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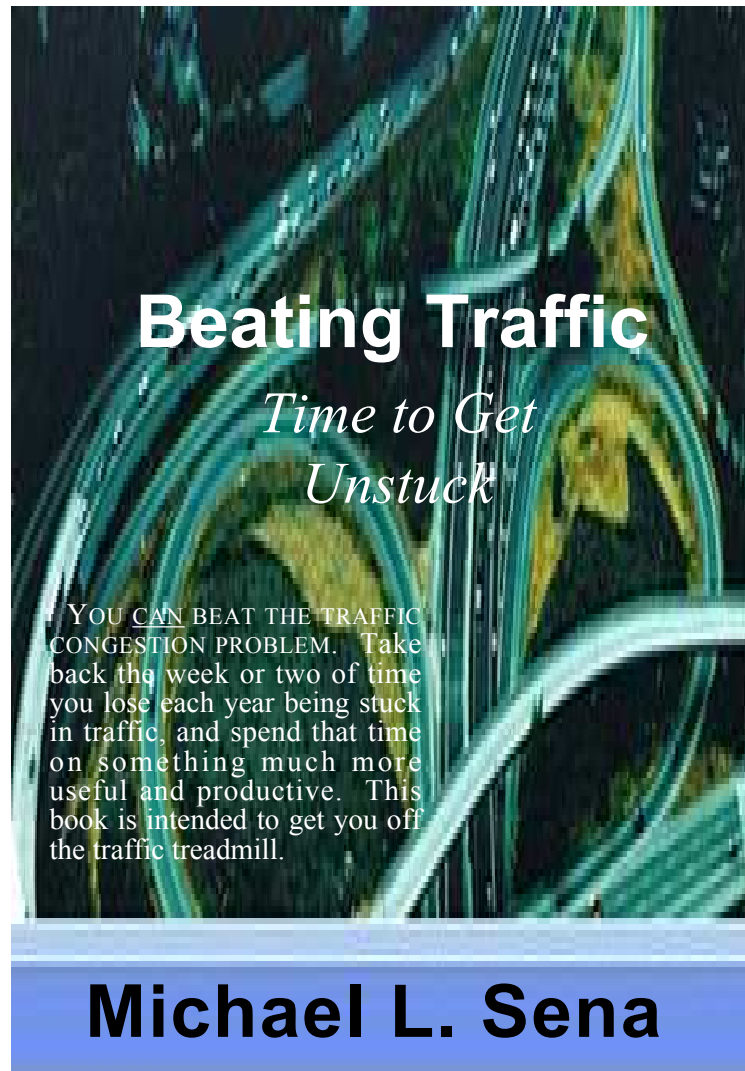
Congestion Charging for Cars

Same procedure as for trucks, or a hindrance to mobility

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Berlin

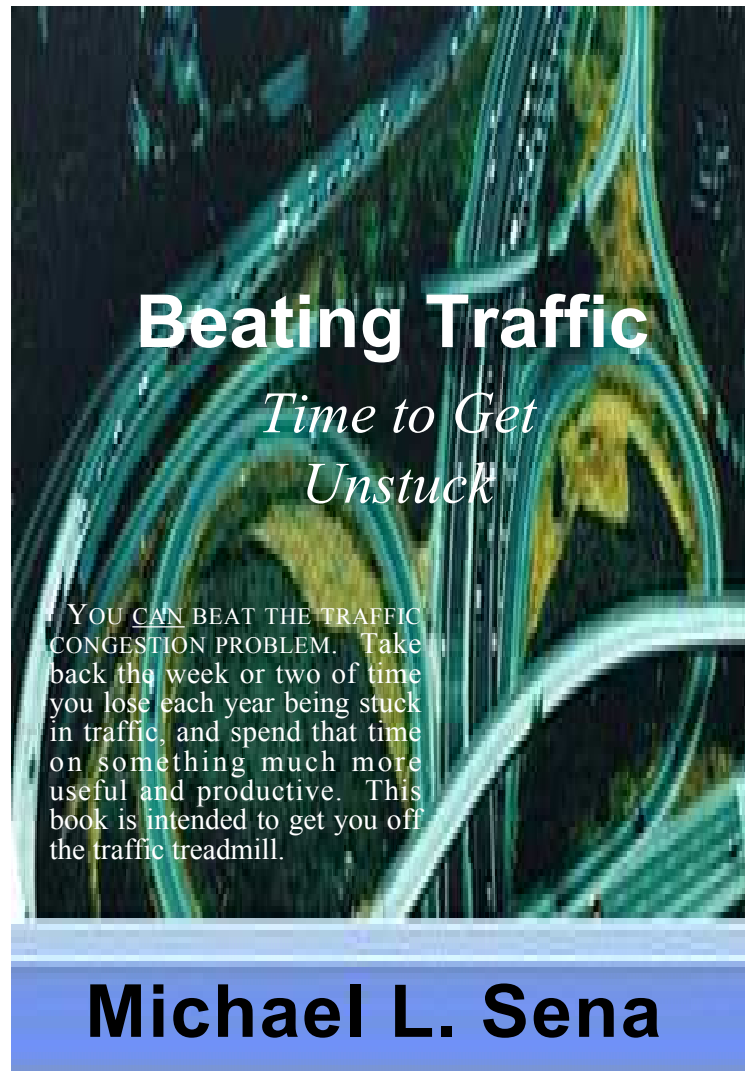
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Premises

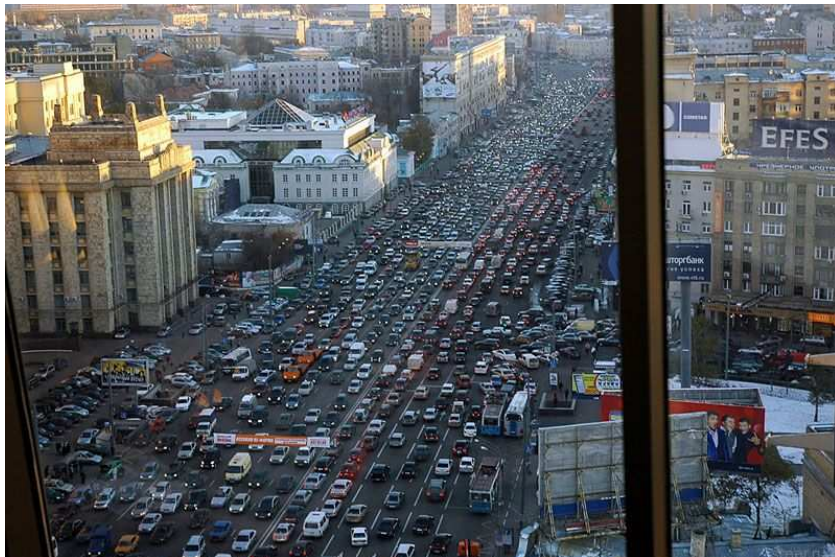
- Cities and city regions are sensitive organisms, and charging people for moving inside of them can have very negative effects.
- Congestion charges for cars in cities are a regressive form of taxation, while road tolls are a fair way for commercial users to pay for what they use.
- There are better ways to reduce traffic congestion in cities.
- Behavioral change, both personal and societal/governmental, is needed.

These premises are explained in my book, Beating Traffic, published in 2007 and available from Amazon and other Internet booksellers.



Premises

- Cities and city regions are sensitive organisms; messing around with them can have unforeseen negative consequences.
- Congestion charges are a regressive form of taxation that attack the symptoms of congestion but not the sources.
- There are better alternatives to congestion charges if the goal is really to reduce traffic congestion.
- Conquering the growing problem of traffic on local roads and highways requires behavioral change, both personal and societal/governmental.

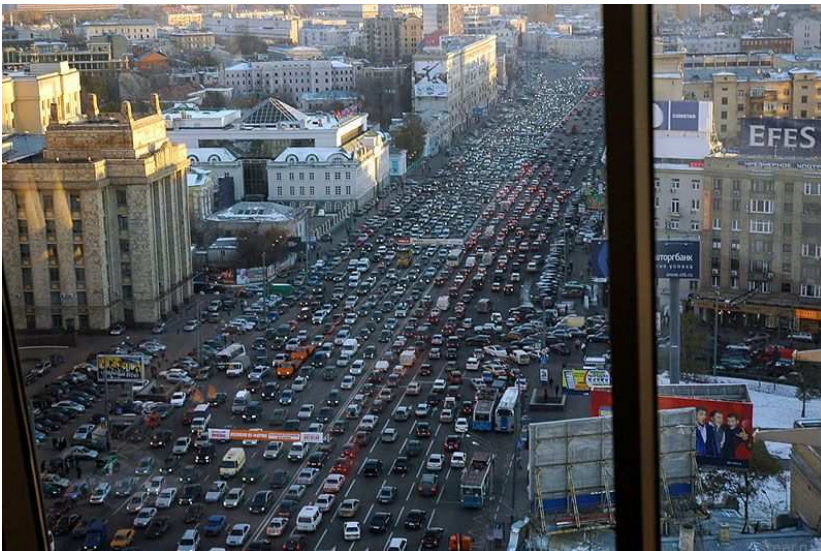


Theses

- Congestion charging causes uncompensated external effects.
- Congestion charging discriminates against lower income drivers.
- It is a knee-jerk reaction to satisfy the “Do something, anything!” crowd.
- The costs of congestion charging schemes can only be covered if enough people keep driving.
- Mobility is a right not a privilege.

Theses

- Congestion charging causes external effects that are not accounted for or compensated by the collection of fees.
- Congestion charging is a regressive tax that discriminates against lower income drivers without compensating them with improved accessibility to required services or desired activities.
- The costs of congestion charging cannot be covered by the fees collected if more than a pre-defined percentage of drivers do not enter the congestion zone.
- If mobility is privilege and not a right, who has the right to decide which citizens are the underprivileged, and who has granted that right?
- Congestion charging is a knee-jerk reaction to hysterical calls to “Do something, anything”.





Antitheses

- Congestion is so severe only a drastic reduction can reverse effects.
- Congestion charges are no different from other types of service charges.
- Congestion charging reduces unnecessary trips without disturbing everyday business in cities.
- Even if congestion charging incurs a financial loss, the overall benefits to society are positive.
- Mobility is a right, but it has limits.

Antitheses

- Congestion has reached such extraordinarily high proportions that it has generated external effects that are so severe that only a drastic reduction in congestion can reverse them.
- Congestion charges are a method for apportioning a scarce resource, just like payments for any service.
- Even if congestion charging incurs a financial loss, the overall benefits result in a positive gain for society.
- Mobility is a right, but it has limits
- Congestion charging is an effective way to reduce unnecessary trips into high traffic areas without disturbing the everyday business of the district.



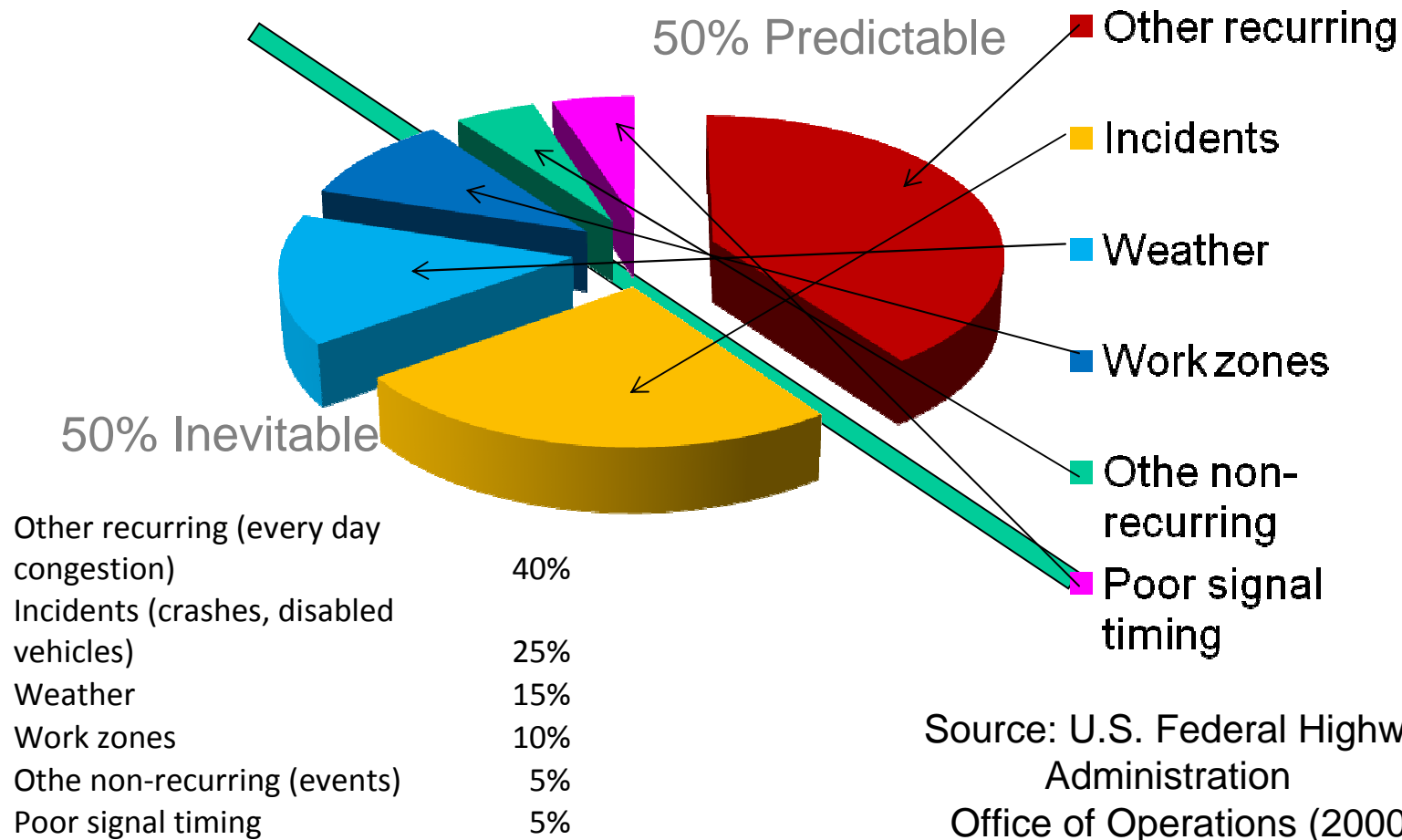
Why create restrictions and make people pay

It is essential to be clear on the fundamental reasons for instituting any form of driving restriction, including making people pay to drive their cars in a given area.

A list of possible reasons would include the following:

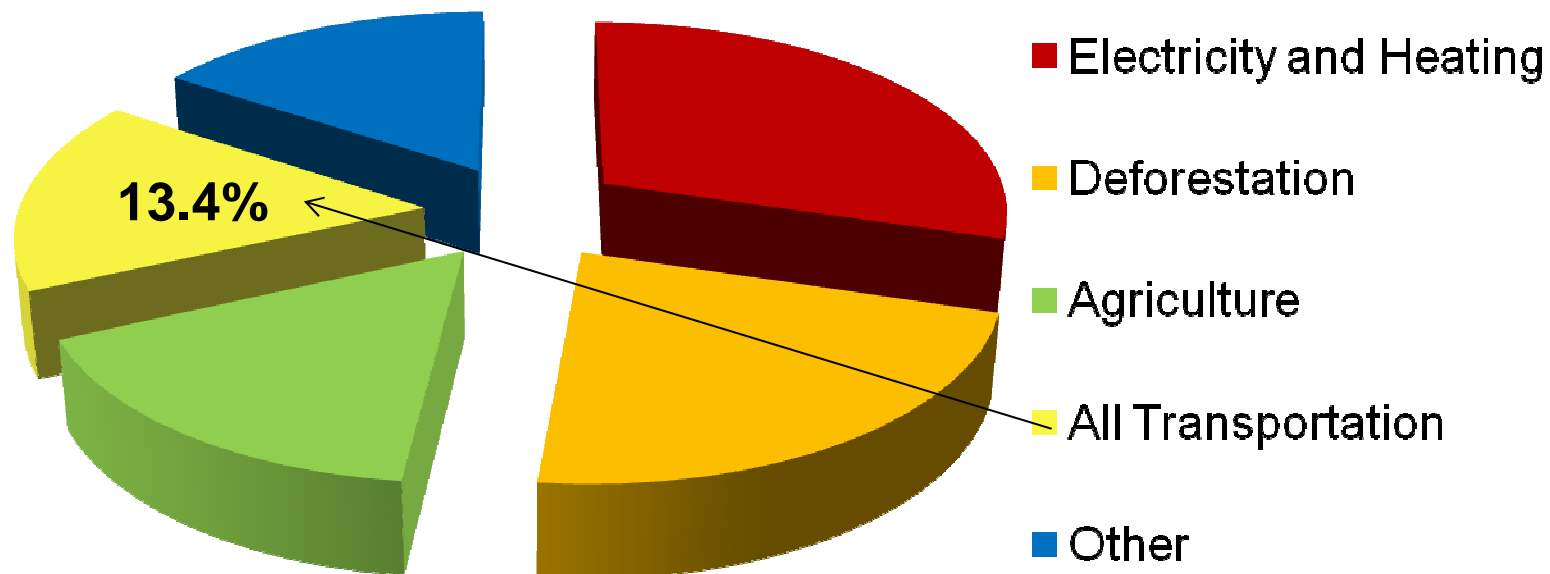
- ✓ Pay debt on the vehicular infrastructure.
- ✓ Pay for repair and maintenance of the infrastructure.
- ✓ Subsidize collective transport.
- ✓ Provide an economic advantage for the collective transport by making private automobile use prohibitively expensive.
- ✓ Reduce the number of private vehicles to increase the average speeds and on-time arrival of buses or surface rail systems.
- ✓ Reduce the overall number of vehicles in order to reduce one or more of the following:
 - CO2 or other emissions;
 - Accidents involving pedestrians or cyclists;
 - The amount of space allocated to vehicular rights of way and parking in order to encourage other land uses; and/or,
 - Noise related to heavy traffic.

Reasons for Traffic Congestion



Source: U.S. Federal Highway
Administration
Office of Operations (2000)

Percent of Greenhouse Emissions



Source: *The Economist*, A Survey of Climate Change, Special Report, September 9th, 2006.

Electricity and Heating	24,5%
Deforestation	18,2%
Agriculture	13,5%
All Transportation	13,4%
Other	12,9%

Traffic Congestion is a Tragedy of the Commons

Anyone with access to a common resource has an interest in over-exploiting it because if he or she does not, someone else will.

1832 William Forster Lloyd, a political economist at Oxford University, looking at the recurring devastation of common (i.e., not privately owned) pastures in England, asked: “Why are the cattle on a common so puny and stunted? Why is the common itself so bare-worn, and cropped so differently from the adjoining inclosures?”

*Anthony Downs Principle of Triple Convergence**

“...traffic congestion occurs because traffic flows in a region’s overall transportation networks form almost automatically-self-adjusting relationships among

- different routes,*
- times and*
- modes.”*

In other words, build a road or lower the price on trains, and they will come.

*Downs, “Stuck in Traffic: Coping with Peak-Hour Traffic Congestion”(Brookings Institution Press Lincoln Institute of Land Policy, 1992).

Triple Convergence: A zero sum game

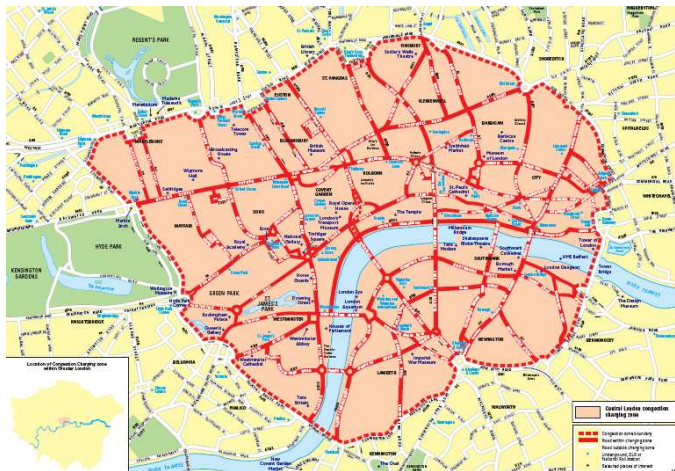


- People will change the routes they take;
- Switch the times of day during which they travel; and,
- Leave the bus, train or car in order to take advantage of a newly opened, faster, cheaper or more comfortable form of travel.
- They will do this within their own constraints:
 - Income
 - Cost of transportation
 - Location of residence
 - Personal comfort

Congestion Charging as a Solution to Congestion



~~£5~~ £8 per day for privilege of driving on the red roads



*The original London
Congestion Charging Zone .*

Source: Transport for London (2006)

- Infrastructure cost for congestion charging system covering nineteen square kilometres of Central London: £200 million
- Annual operating cost: £115 million
- First year's revenue at £5 per car: £70 million
- Revenue after raising fee to £8 per car in the second year of operation: £97 million
- Exempt from fee:
 - All two-wheel vehicles
 - Licensed taxis and minicabs
 - Emergency vehicles
 - Breakdown organisations (e.g. AA)
- Residents living inside the zone can apply for a yearly license at a 90% reduction.

Does it really work in London?

- Supporters say Yes!; detractors say Absolutely not!
- Transport for London claim that the large majority of those who stopped coming into the zone (around 25%) switched to public transportation.
- Eighteen months after the scheme started, the London Chamber of Commerce and Industry released its findings:
 - 63% of businesses inside the zone reported a fall in customer numbers;
 - 37% of retailers had reduced staffing;
 - 33% are considering relocating outside the zone; and,
 - 28% are considering closing their businesses

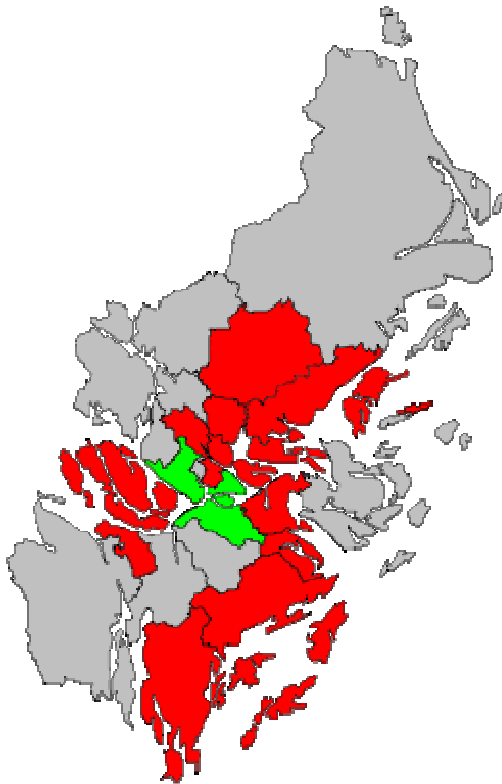
“Road pricing will penalise the poor, it will be argued (largely by politicians and journalists who don't usually give a fig for the poor). But most of the very poor do not own cars and those that (sic) do use them far less than average.”

New Statesman. *Give motorists a better deal – road tolls,*
March 4, 2002.

“Part of the reason that the poor are poor is that they cannot get to where the jobs are located, precisely because they cannot afford to own and operate a car. Raising the price of operation makes an already difficult situation for the poor even worse. The author of this article should ask the poor people in New Orleans who were unable to escape the ravages of hurricane Katrina in September, 2005 if they would have preferred to own a car when the warning came to evacuate, rather than depending on taking the bus that never came.”

Beating Traffic: Time to Get
Unstuck– Chapter 1, Page 7.

Stockholm follows London with *Environmental Zone*



The vote for Stockholm Congestion Charge

Total excluding Stockholm: 39.8% Yes – 60.2% No

Total including Stockholm: 47.5% Yes – 52.5% No

The Environmental Charge Objectives

- Reduce traffic volumes by 10-15% during rush hours
- Improve accessibility for buses and cars
- Improve the environment

Originally, fees were to be used to improve public transportation

After a change of country leadership, the charge was instituted, but all fees are to be used to build roads around Stockholm.

Results from Stockholm



The Swedish Road Authority engaged consulting firm Transek to follow the congestion trial in 2006 and report on the results.

- 25% fewer vehicles entered the zone after the charge
- 10% increase in public transport usage (i.e., 15% disappeared)
- 4% of private car drivers pay 30% of total fees
- These drivers are high income men who live inside the zone
- Men paid twice as much as women
- Medium income wage earners reduced auto usage the most

Be careful what you wish for

Like all sin taxes, the ultimate **goal** of congestion charges is to eliminate undesirable behavior—in this case, driving.

Research shows that fining citizens to do the right thing can have the opposite result to the one desired.

A study in Israel of six day-care centers in Haifa showed that after fines were instituted for parents who showed up late, the number of tardy parents doubled. “I can pay for my sin, and I don’t have to feel guilty.”

- Triple Convergence eventually drives people back to their cars—because the roads are less congested than the alternatives (bus, train, trolley), perceived or real cost of road travel becomes lower than public transport), so congestion fees have to be raised.
- Businesses, workers, shoppers and tourists vote with their wallets and their feet. They relocate outside the zone.
- Central cities, which have been enjoying a resurgence, again become unattractive places to live, work and recreate.
- The biggest gainers are the real estate speculators.



We are the problem and we are the solution

- Driving kids to school
 - Centralised schools
 - Walking not safe – too many cars
 - Walking not safe – drub pushers and pedofiles
- Driving ourselves to exercise classes and other recreation
 - Disappearing spontaneous exercise
 - Specialised training perceived to work better
 - Supervision needed
- Shopping in Big Box stores rather than in local shops
 - We believe we get better prices
 - We believe that we get acceptable quality
 - We believe we get better variety
- Allowing more large trucks on all roads
 - Just-in-time manufacturing
 - Just-in-time shelf filling
 - Worldwide sourcing and global distribution

Students Give Up Wheels for Their Own Two Feet



*Gianfranco Frizzera, a volunteer in a program aimed at reducing vehicle emissions, walked children to school through a cemetery in **Lecco, Italy**.*

International Herald Tribune, March 27, 2009

Piedibus

(literally foot-bus in Italian)

The cemetery route is called the **Mortobus**

There are alternatives to charging drivers



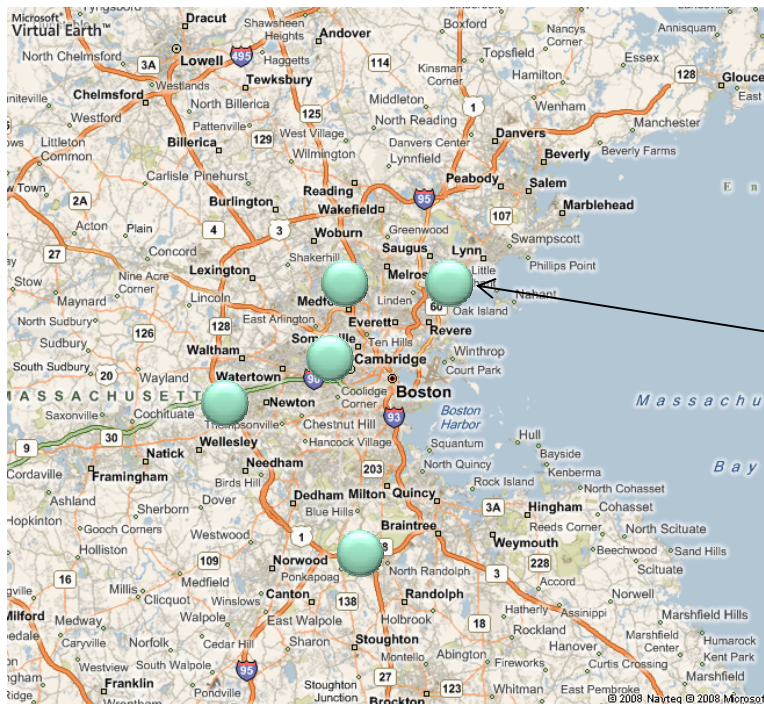
A normal Saturday on the main street in Tokyo's Ginza shopping district.

- Car-free central zones – Bologna
 - Evening servicing only of shops
 - Access to hotels for taxis
- Weekend street closures - Tokyo
- Alternate driving days – Athens
 - License plate numbers
- Limited parking spaces – Boston
 - Reversed zoning rule to build parking in basement of new office building
- Street pattern design – Göteborg
 - Make it difficult to drive
- Park-and-Ride – Boston
 - The best solution in today's car-centric society

Laws should be enacted firstly to ensure that people know what society believes is the right thing to do, and secondly to ensure that its citizens do the right thing.

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Help citizens do the right thing



The Boston Metropolitan Region

- Limited downtown commuter parking to encourage use of public transportation.
 - Commuter train
 - Heavy rail transit
 - Light rail transit
 - Bus
- Park-and-Ride at multimodal facilities to collect car drivers before they enter highest density congestion zones.
- Multi-use zoning at transit and train stops to encourage development
- Pedestrian Zones in the city
 - Quincy Market
 - Washington Street
 - Harbor Park

Exercise choice: That's what makes us humans.

Jakriborg, Sweden, a new town being built between Malmö and Lund on the principles of multi-use zoning, pedestrian- and bicycle-friendly streets, and an architectural style that harmonizes all of life's daily activities.

The idea is not to eliminate private cars, but to put them in their proper place.



Thank you

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