

# USING PEAK-PERIOD TOLLS TO CURB GRIDLOCK

## Report Findings

Having motorists pay directly for using roads and bridges during peak travel times is one of the most promising options for reducing traffic jams and the resulting air pollution from motor vehicles, according to a new report from a committee of the National Research Council convened by TRB and the Commission on Behavioral and Social Sciences and Education. Lack of public and political support stands in the way of implementing such a proposal for now, the committee acknowledged, but the results of limited applications in California may bring wider acceptance.

Martin Wachs, Professor of Urban Planning and Director of the Institute of Transportation Studies, University of California at Los Angeles, served as chairman of the committee. (See box for committee roster.)

"Congestion pricing" would charge a premium to motorists who drive during peak travel times through mechanisms such as road or bridge tolls, fees to enter congested areas, or changes in parking or public transit costs. In response to these fees, some motorists would vary the timing of their trips, share a ride, take transit, or avoid some trips.

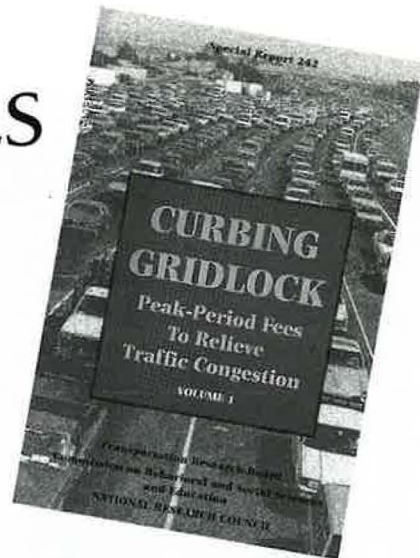
Wasted time and fuel caused by traffic congestion costs more than \$40 billion annually nationwide. "Traffic congestion in and around major cities is still a critical problem despite billions of dollars spent on more urban freeways and public transportation systems over the last 20 years," said Martin Wachs. "Congestion pricing would level the social costs of driving directly at those who impose them. It would lead to better use of existing roads, public transit that is more competitive with driving one's car, and public revenues that could be used for transportation and nontransportation purposes."

Despite the potential benefits, conges-

tion pricing has been rejected in the past, partly because of concern that lining up at toll booths would itself contribute to congestion. Technologies now in use on toll roads, however, allow tolls to be collected electronically without requiring motorists to stop.

The impact on congestion and air pollution could be substantial. For the greater Los Angeles area, for example, peak-period fees averaging 15 cents per mile, or \$3 per daily round trip, could reduce total travel during the peak period by 10 to 15 percent, and could cut the time of the average commute by about 20 percent. It would also help the region meet federal and state air quality mandates. Precursor gases to the formation of ozone could be cut by up to an estimated 8 percent and carbon monoxide by 12 percent.

Congestion pricing would charge differently for the use of roads, but not necessarily more. A region-wide fee in Los Angeles, for example, would raise \$3 bil-



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lion annually, and these funds could be used to reduce gasoline, property, and sales taxes that support transportation.

Experimentation with congestion pricing is being encouraged by the federal government through the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), which provides federal funds for congestion pricing pilot projects. Federal funds have been provided to

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### Committee for a Study on Urban Transportation Congestion Pricing

Martin Wachs (*Chair*), University of California at Los Angeles  
Jose A. Gomez-Ibanez, Harvard University  
Susan A. Hanson, Clark University  
Steve Heminger, Metropolitan Transportation Commission, Oakland, California  
Joel L. Horowitz, University of Iowa, Iowa City  
Laura A. Jibben, Regional Transportation Authority of Northeastern Illinois  
Ryuichi Kitamura, University of Kyoto, Japan  
Daniel L. McFadden, University of California at Berkeley  
John G. Milliken, Venable, Baetjer, & Howard, McLean, Virginia  
Paul E. Peterson, Harvard University  
Mark A. Pisano, Southern California Association of Governments, Los Angeles  
Robert C. Repetto, World Resources Institute, Washington, D.C.  
William T. Roach, King County Metro, Seattle, Washington  
Kenneth A. Small, University of California, Irvine

## **SALVATORE J. BELLOMO**

### **1942-1994**

Salvatore J. Bellomo, co-founder and principal of Bellomo-McGee, Inc., of Vienna, Virginia, died in June.

A graduate of Rutgers University, Bellomo began his career with Alan M. Voorhees and Associates, Inc. in McLean, Virginia, becoming Vice President and Manager of the Planning and Environmental Division. During this period he also earned a masters degree and a doctorate in civil engineering at Catholic University.

In 1978 Bellomo and a colleague formed BKI Associates, Inc., and in 1982 he joined with Hugh W. McGee to form Bellomo-McGee, Inc., managing or directing more than 175 transportation and traffic engineering projects throughout the country.

Bellomo's association with TRB included serving as Principal Investigator for research completed leading to several National Cooperative Highway Research Program Reports, including NCHRP Report 177: *Freight Data Requirements for Statewide Transportation Systems Planning: Research Report*, and 179: *Evaluating Options in Statewide Transportation Planning/Programming: Issues, Techniques, and Their Relationships*. In addition, he served as a member of TRB committees, including Access Management and Transportation and Air Quality.

In 1983 Bellomo was awarded the James Laurie Prize from the American Society of Civil Engineers (ASCE) for professional contributions to the advancement of transportation engineering. He was also a founding member of IVHS AMERICA and past Chairman of the ASCE Urban Transportation Division.

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## **New Executive Director**

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intermodal transportation; and a program to provide assistance in selecting and implementing SHRP products and maintaining and operating the SHRP Long-Term Pavement Performance data base. Under Deen, the Board's varied programs and publications achieved recognition both within the National Research Council and throughout the national and international transportation community.

Outside TRB, Deen chaired the national effort to prepare the first U.S. strategic plan for IVHS, and served as Vice Chairman of the IVHS (now ITS) AMERICA Coordinating Council. He is on the Board of Regents of the Eno Foundation for Transportation Education and served as Chair of Eno's first Transport Public Policy Forum held in July. He has also served on the editorial boards of several transportation publications and on advisory committees for the transportation programs of several leading academic institutions, including the Massachusetts Institute of Technology and the University of Texas. He has been the recipient of numerous awards, including TRB's Pyke Johnson Award and more recently the George S. Bartlett Award (1993), the SHRP Leadership Award (1993), and the 1994 Ronald D. Kenyon Award.

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## **Curbing Gridlock** *continued from page 30*

the San Francisco Bay Area to study a proposal to increase the peak-period toll on the San Francisco-Oakland Bay bridge during peak periods by \$1 or \$2.

Separately from the ISTEPA pilot program, a 10-mile, privately funded toll road in the median of State Route 91 along Santa Ana Canyon will charge single-occupant vehicles a congestion fee while allowing high-occupancy vehicles to use the road without charge. This road is under construction and scheduled to open in 1995.

Despite the many advantages of congestion pricing, the report acknowledges formidable barriers to its adoption. Chief among them is lack of political acceptance, which ranges from weak public support to federal disincentives. The public pays for building and maintaining highways through fuel, property, and sales taxes and may see congestion pricing as another form of taxation. Charging a premium for road use during peak periods can be viewed as an unfair financial burden on low-income motorists. Moreover, federal law restricts tolls on Federal-aid highways and prohibits introducing new tolls on interstates.

Most of the barriers could be overcome, the committee said. The committee rec-

ommendations are designed to ease federal restrictions and to encourage local experimentation. Revenues generated could be used to replace other taxes collected to support transportation, thereby easing the burden on middle and lower income groups.

The committee recognizes, however, the political and public resistance to regionwide congestion pricing and therefore urges more limited trials with this approach to congestion management. One approach that might have more public appeal would be to convert underused lanes set aside for high-occupancy vehicles (HOVs) into toll lanes for solo drivers while continuing to allow HOVs to travel free of charge.

The committee places high priority on careful and extensive evaluation of any congestion pricing programs introduced in the United States. "If individual projects succeed, they will help convince policy makers and the public of the benefits of congestion pricing," the committee reported.

The study was sponsored by the Federal Highway Administration and the Federal Transit Administration of the U.S. Department of Transportation.