

## **Victoria Transport Policy Institute**

1250 Rudlin Street, Victoria, BC, V8V 3R7, CANADA

www.vtppi.org info@vtppi.org

Phone & Fax 250-360-1560

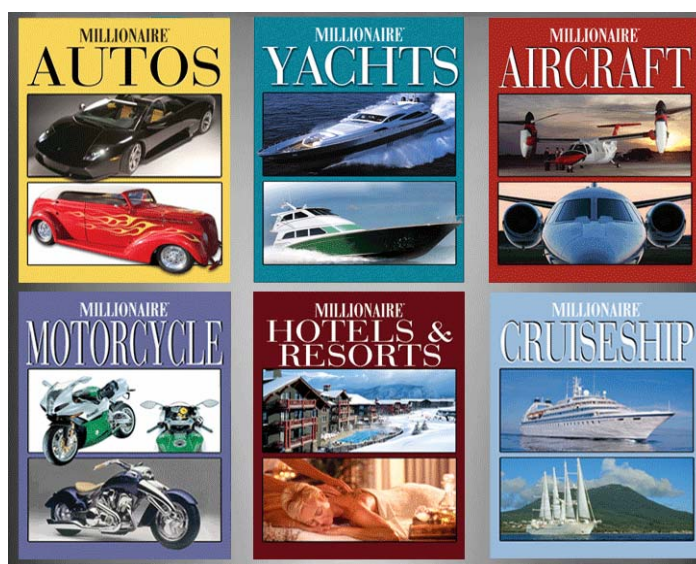
"Efficiency - Equity - Clarity"

# **Mobility As A Positional Good** *Implications for Transport Policy and Planning*

By Todd Litman

*Victoria Transport Policy Institute*

8 March 2007



*Luxury vehicles and exotic vacations are prestige goods that enhance their consumers' status. This tends to stimulate mobility and increase resource consumption beyond what is optimal.*

## **Abstract**

"Positional" (also called "prestige") goods confer status on their consumers. However, this increased status is offset by reduced status to others, resulting in no direct net benefit to society. As wealth increases so does the portion of consumption motivated by positional value. Many mobility-related goods and services have positional value, including vehicle ownership and use, and exotic holidays. This paper investigates how positional value affects transportation decisions, explores the resulting economic impacts, and discusses implications for transport policy and planning.

Originally presented at:

*AutoConsequences: Automobiliation and its Social Implications*

6 October 2006, Vancouver, Canada

Simon Fraser University Traffic Safety Project ([www.sfu.ca/traffic-safety/events.html](http://www.sfu.ca/traffic-safety/events.html))

Todd Litman © 2006

You are welcome and encouraged to copy, distribute, share and excerpt this document and its ideas, provided the author is given attribution. Please send your corrections, comments and suggestions for improving it.

*Contentment is natural wealth; luxury, artificial poverty.*  
- Socrates (469-399 BC)

## Introduction

*Social position* (also called *prestige* and *status*) refers to a person's social rank. Many goods have *positional value* (as opposed to *functional value*) because they increase the status of their consumers (Wikipedia, 2006). These are called *positional* (or *prestige* or *status*) goods, the consumption of which is considered *conspicuous* (Veblen, 1899). Examples include fashionable jewelry and clothing, ostentatious homes, luxurious vehicles and extravagant entertainment. Conceptual tests of positional value are, "Would I choose this particular good if it were unpopular?" and "Would I choose this good if nobody else knew?" Prestige value is often a component of functional goods. For example, many motorists choose vehicles with greater potential speeds and offroad abilities than actually needed because these features are considered prestigious.

From individual's subjective perspective positional value is very important. Popular culture embodies vehicles and travel decisions with symbolic value – they help define a person's identity. An offhand judgment about a person's transportation ("Take me away from here in that nice car of yours," or "He's riding a loser cruiser") can cause delight or pain. Having a prestigious vehicle can increase a young person's chance of dating, and therefore mating, a popular partner. Employees can enhance their self confidence and careers by driving a fashionable car. Living in a prestigious neighborhood raises a person's social status and networking opportunities. Business competitiveness often requires accommodating customers' preferences for status goods.

However, from society's overall perspective, positional goods provide little or no net benefit because gains to one individual are offset by losses to others (Hirsch, 1976; Frank, 1999). For example, if one person drives a prestigious car his or her peers must obtain equally prestigious vehicles to maintain status. It represents a form of inflation, popularly called "keeping up with the Joneses," that raises everybody's costs without increasing overall welfare. Positional value is therefore an *economic trap*, a situation in which individuals compete in ways that waste resources (also called a *social trap*, reflecting society's overall perspective, a *zero sum game*, reflecting the fact that gains to one represent losses to another, or a *treadmill*, because to the degree that social position is based on economic success in competitive conditions, people feel that they must work harder to maintain a given level of status). Described differently, prestige value is an economic transfer rather than a net economic gain.

This paper investigates how positional value affects transportation decisions, explores the resulting economic impacts (including impacts on social welfare and external costs), and discusses implications for transport policy and planning. Although the general implications of positional goods have been discussed for decades, research regarding mobility as a positional good is relatively limited and primarily theoretical, suggesting that it is fertile ground for analysis and application to decision-making.

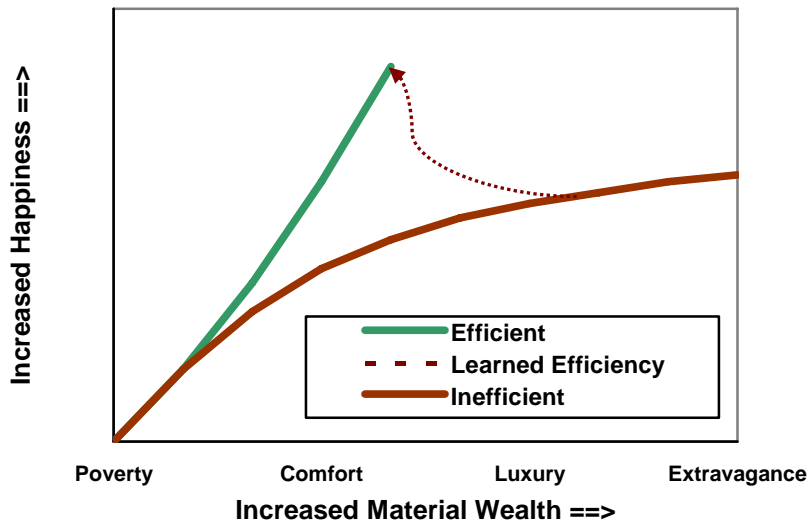
## The Science of Happiness

To evaluate the overall value of positional goods requires a deeper understanding of how consumption decisions affect overall happiness, which economists call *social welfare*. Most economists recognize that material wealth is just one factor affecting welfare, but that critical concept is often ignored in practice; economic progress is usually evaluated based on indicators of material wealth and productivity such as changes in income, property ownership and Gross Domestic Product (Redefining Progress, 2006).

Developed countries have achieved a high level of material wealth that could provide a high level of social welfare. But happiness is elusive. Residents of wealthy countries complain about excessive stress, inadequate leisure time and social isolation. If we had 21st Century productivity with 19<sup>th</sup> Century expectations we would live in Eden, but economic traps erode much of the potential welfare gains from material progress, reducing the efficiency with which we achieve happiness.

Researchers have investigated factors that affect how much happiness people achieve and the efficiency with which wealth provides happiness (Frank, 1999; Lane 2000; Diener and Seligman, 2004; Stutz, 2006; The Economist, 2006; Dolan, Peasgood and White, 2006). This research indicates that rising from poverty to moderate wealth increases happiness, but once people's basic material needs for food, housing and medical care are met, the relationship between wealth and happiness weakens. Increased wealth can increase happiness if used efficiently or it may provide little additional happiness if squandered. Some people learn to be happier with less wealth, for example, by choosing a more satisfying but less lucrative job, as illustrated in Figure 1.

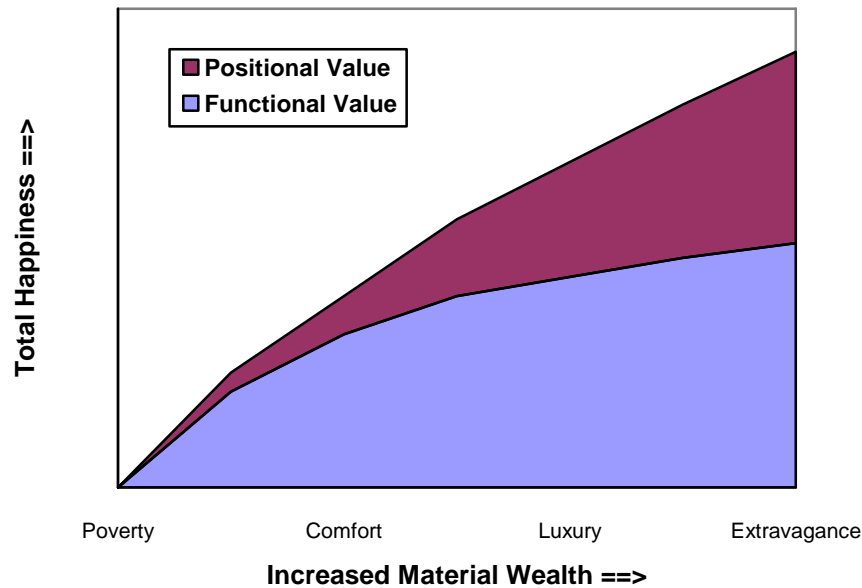
**Figure 1** Wealth and Happiness (Based On Stutz, 2006)



*Starting from poverty, increased material wealth tends to increase happiness. But once people achieve basic material comfort, wealth may either be used efficiently, providing more happiness, or inefficiently, with large increases in consumption that provide little additional happiness. Some people learn to achieve greater happiness with less wealth.*

Economic traps reduce the efficiency with which wealth creates happiness (Easterbrook, 2003). Increased aggregate wealth raises the amount of consumption required to achieve a given level of status and the portion of consumption devoted to positional value, as illustrated in Figure 2. *Material affluence* (abundant money) often requires sacrificing *time affluence* (abundant free time) and *social affluence* (abundant friendships). Since material affluence is more conspicuous than other types of affluence, positional competition skews people’s decisions toward more employment and consumption than is optimal. For example, it dissuades people from choosing more satisfying but lower-paying jobs or working fewer hours to have more time for family and friends because such a lifestyle is less prestigious. This explains why people often work long hours to afford expensive holidays they need to recover from job stress. Increased consumption also tends to increase problems such as congestion, obesity, smoking, alcoholism and drug use. This helps explain why happiness is so elusive (Scitovsky, 1976).

**Figure 2** Positional and Functional Value (Galbraith, 1958; Stutz, 2006)



*Starting from poverty, increased material wealth provides significant benefits (happiness) by improving health and comfort, but once people’s basic physical needs are met, an increasing portion of wealth is devoted to positional goods. These goods raise the status of people who consume them but reduce the status of others and so provide no net benefit to society overall.*

The efficiency with which wealth provides happiness is affected by both individual and public decisions. Individuals can choose more satisfying but lower paying jobs, avoid wasting money on unsatisfying luxury goods and choose friends who value their behavior rather than material wealth. Public policies and community values can contribute to inefficient consumption. For example, if planning decisions or social attitudes favor automobile travel over lower cost modes, people will be forced to drive more than they actually prefer, contributing to a cycle of more costly travel, declines in more affordable alternatives, and increases in external costs such as congestion, risk and pollution.

**Money and Happiness: Here's Why You Won't Laugh All the Way to the Bank**

By Jonathan Clements, *Wall Street Journal*, August 16, 2006.

It's only money. Really.

If you're reading this column, you are no doubt looking to get ahead financially. But don't kid yourself: All those extra dollars won't make you extra happy. In recent years, economists and psychologists have turned their attention to "happiness research" – and the results are a little disturbing if your life's goals are a bigger paycheck and a fatter nest egg. Money alone just doesn't buy a whole lot of happiness.

To be sure, high-income earners often express greater satisfaction with their lives. In a 2004 survey, 43% of those with family incomes of \$90,000 or more reported being "very happy," versus 22% for those with incomes below \$20,000. But the truth is messier than such surveys suggest. Yes, if you live in poverty, more money can bolster your happiness, but once you're safe and warm and fed, it makes surprisingly little difference. "Once you get to the lower-middle class, then it takes a lot of income to make a difference. Income does matter, just not as much as people think," says Professor David Schkade.

Indeed, despite rising standards of living, just 30% of Americans described themselves as "very happy" in the late 1990s, down from 34% in the early 1970s, according to a study by economics professors David Blanchflower and Andrew Oswald published July 2004 in the *Journal of Public Economics*. Researchers speculate that our happiness is influenced not by our absolute level of wealth and income, but rather by how our financial situation compares with friends and colleagues. This may help explain why so many high-income earners describe themselves as "very happy."

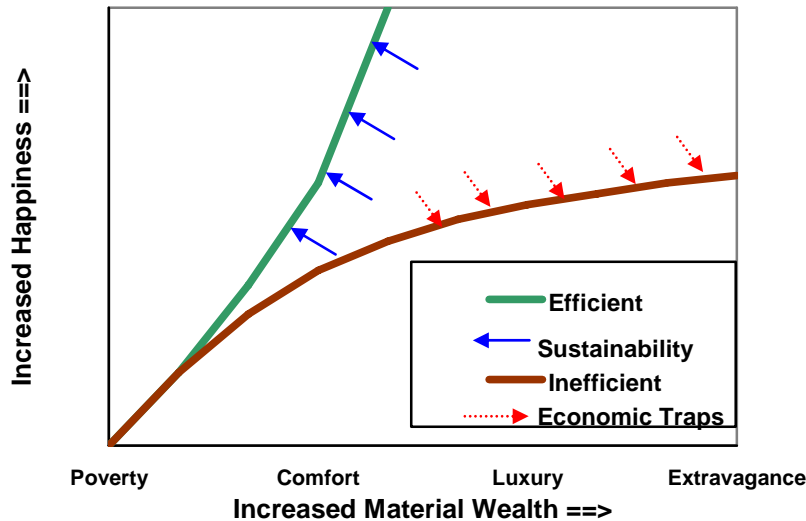
Other studies indicate that people with higher incomes tend to spend more time working, commuting and engaging in obligatory nonwork activities such as home maintenance, all of which are associated with less happiness. The results indicate that people who are richer aren't having a better time, but if you ask them about their lives, they report being a little more satisfied than those who are less affluent.

This raises the question: If more money won't make us much happier, what will? Here are four pointers.

- Keep your commute short. Tempted to use your latest pay raise to buy a big house in a distant suburb? Don't do it. While we often adjust amazingly well to life's hardships, commuting is an exception. "You can't adapt to commuting, because it's entirely unpredictable," says Daniel Gilbert, author of *Stumbling on Happiness*. "Driving in traffic is a different kind of hell every day."
- Choose time over money. Cutting back work hours will likely leave you happier, even if it means less pay. What about the fall in your standard of living? It may hurt less than you imagine. True, you are thrilled when you buy a new car. Soon enough, however, the good feelings fade.
- Think carefully about how you spend your dollars. While a new car may not boost your happiness for long, maybe a trip to Europe would. "Money itself doesn't make you happy," Prof. Gilbert says. "What can make you happy is what you do with it. There's a lot of data that suggests experiences are better than durable goods." The car might seem like the better purchase, because it has lasting value. But, in fact, it sits in the driveway, slowly deteriorating. Experiences don't hang around long enough to disappoint you. What you have left are wonderful memories.
- Use your leisure time wisely. Surveys show that leisure is better for your happiness than work. But much also depends on how you spend your leisure time. Passive activities like watching television usually don't make folks as happy as eating. A good meal, in turn, doesn't rank quite as highly as active leisure activities, such as socializing with friends. "Going to a dinner at a nice restaurant, where you're going to see friends and eat good food, is one of the best combinations,"

Wealth spent on positional value provides little or no net benefit, since gains to individual consumers (those who consume prestige goods) is offset by losses to others (those who compete for status). This can be considered as a type of external cost which occurs in addition to more commonly-recognized external costs such as congestion, uncompensated accident risk and pollution (Verhoef and van Wee, 2000). It is important for economists and decision-makers to account for this when evaluating policies (Stutz, 2006). Since this affects resource consumption it is a sustainability issue (TRB, 1997; Litman & Burwell, 2006).

**Figure 3 Sustainable Development**



*Because sustainability requires constraining material consumption within ecological limits (such as limiting consumption of land in order to protect habitat, and reducing fossil fuel consumption to minimize climate change), sustainable development requires maximizing the efficiency with which material wealth provides happiness, as indicated by blue arrows. However, economic traps tend to shift consumers toward less efficient and therefore less sustainable resource consumption, as indicated by red arrows.*

It may be rational and beneficial for society to implement policies that avoid these economic traps, such as special taxes on luxury goods and more progressive tax structures (Frank, 2005). Many economists and public officials are understandably reluctant to support strategies that contradict *consumer sovereignty* (the idea that consumers should be free to choose any goods they want). However, society often intervenes in markets to reduce unjustified harm, such as outlawing drugs, and to favor basic services over luxury services, such as subsidizing healthcare. Policies to reduce the harm of prestige-induced wasteful consumption can be justified on both efficiency and equity grounds.

## **Transportation Impacts**

*Positional value influences transportation activities in several ways, described below.*

### ***Motor Vehicle Ownership***

Positional value motivates some people to increase their vehicle ownership beyond what they would otherwise choose (Steg, 2004). For example, a lower-income person might be best off overall relying on a combination of walking, cycling, public transit and rented cars, but chooses instead to own an automobile because of the status it conveys.

Teenagers will sometimes work primarily to afford a vehicle that is primarily used to commute to work, a pattern that is only rational if car ownership is considered an end in itself. Some seniors own vehicles that they seldom drive, although it would be cheaper to rely on taxis, because not driving is stigmatized.

Once a person owns a vehicle they are motivated to use it in order to maximize the value of their fixed expenses. The prestige value of vehicle ownership therefore shifts people from multi-modal lifestyles (they share vehicles and use various modes) to automobile dependency (each driver has a personal vehicle, which is used for most travel).

Consider how it feels to not own a motor vehicle in an automobile-dependent society: It feels bad, in part because automobiles are an important status symbol that many people use to display their identity (so people who do not own an automobile are considered “nobodies”), and in part because non-drivers frequently face practical problems, such as inadequate walking and cycling conditions, poor public transit service, and unpleasant stops and station waiting areas.

It is difficult to determine the magnitude of this effect. Motor vehicles do provide significant functional benefits, so prestige value alone only increases vehicle ownership only modestly, perhaps 5-15% in the short-term, reflecting marginal value automobiles, such as a vehicles owned by lower-income residents of communities with good transit service (so they can manage without an automobile) and households' second, third or fourth car. Its impacts are probably larger over the long run as higher vehicle ownership further increases automobile dependency, as described later.

### Luxury Vehicles

Prestige value motivates many consumers to purchase more expensive vehicles than they otherwise would (Carlsson, Johansson-Stenman and Martinsson, 2003). This is illustrated by the prominence luxury vehicles receive in status-oriented publications such as the *Robb Report* ([www.robreport.com](http://www.robreport.com)) and *Millionaire Magazine* ([www.millionaire.com](http://www.millionaire.com)). Such vehicles may provide some functional benefits compared with cheaper and more practical vehicles, such as increased reliability, durability and safety (although not always, particularly sports cars), and more pleasurable driving (although not always, particularly large SUVs), but much of their attraction is positional.

**Figure 4** Prestigious Vehicles



*Positional value motivates drivers to select expensive and inefficient vehicles such as a Hummer.*

Only a small portion (perhaps 10%) of the overall fleet can be considered truly luxury vehicles, but positional value encourages consumers to choose higher value vehicles than they would if such vehicles lacked status value or were not used as symbols of group identity. For example, some groups value 4 x 4 trucks and SUVs, while others value low-riders built for street racing, or sports cars designed for performance. Embodying automobiles with status tends to increase vehicle ownership, vehicle costs, and vehicle travel as owners drive more to display their vehicles and justify their investments. Many vehicle prestige features (larger size, increased performance, off-road capability, additional accessories) that reduce fuel efficiency, leading to increased resource consumption that provides little net social benefit (Verhoef and Bert van Wee, 2000).

### **Pimp My Ride, Television Show ([http://en.wikipedia.org/wiki/Pimp\\_My\\_Ride](http://en.wikipedia.org/wiki/Pimp_My_Ride))**

Each car is a custom “pimp,” tailored to the personalities and interests of the owners. For example, a *Need for Speed: Underground 2* fan had his car painted to look like one he customized in the game, while a bowler had a ball washer installed in his trunk. Work usually includes new paint, accessories, chrome, tires and rims, and internal electronics. At the end of the show, the car is revealed to its owner, as well as all the details of the renovation and the custom features.

### Mode Choice

Automobile travel is considered prestigious, while alternative modes such as walking, cycling and public transit are often stigmatized (Ory and Mokhtarian, 2005). A survey of commuters found that their decision to drive rather than use other modes resulted more from symbolic than from functional motives (Steg, 2005). The stigma of alternative modes was illustrated in 1986 when, during parliamentary debate, British Prime Minister Margaret Thatcher said, “A man who, beyond the age of 26, finds himself on a bus can count himself as a failure.” These comments are particularly callous because they were made when there were about 0.35 private vehicles per capita in the UK (compared with about 0.42 vehicles per capita now, and about 0.75 vehicles per capita now in the US), implying that a major portion of the Prime Ministers’ constituents were “losers.”

**Figure 5** Public Transit Is Stigmatized



*This advertisement illustrates how alternative modes are stigmatized.*

Buses are often called “loser cruisers,” and walking and cycling are often portrayed as undesirable and inferior travel modes. This stigmatization reduces use of alternative modes compared with what consumers would otherwise choose. For example, commuters are more likely to drive rather than use public transit, and parents are more likely to chauffeur children rather than allow them to walk or bus to school.

### Loser Cruiser

*A Day in the Life of Chelsea Blog* (<http://cvanderkooi.blogspot.com/2006/11/loser-cruiser.html>)

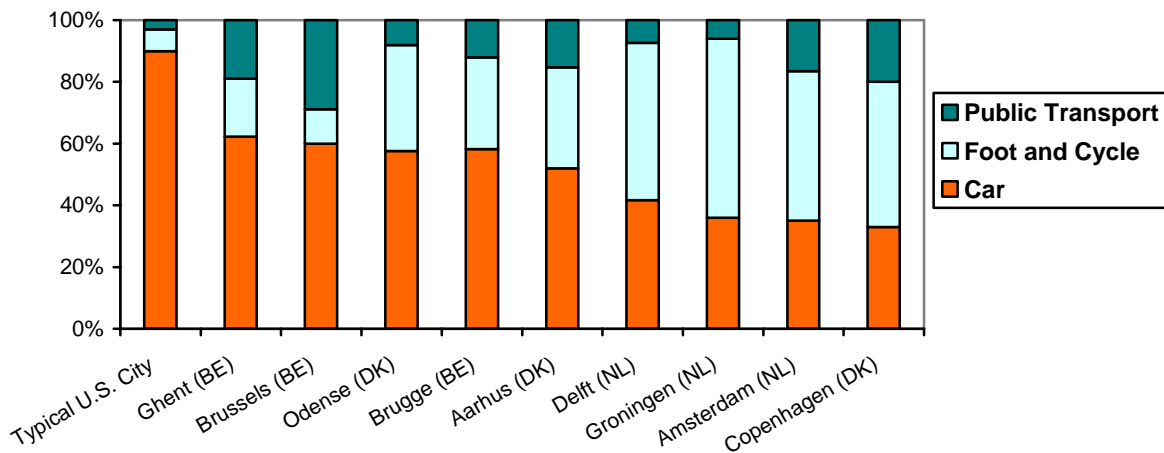
Today was so cold, my car won't start. Therefore I am forced against all my will to hop on the loser cruiser. The last time I took the bus it cost \$1.10 for students, and this was about 10 years ago. I'm not sure really where to start, I am trying to find which one goes to Westmount, but it's really not that easy. The bus is full of interesting people, but I feel a little degraded riding it. I feel like saying to the strange people around me "I have a car! I swear, I work for a living and can afford it! Please believe me!" I am not happy to be waiting outside in -300 degrees waiting for the loser cruiser to come pick me up...but it's better than walking I guess. Anyone else hate the bus??

The stigmatization of walking, cycling and public transit travel also has indirect effects. These modes experience significant economies of scale, so reductions in their demand reduce their quality of service and reduce the incentive for multi-modal land use patterns. For example, if driving is considered more prestigious than other modes, businesses will locate to maximize access by automobile rather than other modes, as described in the following section.

Because prestige modes tend to be faster but more costly than stigmatized modes, prestige value encourages people to work more hours. For example, a person might otherwise prefer to work fewer hours and rely on slower transport modes, but feels obliged to work more in order to afford car ownership, for the sake of prestige.

The magnitude of this impact is indicated by the much higher automobile mode split in North American cities compared with equally wealthy European cities that retain respect for walking, cycling and transit travel, as indicated in Figure 6. Of course, factors such as quality of service and land use patterns also affect travel behavior, but these result, in part, from long-term decisions made by individual households (such as which home to purchase) and communities (such as transportation planning decisions and land use policies) which reflect the prestige of each mode.

**Figure 6 Mode Split In Selected European Cities (ADONIS, 1998)**



*Many wealthy cities have relatively low rates of automobile travel, reflecting the greater prestige given to alternative modes in those regions.*

Although it is difficult to determine exactly how much the stigmatization of alternative modes affects travel behavior, the total impact is probably moderate to large, particularly in urban areas over the long run, increasing automobile travel 10-20% more than would otherwise occur.

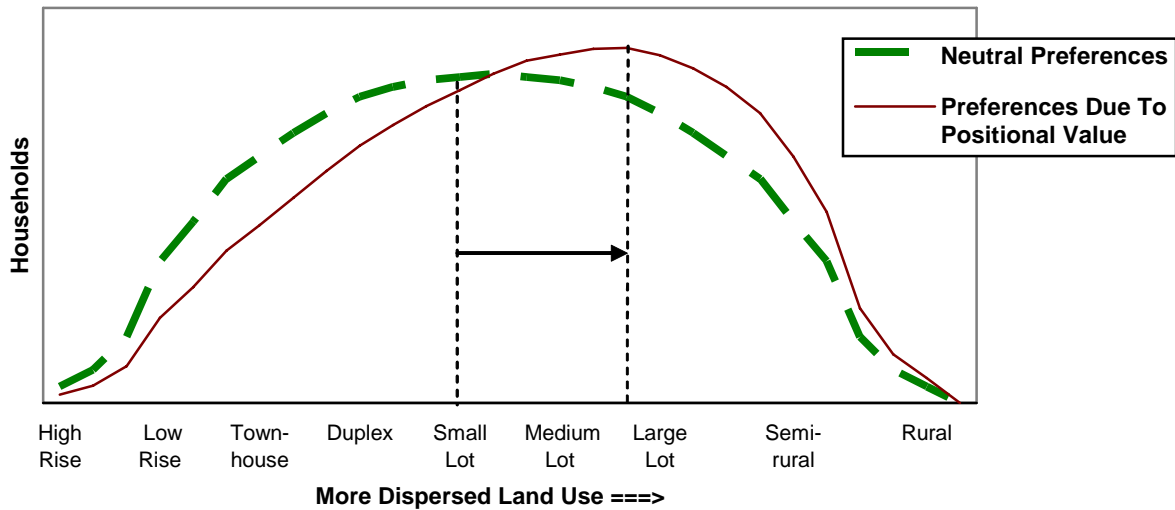
**Automobile-Dependent Land Development (Sprawl)**

Single-family homes and suburban locations tend to be considered more prestigious than more compact homes in urban neighborhoods. Market surveys indicate that many households choose suburban homes primarily for their social attributes (prestige, security and good schools) rather than physical attributes such as large lawns (NAR and NAHB, 2002; Litman, 2007).

For example, in the Academy Award winning film *American Beauty*, the mother, frustrated that her teenage daughter does not appreciate the family’s material wealth, as indicated by their perfectly-maintained suburban home, proclaims, “When I was your age, I lived in a duplex!” This illustrates how popular culture considers anything other than a single-family suburban home to be socially inferior.

The positional value of single-family, suburban housing tends to shift housing location decisions toward more automobile-dependent neighborhoods than what consumers would consider optimal based only on their physical needs and preferences, as illustrated in Figure 7. For example, a household that would otherwise prefer an apartment shifts to a townhouse, a household that would otherwise prefer a townhouse shifts to a small-lot single-family house, and a household that would otherwise prefer a small-lot single-family house chooses a large-lot house, because these are considered more prestigious.

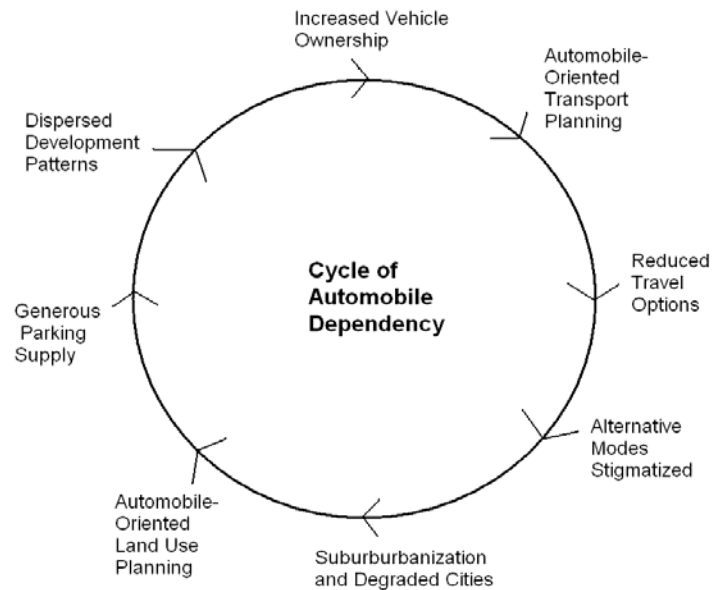
**Figure 7 Suburban Location Prestige Shifts Consumer Decisions**



*Greater prestige of single-family homes and suburban location encourages households to choose more automobile-dependent neighborhoods than if such decisions were based functional preferences.*

This contributes to a self-reinforcing cycle of increased automobile dependency and sprawl, as illustrated in Figure 8. In recent years, urban living has become more popular, particularly among some social groups, such as young professionals and retirees, as illustrated in popular television shows and films which show interesting people living urban lifestyles, but this type of living is still considered exceptional overall.

**Figure 8** Cycle of Automobile Dependency and Sprawl



*This figure illustrates the self-reinforcing cycle of increased automobile dependency and sprawl. The prestige of suburban locations and degradation of urban locations is part of this cycle.*

People who live and work in suburban locations tend to drive significantly more than residents of more multi-modal urban locations. If more multi-modal, urban locations were as prestigious as suburban locations, perhaps 10-30% of suburban households would shift to such locations, reducing their per capita vehicle miles of travel 20-40%, providing total reductions of 2-12%.

**Longer Distant Recreation Travel**

Demand for long-distance holiday trips results, in part, from the prestige associated with exotic destinations (Veblen, 1899; Duffy, 2002; Ory and Mokhtarian, 2005). As international travel becomes more common, more exotic destinations are needed for a trip to be considered unusual, causing vacationers to travel greater distances than they functionally enjoy, so their trips can be considered “special.” As a result, many tourists travel to distant resorts with rushed schedules that include little or no interaction with local people or culture (many resorts are designed to prohibit such interactions), and while there demand services (food, shelter and entertainment) identical to what they could obtain closer to home. Often, many four-day visits require two-days of travel (one day each way), so travelers have little time to relax and enjoy the experience. Much of the pleasure of such trips comes from the sense of having visited a distant location, and the resulting bragging rights.

**Figure 9** More Distant Travel



*Tourists travel to increasingly distant destinations although they often have little interest in the unique features of that area. They are partly motivated by the prestige of traveling to an exotic location.*

Because people use such travel to compete for prestige, this type of travel demand is virtually unlimited. If international travel were sufficiently cheap, parents might have birthday parties in distant lands, even for children too young to appreciate the experience, simply to make it a “special” event. If interplanetary travel were sufficiently cheap, an earth-bound holiday might be considered dull.

It is difficult to determine how much positional value affects total travel. Many people are sincerely interested in visiting distant and unusual destinations, but the prestige of such trips probably increases some travel activity, particularly to exotic locations, such as Cancun, Mexico and Tahiti.

### **Planning Practices**

For much of the last century, transportation and land use planning practices tended to favor automobile and air travel over other modes, with dedicated funding, minimum parking requirements, and transport system quality indicators that primarily considered automobile travel conditions. These practices partly reflect the sense by public officials that these modes are prestigious. This effect is often subtle, reflected in extra enthusiasm for automobile improvements and weak support for efforts to improve alternative modes. These practices are particularly obvious in developing countries where the majority of transport resources are often devoted to improving automobile transportation, although the majority of residents rely on other modes. For example, in recent years Mexico City dedicated \$500 million to new freeway construction but depended on foreign aid to finance a \$30 million Bus Rapid Transit route.

Although it is difficult to determine exactly how much prestige value contributed to automobile dependency, even a small contribution could have large effects on mobility over the long term (Soron, 2006).

### **Industrial Development Policy**

Many people, including many decision-makers, consider the vehicle manufacturing industry particularly important and glamorous, leading to public policies that favor it over other sectors. Many jurisdictions offer generous public subsidies to attract vehicle production facilities, often much greater per job than offered to other industries and exceeding what is economically justified. The global vehicle industry is overcapitalized, with significant excess capacity and numerous countries competing to expand their exports, resulting in losses to many producers. Most countries would be better off supporting other industries that provide greater returns and more competitive advantage.

**Figure 10**    **Vehicle Production**



*Many countries subsidize their automobile industry more than is rationally justified.*

It is difficult to know how much the perceived glamour of the motor vehicle industry affects travel behavior. It has probably increased vehicle production and therefore vehicle ownership and use than is economically optimal.

**Summary**

Table 1 summarizes the positional value categories identified in this paper and their transport impacts. Although these impacts may individually seem modest, stimulating vehicle travel just a few percent, their effects are cumulative. Their total travel impacts are probably moderate to large, increasing per capita vehicle ownership 5-15%, and vehicle travel 10-30% in the short term, and more over the long-term, compared with what would occur if motor vehicle travel were not considered prestigious and alternative modes were not stigmatized.

**Table 1 Summary of Positional Value Travel Impacts**

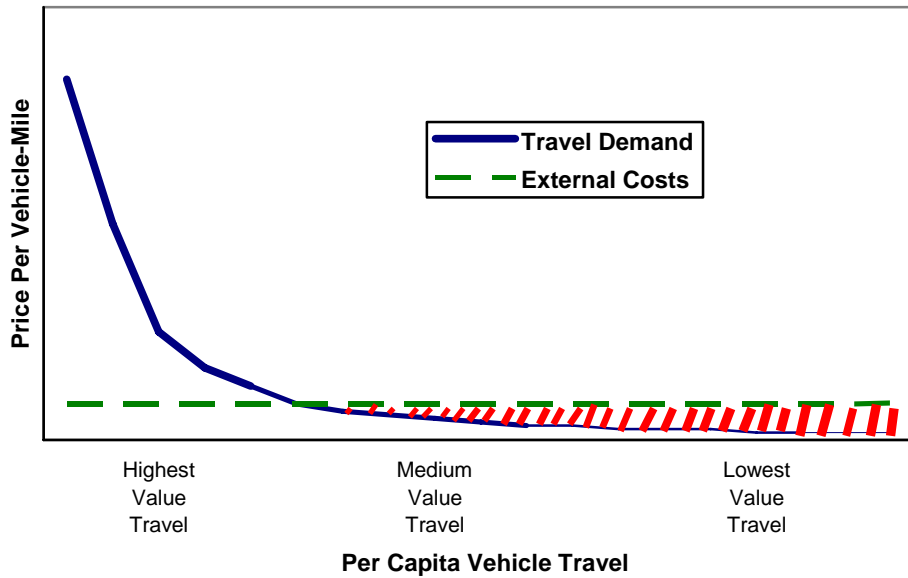
Category	Description	Travel Impacts
Vehicle Ownership	Households own more vehicles than functionally justified or cost effective.	Increased vehicle ownership and therefore use.
Luxury Vehicles	Motorists choose more valuable vehicles.	Increases vehicle costs. Stimulates some additional vehicle travel.
Mode Choice	Alternative modes (such as walking, cycling, ridesharing and public transit) are stigmatized relative to driving.	Reduces use of alternative modes, and over the long term reduces their quantity and quality, increasing automobile travel.
Long-Distance Recreational Travel	Encourages consumers to choose more distant holiday travel destinations.	Increased long-distance holiday travel.
Planning Practices	Planners and public officials favor automobile and air travel.	Increases investment in automobile and air travel, and reduces the quality of alternatives.
Industrial Policy	Public officials favor motor vehicle industries more than economically justified.	Increases automobile ownership and use.

*This table summarizes the categories of prestige value travel impacts.*

This conclusion is supported by the significantly higher rates of automobile travel in communities where walking and transit are stigmatized compared with equally wealthy communities where walking and transit travel are respected. For example, in most U.S. cities 80-90% of trips are made by automobile, compared with 40-60% of trips in wealthy European cities. Although it is difficult to separate out the specific factors that affect travel, such as fuel prices and transit service quality, the relative levels of prestige of different modes by public officials and consumers is undoubtedly an important factor.

Travel demand has a long tail, meaning that if the price (perceived user costs) decline consumers will increase their mobility, as illustrated in Figure 11, in part due to competition for status. For example, if financial and time costs were low enough, Los Angeles residents would travel to New York for dinner, London for a show, and return home to sleep in their own bed, in part so they can brag about their worldliness, and avoid embarrassment if their neighbors brag about making such trips. The additional travel provides minimal user benefit, because it consists of low value travel that consumers will only take if their costs are low enough and forego if their costs increase.

**Figure 11 Travel Demand Curve**



*The demand curve for mobility has a long tail: as prices decline mileage increases even if the additional travel provides small incremental benefits and imposes significant external costs. As a result, an increasing portion of travel has negative social value (total benefits are less than total costs, including energy and environmental externalities), indicated by the red shaded area.*

This increase in vehicle travel imposes various costs on society and increases various transportation problems (Litman, 2006):

- Traffic congestion.
- Road and parking facility costs.
- Traffic accidents.
- Energy consumption
- Pollution emissions
- Dispersed, urban-fringe development (sprawl).
- Reduced mobility options for non-drivers.
- Reduced fitness and health.
- Tourism impacts on traditional societies and natural features.

As a result, the additional travel stimulated by prestige value can have negative net benefit, that is, its incremental costs are greater than its incremental benefits. In addition to being economically inefficient, motorized transport positional value tends to be inequitable, by reducing the status of physically, economically and socially disadvantaged people who rely on lower status modes. In particular, it reduces the quality of walking, cycling and public transit transport, and stigmatizes them, further reducing the status of disadvantaged people.

Described more positively, increasing the status of efficient transportation options such as walking, cycling, ridesharing and public transit can help reduce problems such as traffic congestion, accidents, energy dependence and transportation inequity. This suggests that marketing solutions may be as important as engineering improvements in solving future transportation problems.

## **Possible Offsetting Benefits**

It could be argued that positional value provides social benefits that offset their costs. Prestige value motivates consumers to earn more money, and so stimulates education, employment and economic productivity. However, this is not unique to transport, and there is little evidence that transport prestige value is better at motivating productivity gains than other goods, such as attractive homes and new electronics. To the degree that prestige mobility imposes more external costs per dollar than other prestige goods (which appears to be true: although many goods impose external costs during production, motorized transport also imposes external costs during use, including congestion, road and parking facility costs, accidents and pollution), it is wasteful to encourage or even accommodate such activities.

Prestige value stimulates technological innovation and industrial development. There is little doubt that demand for prestige products encourages motor vehicle manufactures to innovate. During certain time periods in certain regions, motor vehicle production helped stimulate industrial development, but the global vehicle industry is now experiencing overcapacity, making vehicle manufacturing relatively unprofitable while other industries, such as electronics and software development, now provide greater innovation returns on investments.

Prestige value also stimulates total resource consumption. To the degree that a healthy economy needs overall consumption to be stimulated (an assumption of Keynesian economics), prestige-stimulated mobility can be considered an ideal strategy since it has almost unlimited potential to consume. However, since motor vehicle travel imposes significant external costs, increasing its consumption is less desirable than increasing consumption of other goods that have fewer external costs and greater external benefits. For example, society would probably be better off if households compete for status based on their education achievement, the beauty of their gardens, or their community contributions than the value of their vehicles.

It is possible that other forms of transport may become more prestigious, reducing or even reversing biases favoring motor vehicle travel and sprawl. For example, some social groups consider bicycle commuting prestigious, and some communities (particularly large cities with well-established rail transit systems) have no stigma associated with transit travel. In recent years, popular culture, as expressed in films and television shows, has glamorized urban lifestyles, at least for young professionals and retirees. However, these are exceptions, and are generally overwhelmed by biases favoring motorized transport. Much greater shifts will be needed before transport decisions could be considered unbiased, efficient and equitable.

## **Implications for Planning**

Prestige value has significant implications for transport and land use planning. It reduces net benefits of some mobility activities (particularly automobile and air travel), increases transport problems, and makes travel demand virtually unlimited. Although it is difficult to quantify the total effects of positional value on mobility, the direction of impacts is clear: It erodes the net welfare gain of increased vehicle use and increases external costs. Trying to satisfy the additional mobility demand stimulated by prestige value is economically inefficient and unfair to people who rely on alternative modes, and so are worse off with increased automobile dependency.

Good public policy favors necessities over luxuries (Kemp, 1998), and so should favor basic mobility (transport activity considered socially valuable) over less important transport activity (“Basic Mobility,” VTPI, 2006). This need not require strict regulations or rationing; it may simply involve modest changes in planning and pricing practices to favor alternative modes and test consumer demand for luxury mobility (Litman, 2005).

Increased motor vehicle ownership and mobility may provide indirect benefits by supporting particular industries and innovations. However, this reduces development of other industries and their innovations. To the degree that consumers truly enjoy mobility intense goods and activities and are willing to pay their full costs, there is no reason to constrain them. However, there is no reason to favor mobility intense industries and goods over other, or to underprice such goods relative to their full costs.

Below are specific examples of public policy strategies to reduce the negative effects of transport prestige value (Sally Cairns, et al, 2004; VTPI, 2006).

- Favor basic, functional mobility over luxury mobility in transport planning and pricing.
- Avoid letting prestige value bias planning decisions to favor automobile and air travel to the detriment of alternative modes such as walking, cycling and public transit. Review current transport planning and funding practices to identify and correct unintended biases.
- Apply luxury taxes, road pricing and emission fees to internalize external costs and capture some of the value that would otherwise be lost through competition.
- Use positional value in marketing to help achieve transport planning objectives (“TDM Marketing,” VTPI, 2006). For example, it may be important to insure that public transit planning responds to consumer preferences, and that such services are well marketed.
- It may be appropriate to enhance the status of public transit by implementing urban rail rather than bus transit, and providing more attractive and comfortable stations and vehicles.
- Promote nonmotorized modes as part of a desirable lifestyle.
- Promote walkable, mixed-use, transit-oriented communities as desirable places to live, and an automobile-dependent community as outdated and unsophisticated.

## **Conclusions**

Positional goods confer status on their users, but this benefit is offset by reduced status to others, resulting in little or no net benefit to society. If the additional consumption stimulated by prestige value imposes external costs it can make society worse off overall. This is an economic trap through which resources are wasted. As society becomes wealthier an increasing portion of consumption reflects positional value.

Positional value significantly affects transport activity. It increases demand for more costly, faster, resource-intensive modes at the expense of cheaper, slower, more resource-efficient modes. This increases per capita vehicle ownership and travel, reduces use of alternative modes, stimulates sprawl, and encourages more distant holiday destinations. Total impacts are significant, probably increasing vehicle travel by 10-30% in the short term and more over the long term. This increases direct costs to consumers and external costs such as congestion, accident and pollution imposed on others.

This has several implications for transport policy and planning. It means that functional travel demand (the level of mobility that provides physical benefits) is significantly lower than what is reflected by consumer behavior; that a significant and growing portion of transport activity provides negative net social benefit; and that efforts to satisfy prestige-stimulated transport demand is both futile and economically harmful. It means that the benefits of increased mobility from an individual's perspective are much greater than the net benefits from society's perspective. It is important that decision makers understand these impacts and take them into account in transport policy and planning analysis.

Positional value means that individual-level demand analysis will overstate aggregate welfare gains since a portion of benefits to individual consumers (those who consume more mobility) are offset by welfare losses to others. This is in addition to the impacts of other, more commonly recognized externalities such as congestion and pollution.

Prestige value may provide indirect benefits by supporting certain industries and innovation but there is no evidence that mobility-related industries should be favored over others or that consumption of mobility stimulates more innovation than other goods.

Economics is concerned with maximizing social welfare, that is, total human happiness. Sustainability requires limiting resource consumption to accommodate ecological and social constraints. Sustainable economics therefore requires maximizing the efficiency with which resource consumption provides happiness. Positional goods contradict this by reducing the social welfare gain provided by the consumption of resources such as a gallon of fuel and travel time. Positional value therefore tends to reduce sustainability.

This is a relatively new research subject. Although previous authors have explored the general impacts of positional value on social welfare there has been little analysis regarding its impacts on transport. More research is justified to better understand how prestige value affects travel behavior and transport economic, and how policies that affect the status of mobility-related goods can be structured to support planning objectives.

## References

ADONIS (1998), *Analysis And Development Of New Insight Into Substitution Of Short Car Trips By Cycling And Walking*, Transport Research, Fourth Framework Programme Urban Transport ([www.vejdirektoratet.dk/dokument.asp?page=document&objno=7134](http://www.vejdirektoratet.dk/dokument.asp?page=document&objno=7134)), European Commission; summary at [www.staffs.ac.uk/schools/sciences/geography/cast/walk21/papThorson.html](http://www.staffs.ac.uk/schools/sciences/geography/cast/walk21/papThorson.html).

BLS (Annual reports), *2000 Consumer Expenditure Survey*, Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)).

Sally Cairns, et al (2004), *Smarter Choices - Changing the Way We Travel*, UK Department for Transport ([www.dft.gov.uk](http://www.dft.gov.uk)).

Fredrik Carlsson, Olof Johansson-Stenman and Peter Martinsson (2003), *Do You Enjoy Having More Than Others? Survey Evidence of Positional Goods*, Working Papers in Economics No. 100 ([www.handels.gu.se/epc/archive/00002855/01/gunwpe0100.pdf](http://www.handels.gu.se/epc/archive/00002855/01/gunwpe0100.pdf)).

Marco Diana (2005), *The Relationship Between the Specific (Dis)Utility and the Frequency of Driving a Car*, TRB 84th Annual Meeting ([www.trb.org](http://www.trb.org)).

Ed Diener and Martin E.P. Seligman (2004), "Beyond Money: Toward an Economy of Well-Being," *Psychological Science in the Public Interest* ([www.blackwell-synergy.com](http://www.blackwell-synergy.com)), Vol. 5 Is. 1, July 2004, pp. 1-31.

R. Diekstra and M. Kroon (1997), "Cars and Behaviour: Psychological Barriers to Car Restraint and Sustainable Urban Transport," in Tolley (ed.), *The Greening of Urban Transport*, Wiley ([www.wiley.com](http://www.wiley.com)).

Paul Dolan, Tessa Peasgood and Mathew White (2006), *Review Of Research On The Influences On Personal Well-Being And Application To Policy Making*, Department for Environment, Food and Rural Affairs ([www.defra.gov.uk](http://www.defra.gov.uk)); available at [www.defra.gov.uk/science/Project\\_Data/DocumentLibrary/SD12005/SD12005\\_4017\\_FRP.pdf](http://www.defra.gov.uk/science/Project_Data/DocumentLibrary/SD12005/SD12005_4017_FRP.pdf).

Rosaleen Duffy (2002), *A Trip Too Far: Ecotourism, Politics And Exploitation*, Earthscan Publication ([www.earthscan.co.uk](http://www.earthscan.co.uk)).

Gregg Easterbrook (2003), *The Progress Paradox: How Life Gets Better While People Feel Worse*, Random House ([www.randomhouse.com](http://www.randomhouse.com)).

EC (2002), *EU Energy and Transport In Figures*, European Commission (<http://europa.eu.int>).

The Economist (2006), "Happiness (And How To Measure It)" and "Economics Discovers Its Feeling," *The Economist* ([www.economist.com](http://www.economist.com)), 23 December 2006, p. 13, pp. 33-35; available at [www.financialexpress.com/fe\\_full\\_story.php?content\\_id=149562](http://www.financialexpress.com/fe_full_story.php?content_id=149562).

Robert Frank (1999), *Luxury Fever*, Free Press ([www.johnson.cornell.edu/faculty/profiles/frank](http://www.johnson.cornell.edu/faculty/profiles/frank)).

John Kenneth Galbraith (1958), *The Affluent Society*, New American Library (Boston).

- Robert H. Frank (2005), *Positional Externalities Cause Large and Preventable Welfare Losses*, American Economic Association Annual Meeting ([www.aeaweb.org/annual\\_mtg\\_papers/2005/0108\\_1015\\_0601.pdf](http://www.aeaweb.org/annual_mtg_papers/2005/0108_1015_0601.pdf)).
- Fred Hirsch (1976), *Social Limits to Growth*, Harvard University Press (Cambridge).
- William Jaeger (1995), "Is Sustainability Optimal?" in *Ecological Economics*, Vol. 15, No 1. Oct. 1995, pp. 51.
- Simon Kemp (1998), "Perceiving Luxury and Necessity," *Journal of Economic Psychology*, Vol. 19, pp. 591-606.
- Robert Lane (2000), *The Loss of Happiness in Market Democracies*, Yale ISPS Series.
- Todd Litman (2005), *Win-Win Transportation Solutions*, Victoria Transport Policy Institute ([www.vtpi.org](http://www.vtpi.org)); available at [www.vtpi.org/winwin.pdf](http://www.vtpi.org/winwin.pdf).
- Todd Litman (2006), *Transportation Cost and Benefit Analysis*, Victoria Transport Policy Institute ([www.vtpi.org](http://www.vtpi.org)).
- Todd Litman (2007), *Where We Want To Be: Household Location Preferences And Their Implications For Smart Growth*, Victoria Transport Policy Institute ([www.vtpi.org](http://www.vtpi.org)).
- NAR and NAHB (2002), *Joint Survey: Survey Suggests Market-Based Vision of Smart Growth*, National Association of Realtors & National Association of Home Builders ([www.realtor.org/SG3.nsf/Pages/NARNHAB02Survey?OpenDocument](http://www.realtor.org/SG3.nsf/Pages/NARNHAB02Survey?OpenDocument)).
- Patricia Mokhtarian and Ilan Salomon (2001), "How Derived is the Demand for Travel? Some Conceptual and Measurement Consideration" *Transportation Research A*, Vol. 35, No. 8 ([www.elsevier.com/locate/tra](http://www.elsevier.com/locate/tra)), September 2001, pp. 695-719.
- Patricia L. Mokhtarian, Editor (2005), *The Positive Utility of Travel: Transportation Research - Special Issue*, Vol. 39A, Issues 2-3, February/March 2005.
- David T. Ory and Patricia L. Mokhtarian (2005), "When Is Getting There Half The Fun? Modeling The Liking For Travel," *Transportation Research A*, Vol. 39, pp. 97-123.
- David Osmon (1998), "Progressive Indirect Tax: A Graduated Car Sales Tax – The Perfect Green Measure," *New Economy*, Vol. 5, No. 2, pp. 123-126.
- Redefining Progress* (2006) ([www.rprogress.org](http://www.rprogress.org)) is a research institute studying practical ways to evaluate progress toward sustainability.
- Jens Schade, *The Acceptability of Travel Demand Management Measures*, research project by *Traffic and Transportation Psychology* ([www.verkehrpsychologie-dresden.de](http://www.verkehrpsychologie-dresden.de)) at Dresden University of Technology.
- Tibor Scitovsky (1976), *The Joyless Economy: The Psychology of Human Satisfaction*, Oxford University Press ([http://en.wikipedia.org/wiki/Tibor\\_Scitovsky](http://en.wikipedia.org/wiki/Tibor_Scitovsky)).

## Mobility As A Positional Good

Dennis Soron (2006), *Driven to Drive: Cars and the Problem of 'Compulsory Consumption'*, AutoConsequences: Automobiliation and its Social Implications, 6 October 2006, Vancouver, Canada, Simon Fraser University Traffic Safety Project ([www.sfu.ca/traffic-safety/events.html](http://www.sfu.ca/traffic-safety/events.html)).

E.M. Steg, et al (1998), *Affective Motives for Car Use; Extensive Summary*, Centre for Environmental and Traffic Psychology, University of Groningen, The Netherlands.

Linda Steg (2005), "Car Use: Lust And Must. Instrumental, Symbolic And Affective Motives For Car Use," *Transportation Research A*, Vol. 39 ([www.elsevier.com/locate/tra](http://www.elsevier.com/locate/tra)), pp. 147–162.

John Stutz (2006), *The Role of Well-being in a Great Transition*, GTI Paper Series No. 10, Tellus Institute ([www.gtinitiative.org/documents/PDFFINALS/10WellBeing.pdf](http://www.gtinitiative.org/documents/PDFFINALS/10WellBeing.pdf)).

*TravelSmart* ([www.travelsmart.vic.gov.au](http://www.travelsmart.vic.gov.au)).

Thorstein Veblen (1899), *Theory of the Leisure Class*, Macmillan ([www.gutenberg.org/etext/833](http://www.gutenberg.org/etext/833)); summary at [http://en.wikipedia.org/wiki/The\\_Theory\\_of\\_the\\_Leisure\\_Class](http://en.wikipedia.org/wiki/The_Theory_of_the_Leisure_Class)).

TRB (1997), Committee for a Study on Transportation and a Sustainable Environment, *Toward A Sustainable Future*, National Academy Press ([www.trb.org](http://www.trb.org)).

Erik T. Verhoef and Bert van Wee (2000), "Car Ownership and Status: Implications for Fuel Efficiency Policies from the Viewpoint of Theories of Happiness and Welfare Economics," *European Journal of Transport and Infrastructure Research*, Vol. 0, Is. 0 ([http://ejtir.tudelft.nl/issues/2000\\_00/pdf/2000\\_03.pdf](http://ejtir.tudelft.nl/issues/2000_00/pdf/2000_03.pdf)), pp. 41-56.

VTPI (2006), *Online TDM Encyclopedia*, Victoria Transport Policy Institute ([www.vtppi.org](http://www.vtppi.org)).

Wikipedia (2006), "Positional Goods," *Wikipedia* ([http://en.wikipedia.org/wiki/Positional\\_good](http://en.wikipedia.org/wiki/Positional_good)).