



S U R F A C E T R A N S P O R T A T I O N P O L I C Y P R O J E C T

The Lure of the Underground

by Roy Kienitz
STPP Executive Director

This is the second issue of *Progress* given over entirely to transportation innovations in Europe. It comes as no surprise that they don't do transportation like we do. Attitudes among both policy makers and citizens toward land use, high speed rail, pricing, public transit, pedestrianization and bicycle usage, to name just a few, are markedly different than here. These topics are explored in greater detail in our articles.

We take the time to highlight these differences to give people here some hope that there is another way; that all our talk about the potential of transit, mixed-use development and smart growth is based firmly in real world experience. The European experience proves that a high standard of living does not require a transportation system dominated by the car. This is a choice, not a necessity.

Interestingly, a common reaction among Americans to these countries' obvious successes is to dismiss them as pre-ordained by history and geography, and therefore irrelevant to our situation. Although history and geography give them a head start, Americans commonly underestimate the effect that policy choices have had on European development patterns and travel behavior. The high rates of transit, biking and walking seen in most European countries stem from decades of investment and effort. They happened because people willed them to happen.

Whether in Germany, France, Switzerland or Britain, people who walk, bike and take transit do so because it has been made more convenient for them than driving. This becomes all the more evident when you see cities in these countries that have not, for whatever reasons, put much effort into alternatives to the car. These places have the look of the standard European city – an old downtown, narrow streets, historic buildings, dense residential neighborhoods, etc – but exhibit travel behavior more like Pittsburgh than Paris.

The struggle to give Americans the level of transportation choice available to most Europeans is a challenging one, but not hopeless. Attitudes here towards transportation have changed markedly in recent years, and communities all over the country are much more accepting of alternatives to the car than many transportation professionals thought they ever would be. The public is changing its mind, and people in the transportation business can propose policies and projects that were unthinkable even five years ago with a real chance of success.

So look out Europe, here we come!



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Smart Growth at the Ballot Box: Election Results 1999

Despite the off-year election cycle this year, voters decided on more than 60 initiatives related to transportation, development, and open space preservation; also, electoral candidates ran on smart growth platforms in several districts. While support for transportation initiatives varied, several of the most hard-fought measures passed, including the bond measure to expand Denver's regional transit network. Measures to improve transit service in San Francisco also passed, as did initiatives to develop rail corridors in Maine, and to fix aging highways and bridges in New Jersey.

Smart growth advocates expect even greater interest in ballot initiatives in the 2000 election, especially in California, Arizona, and Colorado where growth management and open space protection ballots are being considered. For information on 1999 ballot measures, visit the Sprawl Watch Clearinghouse at <http://www.sprawlwatch.org>.

FHWA Accepting TCSP Applications for 2001

The Federal Highway Administration is accepting applications for the Transportation and Community and System Preservation program's next round of funding. The deadline for the 2001 grants is 1/31. For more info, visit the TCSP website at <http://tcsp-fhwa.volpe.dot.gov/index.html>

Environmental Justice Focus In Metro And State Transportation Planning

A recent memorandum from FHWA and FTA Administrators makes clear that environmental justice (EJ) issues must be addressed in both the processes and products of metropolitan and state transportation planning and in federal planning certification to ensure compliance with Title VI of the Civil Rights Act. The memo calls for officials to perform better assessments of who wins and who loses from transportation spending plans. It also requires that state and local transportation officials make special efforts to engage and respond to the concerns and needs of minority and low income residents.

For a copy of the FHWA/FTA memo, visit: <http://www.tea21.org>.

Senate Committee Passes Highway Conformity Bill

In late September, the Senate Environment and Public Works Committee favorably reported on legislation that if passed, would reinstate the "grandfather" clause in the Clean Air Act. The legislation seeks to nullify the March 1999 court ruling overturning the practice of building road projects with federal funds in areas out of conformity with national air quality standards. The bill's future remains unclear, as it lacks bipartisan support.

Book Review... Overcoming Automobile Dependence

by Peter Newman and Jeffrey Kenworthy

In *Sustainability and Cities: Overcoming Automobile Dependence*, Peter Newman and Jeffrey Kenworthy examine and challenge America's love affair with the automobile. Comparing land use and transportation patterns in 37 metro areas around the world, the authors found that American cities are the most dependent on automobiles, while wealthy Asian cities such as Hong Kong are eight times less auto-dependent.

They also find that land use patterns, rather than low gasoline prices or incomes, are most likely to drive automobile use up; and that more compact metropolitan areas are often the most wealthy, and have the lowest levels of per capita natural resource and automobile use.

Newman and Kenworthy recommend that American cities concentrate on developing near transit-oriented lo-

Reviewed by Theresa Meeks
STPP Intern

cations and revitalizing central and inner urban areas. After decades of decline, 8 of the 10 U.S. cities studied are now showing signs of increased density in both jobs and population. In the past 5 years, the central and inner areas of U.S. cities have made a comeback, but the trend may continue as urban revitalization projects continue and the convenience of auto-free central city living is emphasized.

Sustainability and Cities: Overcoming Automobile Dependence is available from Island Press.

To order call 1-800-828-1302, or visit <http://www.islandpress.com>.

From Predict and Provide to Predict and Prevent

by **Phil Goodwin**,
Professor of Transport Policy
University College London

From the late 1950s onwards, the transport planning orthodoxy in the United Kingdom was what has been called 'predict and provide'. The axiom was: first we forecast how much traffic there will be, and then we build enough road space to accommodate it.

This was the axiom that resulted in a rapid, huge, expansion of road capacity, and produced the national network of motorways - now, we cannot imagine life in a modern economy without them. It was also the axiom that resulted in some things that we now, mostly, have come to realise were a grievous mistake, like the destruction of the heart of some of our city centres to make room for urban motorways. Here, our imagination of life without them is easier, and in many places town centres' road capacity is indeed now being reduced or closed, and the space returned to more productive use, though alas, many historic structures have gone forever.

Good or bad, the axiom's high point was, by one of the ironies of history, its final hour: the 1989 programme of road building, based on the 1989 national road traffic forecasts, called 'Roads to Prosperity.'

This was the last time when any Government transport policy tried - even partially, and with caveats and exceptions - to devise a roads programme intended to 'meet the demand.' It was launched with the greatest of fanfares, but even by the time of the launch the process which would lead to its abandonment was under way, and was, indeed, largely completed under the previous Government - this is not a party-political difference. The flaw was, the programme would not keep pace with traffic growth.

Indeed, one unchallenged study showed that even a fantasy roads programme, 50% larger than 'Roads to Prosperity,' would not keep pace with traffic growth.

Now, suppose road capacity is expanded at a rate less than traffic growth. What follows?

The consequence is a matter of arithmetic, not politics. On that trend, the ratio of vehicles per mile of road can only increase, and therefore logically congestion is likely to get worse, not better (either in intensity, or in duration, or in geographical spread, or some combination of these). Supply of road space will not - because it cannot be increased to match demand, therefore demand will have to be reduced to match supply. In practice, 'Predict-and-provide' actually meant, inevitably, 'predict-and-underprovide' and a strategy with road building at its heart would not deliver improvements in travel conditions. We called it the new realism.

In the mid-1990s, the same idea started to be extended to inter-urban roads also, especially after 1994 when the Standing Advisory Committee on Trunk Road Assessment (SACTRA) reported that road construction in conditions of congestion normally results in an increase in the total volume of traffic, hence a shorter period of relief from congestion, thereby consigning to history the untenable" assumption that the total volume of traffic is unaffected by travelling conditions. This opened the way to recognising that the volume of traffic is - in part - the result of policy, and is therefore subject to some degree of choice.

So two propositions: we cannot match the supply of road capacity to the forecast demand for it. And, that demand is not an inexorable, external, given: it is subject to influence.

Taken together, these propositions marked the change from 'self-fulfilling forecasts' to 'self-defeating forecasts'. Predict-and-provide became predict-and-prevent. This was the reason - not just a change in fashion or shortage of funds - why during the 1990s demand management has become part of the transport policy of every political

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For Further Reading

Robert Cervero, *The Transit Metropolis: A Global Inquiry*, Island Press, 1998.

Alex Marshall, "Eurospawl," *Metropolis*, January/February 1995.

Peter Newman and Jeffrey Kenworthy, *Sustainability and Cities: Overcoming Automobile Dependence*, Island Press, 1998

Pietro S. Nivola, "Fat City: Understanding American Urban Form from a Transatlantic Perspective," *Brookings Review*, Fall 1998.

Pietro S. Nivola, *Laws of the Landscape: How Policies Shape Cities in Europe and America*, Brookings Institution Press, 1999.

Tim Pharoah and Dieter Apel, *Transport Concepts in European Cities*, Avebury Studies in Green Research, 1995.

John Pucher and Christian Lefevre, *The Urban Transport Crisis in Europe and North America*, Macmillan Press, 1996

"Commuting Survey," *The Economist*, September 5, 1998.

From Predict and Provide to Predict and Prevent from page 3

party. Transport policy in principle now is nearly everywhere developing certain common themes.

The growth of traffic will have to be slowed down, and in some locations the actual traffic level will have to be reduced, or even removed.

In part that implies reversing the long-term decline in public transport. We are probably talking about an overall market for public transport which should expand at around 3% to 5% a year, sustained for thirty years, and in some locations the logic of policy suggests growth of 25% in two years, 100% in five - achieved by changing relative prices, or the re-allocation of road space, or both, and investing in new systems where the old ones cannot be sufficiently improved, and in all cases with a strong contractual commitment between public agencies and commercial operators – favourable treatment, but only in exchange for better services.

But that's only part of it. We now recognise the need to reinvent safe, attractive streets in which it is normal for children to walk or cycle to school; to reinvent the old custom of home delivery of shopping; to rediscover the role of land-use planning to reduce journey distances; to look for ways of participating in social activities that generate less traffic. The new policy tool-box includes pedestrianisation, traffic calming, traffic management aimed at maintaining a quality margin of reliability by reducing flows to significantly less than capacity; and once

again pricing is everywhere discussed, as the only tool of traffic restraint which has the double whammy of ensuring that resource costs are covered in the choices people make, and also providing the funds to pay for improvements. There is an important point about this list of policies. While the overall impact is intended to reduce the total amount of traffic, it does so by a combination of measures some of which are restrictive - (which, on their own, could hardly expect enthusiastic public support) - and others provide improvements in the quality and attractiveness of travel conditions - (which, on their own, would certainly be popular but do not result in a reduction in traffic).

Within this policy context, decisions about road capacity are quite logically at the end of the list, not the beginning - not because we shall never again see any new road capacity, which would be absurd, but because it is not possible to design a new road until it is decided what traffic load to design it for, and that now implies a policy choice, not a forecast. It can only be assessed after taking account of the combined effect of the whole policy package. The National Road Traffic Forecasts, issued in October 1997 recognised this explicitly: 'different policies will result in different forecasts' - seven words that unpack seventeen years of practice: they must, I think, displace the 1980 House of Lords ruling that the national road traffic forecasts could not be a subject of discussion or challenge at local road enquiries. And not before time.

Abridged from "Solving Congestion," the Inaugural Lecture for the Professorship of Transport Policy, University College London, 23 October 1997.

On-Line Resources

European Best Practices

International Council for Local Environmental Initiatives:
<http://www.iclei.org/europractice/research.htm>

European Local Transport Information Service
<http://www.eltis.org/>

European Academy for the Urban Environment
<http://www.eaue.de/>

Resource for Urban Design Information
<http://rudi.herts.ac.uk/>

Other Information Sources

American Public Transit Association
<http://www.apta.com/intnatl/index.htm>

Center for Clean Air Policy
<http://www.ccap.org>

Eno Transportation Foundation
<http://www.eno.com>

German Marshall Fund of the United States
<http://www.gmfus.org>

A photo-gallery and trips reports from the last three European study tours sponsored by STPP, the California Institute for Technology Exchange and the German Marshall Fund of the United States will soon be available on STPP's website: (<http://www.transact.org>). Check back in January, 2000.

Five Lessons from Europe

Reflections on the Mountain West Transportation Study Tour

Dena Belzer, Consulting Planner
Treasure Valley Partnership
Boise, Idaho

At first glance, it seems like a stretch to use European cities as transportation and land use models for cities in the Inter-Mountain West region of the U.S. Our stereotypes are that European cities are so much older and more densely developed than the auto-oriented cities of the western U.S. and that European culture is very group oriented so people are more comfortable riding transit than individualistic Americans who think driving is a birthright. Thus it would seem that the European context for making policy decisions about transit and transportation issues is vastly different from ours.

But, the good thing about stereotypes is that they are often not true. In reviewing my vast and almost illegible notes from the trip, the following points stand out.

1. Transportation is About People, not Just Vehicles. Every expert we talked to, including transit operators, transportation planners, elected officials, independent consultants and academics, stressed the need to design transportation systems based on an understanding of people's mobility-related behavior.

2. Create Transportation Choices, Not Just Roadway Capacity. The Europeans all clearly accept the basic premise that it is impossible to build your way out of congestion, since there will never be enough money or space to accommodate all of the latent demand for roadway capacity. As a result, these planners are focused on providing alternatives to driving that are equivalent in cost, time required to make the trip, convenience, and comfort so that people have real options. Cars are readily accepted as part of the overall transportation milieu, but they are never the only mobility choice.

3. All Transportation Strategies Must Be Coordinated With Each Other. Freiburg, Germany has broken its transportation system into five components: transit, bicycles, pedestrians, cars, and parking space management. No planning for one component of the system takes place without considering the impacts on other parts of the system. In addition, the city also uses both "carrots" and "sticks" to reduce traffic. The sticks include traffic calming devices and the price of parking while the primary carrot is providing good alternatives to driving including transit, pedestrian streets, bike routes and bike parking facilities.



Window-shopping in Strasbourg, France, courtesy Chris Blewett

4. More Expensive Isn't Always Better. A constant lament we hear in this country is about the high cost of transit and the fact that lack of funds is a major impediment to building efficient transit systems. Zurich, Switzerland, which has perhaps the best transit system in the world, has also been forced to be innovative in developing a very low-cost system. The city's voters kept voting for transit, but turning down the budgets for big elaborate systems. Eventually, the engineers figured out a wide range of solutions to their budget-constrained situation ranging from street-car design to managing traffic light cycles depending on traffic conditions.

5. There are Economic Benefits to Having Transportation Choices. Although none of the cities we visited had any real measures of the economic benefits of reducing traffic congestion, there were definite indications that businesses saw tangible benefits to finding alternatives to the car. For example, voters in Zurich continue to vote for closing more streets to traffic, with the businesses along these streets being the main advocates for the change. Commercial rents in downtown Zurich are also highest in areas with very limited auto access.

Final Words: Balance, Creativity, Vision, and Teamwork

Perhaps the most important lessons we learned from the Study Tour were not about specific transportation systems, but rather about the process that these places all used to address their fundamental transportation issues. In the final analysis, there was tremendous consistency in the factors people told us accounted for their successes. Everybody stressed the importance of creating a balanced transportation system so that whenever possible, people have more than one mobility choice. To provide a balanced system, planners have to work with what they've got in new and creative ways. Passionate vision makes all the difference. And while it was clear in each place we visited that one or two people were the driving force behind remarkable innovation, these visions could not have been implemented without tremendous teamwork, especially where multiple and sometimes very intricate solutions are required.

European Transportation Planning

Consistency, Desirable Challenges, and Better Quality of Life

**Chris Blewett, Director of the Planning, Policy & Development Department
County of Bernalillo, New Mexico**

A trip of this nature provides an opportunity for one who is open minded to learn many lessons. First, it was clear, time and time again that coordination and consistency were the most compelling procedural elements that lead to such investments as the Strasbourg tram and the dual mode system in Karlsruhe or the transport priorities of Bern.

In Strasbourg, France the act of implementing a tram concurrently with closing through streets in the center-city, restricting parking, and providing for park and rides is a good example of this. We saw other examples of this in Karlsruhe, Germany and Bern, Switzerland. All of these initiatives were based on referendums that the majority of voters (auto owning voters) approved. Rarely, if ever do you see public policy in the U.S. so focused and coordinated as to drive the process in such a consistent framework to achieve a desired goal.

I was also struck by the nature of the “problems” my professional counterparts in many European cities face. In Strasbourg and Karlsruhe, the tram companies did not have enough trams to adequately meet the demand, in fact they could not be produced fast enough. In Freiburg, Germany one of the most immediate problems was finding enough locations for bike parking. In several cities, there were congestion problems related to bikes and pedestrians and problems due to the high demands for these two modes. And my personal favorite, which was expressed in several of these cities, auto demand is not “de-

clining” as rapidly as predicted. In the Southwestern United States, we would be delighted to encounter such challenges.

Finally, the notion of “quality of life” has been bantered about so much in the U.S. the idea has lost meaning. In many of these cities it is so thick you can taste it. It is truly a question of scale and accessibility. The ease in which one could move around, the offerings of the street environment, and the absence of large volumes of auto traffic all play into a sense of “quality of life” that is probably taken for granted in these cities, but is difficult to express adequately in standard Southwestern land use lingo. Even from a distance, on the airplane above Strasbourg or the hotel over-looking Freiburg, it was obvious that decisions related to land consumption and use, were based on considerations that go far beyond the standard subdivision approval process.



Traffic calming in the city center of Baden-Baden, Germany, courtesy Chris Blewett.

New Thoughts from the Old World

**Judith Espinosa, Director, and
Matt Baca, Transportation Research
Programs Manager,
Alliance for Transportation Research
Albuquerque, New Mexico**

How many of us haven't driven the downtown circuit in search for the elusive “just right” parking space. Sometimes you find it beckoning to you with everything one could wish for, but more often than not, it escapes you. Most Americans have shared this experience, and, together we have at one time or another cursed the darkness and wondered why those city fathers can't put some more asphalt down and cement parking structures up.

It has taken a while, but people in the United States are

just now beginning to understand what many European policy makers found out decades ago: The process of establishing good business development in vibrant City Centers begins with a pleasant environment. And, such an environment cannot exist in head-to-head competition with the exhaust belching, horn blowing, and parking-space demanding automobile.

So, one may ask, did the Europeans ban the automobile from their City Centers? Did they ban the dependable home-away-from-home? No. Instead they experimented with a range of solutions while in search of some sort of middle ground. And, in city after city throughout Western Europe, they are finding the results they seek, and, for the most part the City Center has emerged the better for it.

While most old European towns were built prior to the ad-

vent of the automobile, they also faced degraded town centers, intolerable water and air pollution and an unsustainable economy in the inner cities during the 1960's and 1970's. Unlike in US cities, Europe began a quite campaign to "change the policy of transport and travel" within and through their cities. Many new policies in the 1970's took root in the hearts and minds of business groups, academicians, environmentalists, and local elected officials. It took several decades, but that shift in the transportation policies of the 1970's and 1980's are clearly visible today.

One of Europe's most progressive and aesthetically pleasing Light Rail systems is found in Strasbourg, France. Its futuristic curved profile and quiet low-to-the-ground movement make it the ideal candidate for what light rail should be in the new millennium. This new system has stimulated urban development in previously run-down areas, relieved the need for more parking, and serves to integrate pedestrian, bike, and street networks. Parking and transit policy go hand-in-hand is a theme echoed by public officials in Strasbourg.

In Freiburg, Germany, the redevelopment of brownfields sites in the suburbs and their link to the City Center relies heavily on public transportation—no autos needed. No suburban development occurs without a transit solution—the overriding policy. Navigation of the City Center is almost exclusively designed for bicycle networks, traffic calming, and parking restrictions. Interestingly, the momentum toward bicycles as a primary mode of travel has increased because it is now "the thing to do" for elected officials.

In Bern, the capital of Switzerland, city leaders have adopted policies aimed at preserving and supporting general mobility, and speak openly of a transport policy "where people cannot use their car at anytime or anyplace." Meetings with citizens led to development of procedures for traffic calming, parking and driving restrictions, and priority to public transit systems of all kinds.



Delegate Tom Norton, Director of Colorado Department of Transportation, inspects balustrades in Cambridge, England. Photo courtesy of Damian Kulash

Why have these cities succeeded in turning around their transportation systems in the last twenty years? The answer is a seemingly simple concept: Consensus on "the underlying policy for transport." Every city representative, whether elected, appointed, public interest group member, environmentalist, or business person, delivered the same message. Twenty years ago these cities were becoming economically and environmentally unsustainable, and their transportation systems were inefficient. The policy on transport had to be revised to reflect a societal well-being for the population in general and the preservation of the City Center—the business, tourism, and social core of the city.

But, coming from a city where there are more parking lots downtown than liquor establishments, restaurants and lawyers, our experience tells us that easy access for autos is still the accepted priority in most towns and cities in the United States. An editorial in Albuquerque's leading newspaper following a town hall meeting on the need to improve the downtown pedestrian environment, recently proclaimed that, "...courting pedestrians at the expense of the existing infrastructure for vehicular traffic is an innovation for which Albuquerque is not ready." Although the editorial lacked creative ideas on how to model a different approach, we take heart because the ideas which induced the editorial illustrate that (1) residents met at a town hall where (2) they collectively decided that (3) improving pedestrian environment in downtown Albuquerque (our City Center) was critical for city vitality, (4) slowing traffic (traffic calming) was necessary, and (5) methods for redeveloping Albuquerque's historic sites downtown had to start now.

Funny, this same theme emanated throughout our visits in Europe. Who knows? We keep thinking this way, and maybe our staid institutions will catch up to the rest of us, who will be showing off our fine new transportation systems to European visitors.



ITS technology allows buses and taxis to trigger the balustrades, and thus enter the historic city center of Cambridge. Photo courtesy of Damian Kulash

Europe Tackles Traffic And Builds Communities Along the Way

H. Brent Coles, Mayor of Boise, Idaho and Vice President of The U.S. Conference of Mayors

What impressed this mayor most during my study tour of European cities is how public officials, at every level, perceive the importance of transportation as a public endeavor. I saw how seriously they take the responsibility to make decisions that more fully account for the influence of transportation on the lives of their citizens and the health and vitality of their communities.

As mayor, I don't need another full-time job, but the truth is transportation is a full-time job. It is a job that requires constant adjustments, increasing investments and an expanding vision for the future. This is the ethic that our counterparts in Europe bring to transportation. Too often, we think that we can leave the business of transportation to our state department of transportation.

I returned home in May from a whirlwind tour of nearly a dozen cities in England, France, Germany, Switzerland and Italy with a renewed confidence about what is possible here in the U.S. I learned that you can make progress – and even solve – some of the transportation challenges before our communities and regions. I also learned that paying more attention to pedestrian safety and expanding transportation alternatives like bike paths, while not the solution per se, are a good start. The solution, I believe, rests in diversifying transportation choices for our citizens. Ultimately, it is about building consensus on a broader vision for the future.

Without exception, our European counterparts start with the premise that one of the most important functions of government is to provide for mobility in its broadest sense and to secure maximum societal benefits from transportation investment. You see it in the smallest design features—like building materials that allow grass to grow in the right-of-ways of Strasbourg's tram, linking greenways in residential and other areas to transit systems—and in the most complicated challenges—like computers that make real time adjustments to Zurich's traffic signal network, forestalling gridlock in the downtown and other business corridors.



Traffic calming creates a safe environment for pedestrians and cyclists and motorists. Courtesy Damian Kulash

The Europeans also have a keen sense of transportation realities, which serves them well in designing their transportation policies and systems. Dr. Phil Goodwin, Prime Minister Tony Blair's top transportation policy advisor, simply states that under the best case scenario, England can expect to increase its highway capacity by one percent annually despite that traffic is growing by four percent annually. England is now thinking how to change its policies for the future. Another example, is the transportation director of "The Tram" in Strasbourg acknowledging that people like high-tech and futuristic trains more than buses. The system's goal was to have a tram designed specifically with this public preference in mind, and a service plan in place, so that people won't want to drive their car. And, that is what they did.

In these cities, you don't see boarded up storefronts, declining neighborhoods, and brownfields in close proximity to urban centers. They emphasize transit-oriented development and in doing so reinforce the importance of recycling developed land, thus sustaining and renewing existing communities.

My own thinking about my region's transportation future was reshaped by this experience. Upon my return, I joined with other local officials to formalize an agreement creating a regional transportation authority and have spent considerable effort trying to acquire nearly 18 miles of railroad right-of-way which could serve as the backbone of a future commuter rail system for the region. We are committed to utilizing the experience and expertise of our European neighbors to benefit our neighborhoods, our cities and our region.

Building Transatlantic Networks

Imagine meeting one-on-one with the Secretary of the Environment for California, talking with environmental activists in Poland, or exchanging thoughts with industry representatives in Seattle. For the past 15 years, the Center for Clean Air Policy has sponsored a series of transatlantic exchange programs through the support of the German Marshall Fund of the US, US EPA, and the Heinrich Boll Foundation of Berlin. The exchanges have involved over 130 participants, providing opportunities for elected officials, federal and state regulators and professionals in and out of government to learn the latest in thinking on transportation, land use, and air quality issues.

For more information about the Center or its exchange programs, visit <http://www.ccap.org>.

Vive la Différence? Gas Taxes and Road Pricing

**Damian J. Kulash, President and CEO
Eno Transportation Foundation,
Washington, DC**

Europe is lovely with its ancient buildings, urban parks, inviting restaurants, and intriguing shops. Everywhere you look, things are different. It keeps us tourists coming back. But one big difference does not jump out at you until you rent a car, stop to buy gas and pay four or five or even six dollars a gallon. Even the most seasoned tourist gets a mild shock at European filling stations, not to mention tollbooths! Road use is expensive there, and this is no accident.

In our travels we met a number of Europeans who expressed amazement at the policy of “cheap” gasoline in the United States, and bewilderment at our inability to fix what they presumed to be a major economic blind spot. They found it inexplicable that we persisted with cheap gas in the face of environmental problems and congestion. America’s wide open spaces are settled with auto-dependent folks whose tastes do not run to escargots or big gas taxes. For good or ill, our context for road charges is different.

Many domestic critics would agree with our European friends that U.S. roads are underpriced, that this contributes to excess use, and adds to the environmental and social costs that come with it. How much are they underpriced? How much difference would it make if the prices were increased?

Experts and advocates have come up with a wide range of discrepant claims regarding the subsidies given to automobiles and other forms of transportation. The full costs of automobile usage include a number of social impacts that are not directly measured in dollar terms – things like pollution, congestion, loss of life, injuries, and the like. If these are factored into the overall price, then a “correct” price would be considerably higher than what consumers currently pay at the pump.

An alternative form of higher auto fees that enjoys strong theoretical support among economists is congestion pricing. The late Nobel Prize winner, William Vickrey, spent much of the past 50 years advocating the use of marginal cost pricing to transportation. The Buchanan Report advocated applying such fees in the UK decades ago and similar fees have already been levied in Oslo and Singapore. The theory goes that by setting road prices at marginal costs that reflect time consumption as well as monetary costs, roads will be used much more efficiently. In effect, road space will be allocated by the market mechanism, and less essential uses will be priced out. Theory shows that this will lessen the need for additional facili-

ties, produce government revenue, and have positive environmental side effects.

Unfortunately, the demand for congested roads is probably fairly inelastic, meaning that a big increase in price will result in only a small decrease in traffic – at least in the short run. The desirability and public acceptance of road pricing will be heavily influenced by the elasticity, whatever it turns out to be. If road user fees must be exorbitantly high before traffic is reduced, drivers who are paying high tolls and getting little congestion relief will feel they are getting a raw deal, as will drivers who have been priced out. The efficiency advantages of the scheme pale alongside the revenue transfers entailed.

The consumer response will probably change after a few years. Faced with a sudden increase in road prices, many people would have no choice but to pay them. The places they have chosen to live, to work, or to shop leave them little choice. But in the longer term, as leases expire, car payments are completed, and job changes occur, people are able to make bigger changes in their travel habits. Their long term behavior is more “elastic.” The effectiveness of road pricing measures will look better in this context.

We may soon have additional experience that will remove some of the guesswork in this area. In addition to high fuel taxes, the United Kingdom is enacting tough new pricing measures generally, as we learned on a recent study trip to Europe. The UK’s consultation paper on fighting traffic congestion and pollution through road user and workplace parking charges gives broad new powers to local authorities to charge for congested roads or parking – and keep the money (or at least 80 percent of it) – as long as the funds collected are plowed back into transport improvements. Local councils that want to use the new authority can present their proposals to the national government, which intends to approve a small number of trial applications of the concept.

Officials that we met with from the UK’s Department of the Environment, Transport, and the Regions believe that this will lead to a rich new set of experiences with road pricing. This will not only give us a better understanding of the potential of road pricing to reduce congestion and raise revenue, but will also shed new light on the political acceptability of these measures in an auto-oriented society. The situation that will be closely watched around the world and be of great importance to the United States, teaching us much about the economics of road pricing, and also about its political salability. Stay tuned, and enjoy that free traffic jam while it lasts!

Observations of European Transit:

Dependable, Popular, Costly

**Tom Norton, Executive Director
Colorado Department of Transportation**

There is no question that the mass transit system in Europe meets a very definite need and also fits the European lifestyle very neatly. But as I recently toured many of the rail systems in Europe, I kept wrestling with two issues: Just how would such a system be received in America and, just as important, how would it be financed?

The issues are of great importance to Coloradans as we make final decisions on a major light rail serving metro Denver. This rail line, along the Southeast Corridor, will provide 19 miles of rail linking our two largest employment centers. While we are planning, and even while we are building the transit network, I think we have some things we can learn from the European experience.

First, the system has to be dependable. The trains have to run frequently and on time. Few people, especially in American culture, are going to wait more than a few minutes for a train. To lure light rail riders, we have to provide the same sort of dependable, reliable and flexible service that European rail has been offering for decades.

The trains have to be fast, clean and comfortable. The experience has to appeal to a variety of people in all demographic ranges – from executives to students, computer programmers to food industry workers. Clearly, this is the case in Europe and many of our systems in America already meet that description. But in my observations, we often miss one key element that Europeans have not: the issue of connectivity.

All too often, our rail transit systems simply do not provide adequate connections for people to and from light rail stations. I saw in Europe that rail is only one element of an integrated transit systems. Rail is often the most visible (and most expensive) part of a system, though it's not always the most important. In fact, the most important element may be the variety of choices available to the commuter after they get off the train.



With top speeds of 174 mph, the Inter-City Express (ICE) is the mode of choice for many Europeans. Courtesy of Damian Kulash

The key questions seem to be: how do you get to the station and then how do you get to your ultimate destination after the train ride? In America, the answer to the first question is usually simple. You drive your car. Ultimately, that may not be the best answer since autos then continue to clog part of the highway system. It also creates parking problems. In Europe, the transit feeder systems to get people to the rail stations are much more advanced, offering many choices.

In many ways, though, the bigger problem occurs when people disembark from the train. They no longer have access to a car and their destinations are varied. We absolutely have to find ways to efficiently and conveniently deliver travelers who take light rail to multiple destinations with minimal transfers. I noted many examples of effective systems in Europe and, thanks to a good working relationship with our local Regional Transportation District, I believe we are on our way to finding those solutions.

Now we come to cost. These systems are expensive to build and require subsidies to operate. We all know how high the taxes are in Europe, which of course is a choice they have made consistently over the years. On the other hand, we also know raising taxes is not a course of action we typically follow these days in the United States.

I certainly am not an advocate of higher taxes but I do advocate finding creative and innovative ways of financing our transit systems. We need to develop more public-private partnerships as we often find in Europe. We also need to look at how transit systems are privatized. But, when it comes to privatization, I'm not sure the European model fits our needs.

During my trip, I saw many examples of well-run, privatized transit systems. However, we have to keep in mind that in Europe, privatization does not always mean that government is "off the hook" for providing tax subsidies.

Perhaps the answer, for this country, rests in some sort of hybrid form of privatization. In other words, the transit system may continue to be operated by some sort of government agency with substantive parts of that operation turned over to the private sector. This would also have to be integrated into a multi-modal system of customer choices.

Only time will tell how such issues will shake out in the United States as we struggle to find the right mix of transportation choices for our culture. Clearly, we can learn a great deal from the rich history of European transportation, a history that will be especially helpful to planners in Colorado as we make decisions that will affect our transportation system for decades to come.

Getting It Right in the Right-of-Way: A Call for State Legislation on Place Sensitive Highway Design

**Meg Maguire, President
Scenic America**

Bulldozers and scrapers are revving their engines to spend the \$27.7 billion that American taxpayers will pour into state highway coffers this year. This is very bad news for the American landscape because thousands of miles of scenic, historic and environmentally sensitive roads will be widened, straightened and flattened beyond recognition.

For all the national reforms and gains of ISTEA and TEA 21, and despite the achievements in new design standards in states such as Connecticut and Vermont, not much has changed in the way most state highway engineers design roads. And, *until state legislatures require place-sensitive highway design, old design standards and practices will continue to destroy historic, scenic, cultural and environmental values that define the distinctive character of many American communities.*

In order to accelerate the passage of place-sensitive highway design legislation, Scenic America has drafted the following model legislation based on language from Connecticut law and from the 1995 National Highway System legislation. The model legislation requires that every road project in their state will a) fully involve citizens who are affected by that road in the design or re-design of that road; and b) reflect sensitivity to the environment, to aesthetics and to the character of place. We hope this tool will help activists who work with citizens, far-sighted state transportation officials, national leadership organizations and others who champion reform for place-sensitive design.

For more information, contact Scenic America at 202.543.6200 or visit <http://www.scenic.org>.

**MODEL STATE LAW
TO FOSTER PLACE SENSITIVE HIGHWAY DESIGN
ON AMERICA'S STATE AND LOCAL ROADS AND STREET
Prepared by Scenic America
October, 1999**

Scenic America proposes that states adopt this model language to foster place sensitive highway design on state and local roads throughout the nation. We have taken language from both Connecticut Public Act No. 98-118, and from Section 304 of the National Highway System Act of 1995, and added original text to make clear the intent of the legislation.

**PUBLIC ACT NO. _____
AN ACT CONCERNING ALTERNATIVE DESIGN STANDARDS
FOR ROADS AND BRIDGES**

It is the intent of the Legislature to encourage the highest quality design to ensure that road and bridge projects adequately meet our transportation needs, exist in harmony with their surroundings, and add lasting value to the communities they serve.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

a) On or before ___date___, the Commissioner of Transportation shall establish new design standards to govern new construction, reconstruction, resurfacing, restoration, or rehabilitation of bridges, principal and minor arterial roads, collector roads and local roads and streets. The standards shall take into account

- 1) safety, durability, and economy of maintenance;
- 2) the constructed and natural environment of the area;
- 3) the environmental, scenic, aesthetic, historic, community, and preservation impacts of the activity; and
- 4) access for other modes of transportation.

b) In establishing the standards required under subsection (a) of this section, the Commissioner shall solicit and consider the views of chief elected officials and organizations including, but not limited to: those with expertise in environmental protection, historic preservation, scenic conservation, bicycle and pedestrian transportation, as well as regional councils of governments, rural development councils, the state council on the arts, the Federal Highway Administration and (add other categories as appropriate).

Certified as correct by _____
Legislative Commissioner

Clerk of the Senate

Clerk of the House

Approved _____, 2000

Governor, State of _____

Why Are the Roads So Congested?

A new analysis by STPP finds that traffic congestion is getting worse in major American metropolitan areas because of sprawl and its impact on driving habits. Using new data from the Texas Transportation Institute, the study shows that neither population growth nor too few roads are to blame for the rise in traffic jams. In fact, while the population in all 68 metro areas studied grew by 22 million since 1982, it feels like 70 million more people because each person is driving more.

"This analysis shows just why drivers have felt so besieged by ever-increasing traffic. Sprawl is making just about everyone drive farther and more often, and that fills up the roads," said Roy Kienitz, Executive Director of STPP.

To download the paper, *Why Are the Roads So Congested? A Companion Analysis of the Texas Transportation Institute's Data on Metropolitan Congestion* visit STPP's website at <http://www.transact.org>.

Surface Transportation Policy Project

1100 17th Street, NW, Tenth Floor
Washington, DC 20036
Phone: 202.466.2636
Fax: 202.466.2247
Email: stpp@transact.org
<http://www.transact.org>
<http://www.tea21.org>

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The goal of Surface Transportation Policy Project is to ensure that transportation policy and investments help conserve energy, protect environmental and aesthetic quality, strengthen the economy, promote social equity, and make communities more livable. We emphasize the needs of people, rather than vehicles, in assuring access to jobs, services, and recreational opportunities.

The work of STPP is made possible by grants from the Bullitt Foundation, the Nathan Cummings Foundation, the Energy Foundation, the William and Flora Hewlett Foundation, the Joyce Foundation, the Martin Foundation, the James C. Penney Foundation, Prince Charitable Trusts, the Surdna Foundation, the Rockefeller Brothers Fund, and the Turner Foundation.

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STPP Staff: Don Chen, James Corless, Grace Erb, Reid Ewing, Michelle Garland, Carmen Hunt, Nancy Jakowitsch, Sonya Jubar, Charlie King, Barbara McCann, Jerome Milton, Gloria Ohland, William Peters, and Nancy Willis.

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