/ Sha Tin Heights, Shing Mun, Tate's Cairn, and Tseung Kwan O), some bridges (Lantau Link) and Route 3 Country Park Section, which is a tunnel and highway. Some of these are government-owned, and some are on long-term build-operate-transfer (BOT) concessions. There is also a privately-built road tunnel connecting Discovery Bay to the real world. But the road pricing map is a patchwork of historic agreements with no coherent strategy, and with the exception of tunnel and bridge approach roads and the highway part of Route 3, none of the open road is priced. Particularly, the urban areas of Hong Kong Island and the Kowloon Peninsula, with their maze of narrow old roads, have no congestion charging.

What is needed is a clear and fair basis for pricing road usage, for all vehicles entering defined urban areas within certain time frames - say 8am to 8pm, 6 days per week, with no exemptions (other than emergency services vehicles). Buses, coaches and heavy goods vehicles, which take up around twice as much road space as a car (even allowing for the gap between vehicles) should pay twice the rate of other vehicles. It would still be much cheaper to travel by bus, as the cost is shared amongst all passengers. The revenue from road taxes will allow increased social welfare support for those who need it to cover higher bus fares. The charge would be made on each entry, not an "all you can eat" once-per-day pass. Taxis would add it to their meter, as they do now for road tunnels and bridges.

To allow for taxis entering the zone without a passenger, taxis could be allowed to add the

charge to meters when exiting the zone too. That way, they can make a small profit if they carry passengers both ways, and that will eliminate any objections they have. This is already the practice with cross-harbour tunnels, where a taxi is allowed to charge twice the lowest tunnel toll, to cover the risk of returning across the harbour without a passenger.

We should note that any congestion pricing scheme has an inherent element of intervention in deciding "how much" traffic is "too much traffic" and what the traffic speed target should be. The alternative approach, which is the current system, is to allow the roads to congest, and traffic to slow down, until it reaches an equilibrium level. The problem with this is that everyone in the traffic has to move at the speed dictated by the most marginal users, whereas many would be willing to pay a premium for higher traffic speed, because their time carries a higher opportunity cost. In larger cities with more multi-lane highways, an alternative to blanket congestion zones is to have priority lanes, where those who want to avoid the queues pay for the privilege. Unfortunately, most of HK's city-centre streets are too narrow to make that viable.

#### Other measures

Other measures that can improve traffic speed include restricting the areas in which vehicles can stop on the road for loading and unloading, and reducing on-street parking to generate new lanes. Any lane blockage caused by a vehicle stopped for loading or unloading (or chauffeurs waiting for their bosses in Central) has a knock-on effect to all the traffic behind it. On-street car parking is incentivised by ridiculously low meter fees (HK\$2 per 15 minutes) compared with much higher rates charged by off-street car parks. In his Mar-1999 budget speech, then-Financial Secretary Donald Tsang proposed doubled meter fees to \$4 per 15 minutes, but then in Jul-1999 LegCo vetoed the increase in the face of opposition, possibly from the triads who run "valet parking" using the meters in certain areas, and cut the fee back to \$2 per 15 minutes. They capture the difference between the meter charge and the commercial value of the parking space.

In Donald Tsang's final budget as Financial Secretary in 2001, he proposed raising the parking meter fee from \$2 to \$3 per 15 minutes, but this was still vetoed by LegCo. As a result, parking meter fees, as set out in Schedule 2 of the Road Traffic (Parking) Regulations, remain unchanged since 1994. Parking revenues were only HK\$360m in 2009-10.

#### Conclusion

The proposed increase in FRT, like so many parts of the 2011-12 budget, was not well thought out and will not achieve its stated objective, which in any case was based on a false claim that higher ownership of private cars has increased congestion. The Government needs to make a fundamental review of road transport policy, and rethink the way it deters road usage in congested areas and air pollution from road traffic.

FRT and licence fees based on engine size or vehicle type should be abolished, and replaced

with small, flat fees to cover the administrative cost of registration and licensing. Fuel duties should be increased, and charged to all vehicles, and on all fuel types (at different rates per fuel type, based on their contribution to pollution). Congestion pricing should be introduced to reduce congestion. Meter fees should be raised substantially, to be comparable with off-street parking charges. That's the road map to a fairer and more effective road transport policy.

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