

Marketing Theory and Urban Transportation Policy

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A popular theme in urban transportation policy is transportation demand management, or TDM. This policy is in response to years of trying to solve urban travel problems by increasing the supply (e.g., roads) to meet an ever-accelerating demand. As evidenced by the congestion and pollution problems in today's cities, the "supply" policy is not working. TDM focuses on managing and changing travel demand patterns. Increasing the use of mass transit, encouraging housing selection that is closer to work, making it easier to work at home on a personal computer, facilitating vanpools, and developing electronic shopping options are all TDM strategies. TDM, if anything, involves changing consumer behavior in regard to travel and travel-related choices. Three conceptual and theoretical perspectives in marketing are outlined (services marketing, cultural aspects of consumption, and reinforcement theory), and suggestions are made for significantly enhancing this task.

The intent of urban transportation policy in the United States has changed significantly during the past century. Initially, policy was focused on providing for both the mode of choice and mobility levels desired. Such a position led to economic and construction decisions that favored the private automobile. This orientation lasted until the energy shortfalls of the 1970s. In these years, policy was modified to conserve fuel. Curtailed speed limits, investments in mass transit systems, creation of federal programs and funds to support paratransit (car- and vanpools), the designation of high-occupancy vehicle (HOV) lanes, and the development of requirements for vehicle miles per gallon (CAFE) were the result.

As the 1980s began and the fuel shortages lessened, policy once again favored the private automobile, although in a different way. It did not favor the car in the central city, and the road infrastructure was not changed (i.e., there was not a new emphasis on urban road building). Policy, however, did not favor the funding of mass transit, paratransit, and intercity rail efforts. Policy developed in areas other than transportation that directly or indirectly encouraged automobile use. For example, tax policy stimulated real estate development that in large part focused on the available land: the suburbs. This fast and sprawling growth could, for the most part, be served only by private automobile. Additional favoritism was given to the automobile industry by endeavors such as the loan to the Chrysler Corporation and the general climate of the Reagan administration of reducing barriers to the private sector and encouraging economic development.

These policies were in effect at a time when the large "bubble" of the population in the United States, the baby boomers,

were forming families. They had a great need for expanded and affordable housing and more transportation because of dual careers and sprawled residential and office development. The combination of the direct and indirect urban transportation policies of the 1980s paired with the changing demographic character of the population led to a situation at the start of the 1990s in which congestion levels on many of the roads of major metropolitan areas in the United States were intolerable.

Because of the overriding concern over congestion (and its impact on economic issues, quality of life, and other environmental concerns), a policy thrust evolved for the 1990s that is characterized by the phrase transportation demand management, or TDM (1). Historically, shortfalls in transportation supply-demand functions were met by altering the supply: more cars, roads, bridges, and parking lots were built, for example. But today, many urban policy makers realize that they cannot continue to meet demand by manipulating supply; demand must be managed.

It is the premise of this paper that marketing theory offers an excellent perspective from which to conceptualize and refine TDM policy and to develop implementation programs. By its definition, TDM is a management approach to demand modulation. If anything, marketing is a field that deals with demand issues. Furthermore, TDM implies a focus on consumer behavior. Certainly this is another well-known domain of marketing. Finally, TDM commonly involves changes in what is traditionally called the marketing mix: the service (or product), pricing, distribution, and promotion. The links between marketing and TDM are obvious. The bulk of this paper will attempt to illustrate how three theories in marketing have the potential to contribute significantly to urban transportation policy and to the task of TDM.

THREE THEORETICAL MARKETING PERSPECTIVES AND THEIR CONTRIBUTION TO URBAN TRANSPORTATION POLICY

Three domains of marketing theory have been chosen to address urban transportation policy and TDM: services marketing, the cultural aspects of consumption, and reinforcement theory. Other areas of marketing theory are relevant, but as will be apparent in the following, these three are particularly salient to the urban transportation context. An exhaustive review of the individual significance of these three areas to urban transportation policy and practice is not possible in the context of this paper. A broad approach is taken here simply to introduce their respective

contributions, and it is left to further endeavors to explore more fully the relevance of these theoretical perspectives to urban transportation.

Services Marketing

A growing and substantive body of theory and empirical findings is developing in services marketing. Another indicator of the growth of this area is the creation of services marketing courses at many universities and the development of services marketing texts (2,3). To date, this literature has had little application to transportation policy and issues. In the context of urban transportation, a services marketing approach is appropriate because many urban travel modes could be characterized more as a service than a product [see elsewhere (4) for service definitions]. Taxis, van- and carpools, and mass transit certainly fit this definition. HOV lanes, roads and bridges in general, parking garages, and pedestrian and bicycle facilities are certainly "equipment-intensive," but consumers do not buy them—they use them. Finally, the private automobile, in large part, is both a service and a product—a product that is purchased as a result of the decision-making processes used in goods selection, but simultaneously a service that is also judged in much the same way as many other services.

Once it is agreed that urban transportation systems are for the most part services, what can the services marketing literature tell us about urban transportation policy in general and TDM in particular? Of the growing literature on services marketing, some of the issues more relevant to urban transportation policy will be discussed briefly.

First, if a goal is to change demand for mass transit, for example, it must be kept in mind that such a service has many intangible elements in contrast to many products (5). As such, the services literature [e.g., the work by Berry (5)] suggests that marketing efforts should focus on making the offering tangible. Marketing emphasis might be placed on the physical and tangible aspects of public transportation such as the waiting areas (bus stops and subway stations) and the seats in the vehicles and not on efforts that focus on intangibles such as the ease of the trip and its convenience.

Position in the marketplace is very important for all product and service companies. It is probably more critical to service companies because of the intangibility of their offerings. Because it is harder for many consumers to conceptualize or fully understand a service, it is particularly important for the service provider to clarify, as much as possible, the service by careful and explicit positioning (2). The lack of a clear position is certainly a problem for many mass transit systems in the United States. When many of the private systems failed in the 1950s and 1960s (6), the major rationale for the public purchase of them was to provide urban transportation for those without cars (the young, the handicapped, the poor, and the elderly). Yet in certain cities or for certain commuting routes, the clientele is upper middle class. This ambiguity in market position creates a problem when the task of the 1990s is to attract more car-driving commuters to mass transit because of congestion.

The services literature also points out that in many cases production and consumption of a service is simultaneous (2).

For example, a taxi ride is produced and consumed at the same time. This leads to a situation in which quality is hard to control. Inferior products on an assembly line can be eliminated or fixed before the customer comes into contact with them. The provider of a service and the customer often learn that a service is inferior only after it is delivered. This is true in many urban travel situations. Commuting to work on an urban expressway can result in an enjoyable or a disastrous experience that can be categorized only after the event. Services marketing perspectives suggest that the way to deal with this lack of "quality assurance" is to emphasize the training and consistency of the service personnel (e.g., bus drivers) and to develop early warning systems for consumers that advise them of decays in service quality (e.g., the radio station traffic advisory systems in most major cities).

A third perspective put forth by services marketing literature that is relevant to urban transportation policy and TDM focuses on inventory management. A product-oriented business can protect itself against problems of supply shortfall during periods of high demand by having a backup inventory. In many services, however, an inventory is impossible. It is difficult to store extra road capacity on the shelf or spare subways and crews or taxis and drivers. Even if they can be held in abeyance, it is very expensive to do so, especially when they are used only for a relatively short period of time during peak hours. If the spare capacity is not used often (or ever), it is very costly. In contrast, extra products held on inventory are eventually sold and thus do not incur significant financial loss.

Thus, in a service business, where excess capacity is very expensive, an emphasis on demand management is appropriate (7). It is logical, for example, to try to get consumers to use highway and mass transit facilities during the off-peak hours rather than building extra capacity for the peak. Although they have not been very successful, attempts have been made to shift the peak of transit use through pricing strategies. Little has been tried in regard to pricing manipulations for highway demand management. Strategies have focused on getting employers to shift their work days (e.g., flex time and staggered work hours). Other than pricing, most of the marketing suggestions for shifting peak demand revolve around communication techniques (public information, publicity, and advertising).

The services literature suggests another perspective, which involves the inventorying of demand (2). In other words, save demand until there is excess capacity. Airlines do this by establishing a reservation system. Public transit does it by storing the demand in waiting lines. It might be interesting to inventory demand overtly for other urban transportation systems by establishing a reservation system for road use or parking facilities, for example.

In many urban transportation systems, another services marketing perspective is particularly important. For many services, part of the service includes the other customers receiving that service. This is particularly true of restaurants, sporting events, and certainly mass transit. The provider of transit service can provide comfortable seats in an on-time and clean vehicle, but they have little control over the nature of the customers sharing the ride. The issue of customer mix is dealt with in other situations by dress codes, first- and second-class service (and appropriate pricing), physical bar-

riers, advance notification as to the type of clientele desired, and other techniques. The private automobile is the ultimate means of controlling the customer mix in the urban transportation system. It might behoove other modes of urban travel to consider how they might manage their customer mix so that their service is more appealing. Different classes of service with differential pricing, clear distinctions between the types of service offered, and appropriate physical separation between purchasers of different levels of service might be considered for public transportation.

Zeithmal has pointed out that services are often evaluated differently than products (8). Often services cannot be judged until after they are experienced or only by the testimonials of others, whereas many products can be judged before their use through observation. The different ways of gaining information about a service yield evaluation processes for services that are different than those for products. Of Zeithmal's 11 hypotheses about service evaluation, 5 are particularly relevant to urban transportation policy. They are listed here and followed by remarks on their implications to policy and TDM strategies:

- *Consumers seek and rely more on information from personal sources than from nonpersonal sources when evaluating services before purchase.* This hypothesis is strongly supported by the popularity of telephone information systems for mass transit and by the high use of vehicle operators as information sources. If personal information sources are so popular for urban transportation, they should be enhanced and even include the formalization of using current customers as information sources.

- *Consumers use price and physical facilities as the major cues to service quality.* This hypothesis certainly causes problems for mass transit. Prices are typically held low so that transportation-deprived segments of the population can use the service and the physical facilities are at best spartan, and certainly not often clean. If other market positions and segments are desirable for mass transit, the prices and facilities must yield the appropriate cues to these potential customers. This hypothesis might be expanded to include service personnel as indicators of service quality. Other writers note the importance of the service delivery personnel in customer relations (2). These people are not simply in the "factory" producing the service, but a factory that is highly visible to the consumer.

- *The consumer's evoked set of alternatives is smaller with services than with products.* A typical solution to an urban dweller's travel problems is to buy another car. Little thought is given to alternatives such as mass transit, working at home, relocating one's residence, and so forth. It is the task of TDM marketing strategies to clearly inform consumers of their travel options.

- *For many nonprofessional services, the consumer's evoked set frequently includes self-provision of the service.* The option of driving one's own car is an urban travel choice easily made. Marketing efforts must clearly communicate the consequences of various travel options to the travel consumer so that the most obvious choice—"I'll drive myself"—is not always made.

- *Consumers adopt innovation in services more slowly than they adopt innovations in goods.* Once an urban travel mode

is chosen, the decision is not often reassessed, given the continuation of benefits from the mode selected. Urban travel policy makers and TDM marketing strategists should make sure that benefits for desirable modes of travel are apparent, significant, and continuing. Such an orientation will help ensure that the potential for mode shifts is optimized (when resistance to changing services is high) and that current customers are maintained. Marketers might also consider slowly changing behavior from one mode to another. If consumers are resistant to changing services, it is probably also true that changes of a greater degree (e.g., from being the single occupant of a car to being a transit rider) are harder to obtain than ones of a smaller magnitude (e.g., from being the single occupant of a car to being a member of a carpool).

As discussed in the first part of this section on services marketing, the "intangibility" of a service often poses a marketing problem. Another problem in services marketing (and, to a lesser degree, in product marketing) is customer retention. Both intangibility and retention argue for the creation of a "membership" organization when marketing a service (9) such as an urban travel option. Membership symbols such as wallet cards, special waiting rooms, automatic billing, phone hot lines, and so forth help to make a transportation service more tangible. Frequent patronage by members could also yield discounts, which along with the other tangibles of membership can help retain current customers.

Finally, the services literature talks about the inherent benefits of service customization versus standardization (9). Customization may yield exactly what is needed for a particular customer. Good examples are found in law, medicine, and architecture. In urban transportation, the private car or taxi service yields a high degree of customization. The benefits of individually tailoring a service to a customer are obvious, but the negative aspects are not. High customization often yields a degree of uncertainty about the final outcome of the service (e.g., the results of some legal work, architectural design services, or surgery).

Service marketing literature suggests a tempering of these two customization extremes. Some customization should be brought to the mass transit experience, for example, and some degree of predictability should be brought to the highly customized service. As for the latter, the provider of a customized service could break its offering into two components, one predictable and one less so. For example, a doctor may do a clinical analysis for a fixed fee with known outputs (e.g., a blood pressure test) and then embark on the less predictable (e.g., an operation). Providers of a paratransit service might consider clearly communicating the arrival times at fixed locations on a route while leaving the specific arrival times of customized door-to-door service less specified. On the other end of the continuum, providers of mass transit might try customizing their services by doing such things as individual billings for customers and personalized communications and travel counseling.

This has been a brief overview of several aspects of services marketing and its implications for urban transportation policy and TDM. What follows is the application of another area of marketing theory to urban transportation policy—the cultural aspects of consumption.

Cultural Perspectives on Consumption

At the heart of TDM is the notion that people's travel behavior can be changed. However, many are skeptical about the prospects for achieving substantial changes in travel behavior, especially when consumers show such a strong and steadily growing preference for the automobile (1). In fact, the *Nationwide Personal Transportation Study* (10), based on national samples of several thousand households, showed that the proportion of households not owning automobiles has dropped steadily, from 20.6 percent in 1969 to 15.3 percent in 1977 and 13.5 percent in 1983. Americans made 3.6 percent of their trips on public transit in 1969, and that share declined to 3.0 in 1977 and only 2.6 percent in 1983 (11). If the task is to manage and change travel behavior, a first step is to understand the cause of current behavior. In his book *Culture and Consumption*, McCracken presents several insights from a historic and cultural perspective that might enhance the understanding of contemporary urban travel behavior and yield valuable insight for transportation policy and TDM strategies (12).

Consumer goods play a significant role in Western cultures, well beyond their utilitarian and commercial value. Their significance consists largely in their ability to carry and communicate cultural meaning (12). According to McCracken, the original location of meaning resides in the "culturally constituted world" and is transferred from this world to consumer goods and finally to the individual consumers that possess these goods.

Through their ability to communicate, goods give a visible record to cultural meaning that would otherwise be intangible. They help consumers construct their lives, giving their lives concreteness and allowing the consumers to convey meaning to others. One of the most important messages communicated by consumer goods is that of status. In the past, according to McCracken, the status of individuals was communicated by the age of their possessions. As McCracken would say, patina is this visual proof of age, and it consists of the dents, chips, and surface wear of objects. Historically, patina was a means for families to legitimize their claims of long-standing status. Patina served as their visual proof of status (12).

Today, a quite different phenomenon is at work. Consumer goods still serve as communicators of status, but instead of legitimizing the long-standing status of a family, they are able to legitimize the immediate status of an individual. Goods do not have to be in a family's possession for several generations to verify status, but through immediate purchase and use they can help individuals claim status. For example, the ownership of a BMW automobile, a Rolex watch, and Burberry apparel shows that one belongs to a given social niche.

Current travel can be examined as to how it communicates status and thus help explain this behavior. Automobiles are one of the prime means through which individuals in Western societies communicate status. Clothing, housing, and automobiles are all acquired as a "second skin" in which others may see us (13). Cars are visual proof of the styles of life that people lead. They symbolize all that is the American spirit. They epitomize the sense of freedom and independence. As it is so well said in a popular television commercial, "It's not just a car: it's your freedom!" If automobiles allow individuals to communicate their levels of status and sense of freedom

and independence, what does the use of public transportation communicate? Currently, transit users are seen as lower-class, inner-city workers who lack the resources to own and operate automobiles. Buses, subways, carpools, vanpools, and other high-occupancy modes of transportation are seen as inconvenient to our free and easy lives. They do not tell others of the successes in one's life, but instead signal financial problems, handicaps, and other restrictions.

None of these ideas bodes well for promoting changes in current urban travel behavior. If so much status and identity is wrapped up in automobiles and current styles of travel, how can it be expected that people will change their behavior to a different mode? One aspect of the meaning of goods that has not yet been discussed is their changeable and indeterministic nature. Cultural meanings are not fixed and static but are constantly changing. According to McCracken, cultural categories have an elective quality that makes them subject to rethinking and rearrangement by the individual and other parties. If this is true, marketers can help to rethink and redefine the cultural meanings that are associated with public transportation, for example. Instead of promoting public transportation as a means of saving money, why not promote it as a means of conserving scarce resources and preserving the environment? Public transportation can then be used as a means of communicating a different status, that of a concerned and socially responsible individual.

Currently, public transportation does not reinforce status in any form. One way to begin this reinforcement is through the use of advertising. "Advertising and the fashion system move meaning from the culturally constituted world to consumer goods" (12). In essence, advertising brings together the consumer and an aspect of the culturally constituted world within the context of a particular advertisement. It is hoped that the reader of the advertisement sees a similarity between the two and attributes properties in the culturally constituted world to the consumer good. When the known properties of the cultural world come to be resident in the unknown properties of a consumer good, the transfer of meaning is said to be accomplished (14).

Although public transportation is more of a service than a good, the same idea of meaning transfer can be applied. In this case, the meaning that needs to be communicated is that the use of public transportation can provide individuals with status as do other modes of transportation, such as the automobile. This could be done by associating successful people using public transportation, in different forms of advertising. It is hoped that the viewers of such advertisements would then begin to attribute the use of public transportation to more successful and higher-status individuals.

Another perspective from McCracken that yields an explanation of current travel behavior is his history of displaced meaning. Displaced meaning consists of the cultural meaning that has been removed deliberately from the daily life of an individual and relocated in a distant cultural domain. Displaced meaning is a way for people to deal with the gap between their real and ideal worlds. Because they are not always able to live ideal lives, individuals remove these ideals from daily life and transport them to a place of safety. Consumer goods are bridges to these hopes and ideals, and consumption is one way of maintaining access to them. People are constantly striving, through consumption, to attain a por-

tion of their ideal worlds. However, when people are able to capture their ideal worlds, or a portion of them, by purchasing these symbolic objects, they immediately remove the meaning from this good and place it in another "out of reach" object. The obtained object is devalued of its meaning in favor of an unobtainable object, and thus the meaning remains displaced. "What has been long sought is swiftly devalued and the individual moves on to another bridge, so that displaced meaning can remain displaced" (12).

What implications does the theory of displaced meaning have for urban transportation policy? It is most likely that current public urban transportation is a part not of the ideal world that many are striving toward, but of the real world that they are attempting to move away from. Furthermore, in its present configuration, there is no link between any aspect of public transportation and the ideal world. The purchase of a Porsche or a Jaguar might more closely represent the ideal world in regard to transportation. Much work needs to be done to connect elements of alternatives to the private automobile to the consumer's ideal world.

A final perspective in regard to the cultural aspects of consumption is labeled the Diderot effect by McCracken. Possessions often appear to go together, and through this match, they form a consistency in the life of the user. This harmony or consistency of goods is called Diderot unity. Through this idea of Diderot unities, consumption can be seen as an interrelated phenomenon. Consumers buy groups of goods to be consistent with their own image of themselves and the image they want to convey to others. For example, someone would not want to own a Porsche and live in a trailer park; it would be inconsistent.

The Diderot effect occurs when a new good enters one's life. This new good has the power to transform a current set of goods to a totally new one. Old possessions that are inconsistent with the new "magical" object are discarded; then a whole constellation of goods that are consistent with the new object may be purchased. Although McCracken does not talk about the Diderot effect in the context of service purchases, the principle is probably still at work. An example is the matching of certain entertainment activities (e.g., the opera) with a transportation mode (e.g., a limousine) and an eating establishment (e.g., a French restaurant). Urban transportation policy makers and TDM strategists must consider the contextual implications of the Diderot effect.

Reinforcement Theory

In the early 1980s several articles proposed the merits of a reinforcement theory perspective to the study of consumer behavior (15,16). This theoretical perspective is widely researched within the field of psychology, and many applications have been made to educational, clinical, and correctional settings. Outside the original articles, little further theoretical thinking or application has been carried out within marketing in regard to reinforcement theory. However, this perspective has been developed more fully in a transportation context by Everett and Watson (17) and in a transportation-marketing context by Everett (18). Reinforcement theory is particularly appropriate for TDM because it directly deals with modifying behavior—and this is certainly the explicit goal of TDM.

The basic principles of reinforcement theory are reinforcement, punishment, contingencies, the schedule of reinforcement and punishment, and reinforcement and punishment delay. These will be discussed briefly, with comments on their relevance to urban transportation policy and TDM implications.

First, the concepts of reinforcement, punishment, and contingencies: both reinforcers and punishers follow a behavior and are contingent on it (i.e., the behavior must happen for the reinforcer or punisher to follow). Reinforcers are events that strengthen or increase the odds of future occurrence of a behavior, whereas punishers weaken behavior. As Everett and Watson have pointed out, the current urban transportation system (whether by intent or not) consists of many reinforcers for private automobile use and few punishers (17). On the other hand, alternatives to the private car (e.g., mass transit use, bicycle riding, walking, and living closer to work) yield few reinforcers and many punishers. For example, reinforcers ranging from safety to speed, stereo music, air conditioning, deferred payment systems, and prestige and status are contingent on private automobile use. Punishers contingent on transit use are many, from long travel times to filth and crime, waiting in the rain for a late vehicle, the requirement to "hunt for" exact fare, and the social degradation of being a "bus rider."

Reinforcement theory suggests a realignment of these reinforcers if it is desired to modify demand for different travel modes within the urban transportation system. Sleek, clean, dependable transit, possibly on a deferred payment system (credit cards) would be an approach in the correct direction. Punishers for car use in major urban areas could include road user fees and tolls and significantly higher parking fees (possibly even the abandoning of employer-sponsored free parking). Everett and Watson have shown the impact of pricing-based reinforcers on ridership (17). Gains of 6 to 58 percent have been realized.

Basic research and application in psychology have shown that it is not only the nature of the reinforcers or punishers that modify behavior, but also the odds of reinforcement or punishment delivery following a contingent behavior.

Deslauriers and Everett found that pricing incentives for transit use increased bus ridership to a greater degree when only one-third of the riders (on an unpredictable basis) received incentives as opposed to every rider (19). When developing marketing programs aimed at modifying transportation demand, policy makers might want to consider the differential impact of various schedules of reinforcement.

The time delay between a behavior and the delivery of a reinforcer or punisher is also a critical variable in strengthening or weakening behavior. Although researched little beyond the experimental psychology laboratory, the meaning of this concept to urban transportation demand management policy is striking. The concept is simple: those reinforcers or punishers that come more immediately after a contingent behavior have more power in changing that behavior than do those that follow later.

A quick application of the reinforcement and punishment delay concept to the urban travel scene shows that through an elaborate credit system for the purchase of cars and fuel, punishers that might be expected to reduce this travel mode are distant in time. Reinforcers for mass transit use, such as

an improved environment, are also quite delayed. The more immediate consequences for mass transit use are usually punitive, whereas most of those for private automobile use are reinforcing. Although no known application of this concept has been made in marketing or urban transportation, policy could be potentially well served if it were considered. A reduction in easy credit for automobile choices might be appropriate or an immediate and overt recognition (e.g., through media exposure) of the advancement toward improved environmental quality contingent on a company's initiation of a vanpool program. Many logical implementation programs could follow from the concept of reinforcement and punishment delay.

Although this is a quick review of reinforcement theory contributions to urban transportation, the potential for this perspective in developing policy and marketing strategies to manage demand is significant.

URBAN TRANSPORTATION POLICY RESULTING FROM INTEGRATING THREE MARKETING THEORIES

Three theoretical positions in marketing have been put forth. Under each of these areas, many comments have been made as to marketing perspectives that might contribute effectively to urban transportation policy and demand management strategies. These comments were brief, and many more could have been made as each of the theoretical areas is significant in size. However, some of the most interesting policy implications evolve from the marriage of the three theoretical perspectives. One policy implication of this marriage will be introduced here. Clearly, as was the case for each of the theoretical perspectives, much more could be said about their integration.

One of the main points running through the literature on the history of Western consumption is that the material culture is a direct avenue to status. In the terminology of reinforcement theory, consumption behavior of certain material goods is reinforced. One would assume that the further one gets from products and the less tangible a purchase becomes, the harder it might be to link status reinforcement to consumption. In other words, can consumers of a service (such as public transportation) be reinforced with status?

Status seems to be, according to the history of consumption, a major force driving consumer behavior. Present-day public transportation systems provide tangible evidence of neither consumption nor status. Clearly, the ownership of a stylish automobile addresses the problem of tangibility and reinforces status.

Urban transportation policy makers have given little thought to these important variables. Anecdotally, the history of urban transportation adoption verifies the status-reinforcing properties of transportation consumption. The wealthy were the first to have horses, then carriages, then cars. Can it be expected that current public transportation systems, which were made public so that the transportation deprived

could be served, would be desirable for those seeking status reinforcement?

The status reinforcement of the material culture is a simple yet profound result of the marriage of the three theoretical perspectives outlined in this paper. The challenge to policy makers in urban transportation is to develop an atmosphere and environment that will foster marketing strategies that reinforce consumers of environmentally relevant travel services with status.

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