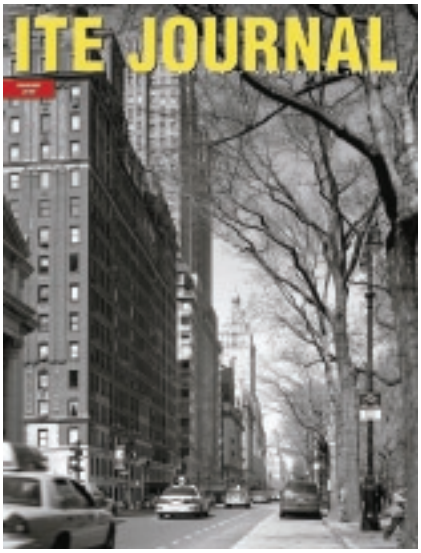
letters to the editor



Comparing benefits.

Planning objectives	Efficient and alternative fuel vehicles	Roadway expansion	Demand management
Congestion reduction	×	✓	✓
Road and parking cost savings	×	×	✓
Consumer cost savings			✓
Reduced traffic accidents	×	×	✓
Improved mobility options for non-drivers	×	×	✓
Energy conservation	✓	×	✓
Pollution reduction	✓	×	✓
Improved physical fitness and health (exercise)	×	×	✓
Land use objectives (reduced sprawl)	×	×	✓

** Note: (✓ = achieves objectives; × = contradicts benefits)*

Efficient and alternative fuel vehicles only achieve a few objectives and tend to exacerbate problems such as congestion, accidents and sprawl by increasing total vehicle travel. Mobility management helps achieve far more objectives.

Source: Litman, Todd. "Win-Win Transportation Emission Reduction Strategies." Victoria Transport Policy Institute, 2007. Accessible via www.vtpi.org/wwclimate.pdf.

DEAR EDITOR:

The *ITE Journal* article, "The Nexus of Energy, Environment and the Economy: A Win, Win, Win Opportunity," by Alan Pisarski (January 2009) raises important issues concerning the need to conserve energy and reduce pollution emissions, but it recommends sub-optimal solutions based on outdated assumptions. It argues that energy and emissions-reduction objectives should be achieved primarily by changing vehicle technologies driven rather than travel behavior based on the assumption that vehicle travel reductions harm consumers and society. This is no longer appropriate. When all impacts are considered, VMT-reduction strategies are often the most cost-effective and beneficial solutions.

Current trends are shifting transportation demands.[1,2] An aging population, increased urbanization, increased congestion, rising future fuel prices, changing consumer preferences and growing health and environmental concerns are all reducing the demand for automobile travel and increasing demand for alternatives such as walking, cycling and public transit. This is not to suggest that automobile travel will disappear, but in many situations society is better off putting resources into alternatives that allow people to drive less.

There are a range of potential mobility management strategies, including improving travel options (walking, cycling, ride-sharing, public transit, telework and delivery services), incentives to use alternative modes (road, parking, fuel and insurance pricing reforms, commute trip reduction programs, etc.) and smart growth land use policies.[3,4] Many of these are justified on economic efficiency and equity grounds, in addition to helping conserve energy and reduce emissions. When all impacts are considered, TDM solutions are often the most cost-effective and desirable solutions because they provide so many benefits.

People concerned only with energy conservation and emissions reduction will tend to choose solutions that only address these objectives, such as shifts to more fuel-efficient and alternative fuel vehicles, but transportation professionals should apply more comprehensive analysis to identify strategies that help achieve a wider range of objectives. For example, we should favor the energy conservation strategies that also reduce parking problems and crash risk and improve mobility options for non-drivers. Similarly, we should favor solutions to parking problems that also help reduce energy consumption and pollution emissions.

Consider the table on this page. Shifting to more efficient vehicles or alternative fuels generally helps achieve only two objectives: energy conservation and air emission reductions. However, to the degree that more efficient or alternative fuel vehicles have lower operating costs, they tend to stimulate more total driving and so exacerbate other transportation problems such as congestion, road and parking facility costs, crashes and sprawl-related costs.

Similarly, expanding congested urban roadways can help reduce traffic congestion but tends to exacerbate other transportation problems by inducing additional vehicle travel.[5] Demand management strategies help address all of these objectives, and so tend to provide far greater benefits.[6]

This is good news overall. It means that with more comprehensive analysis, we can identify true "win-win" solutions that help achieve a wide range of planning objectives and prepare our transportation system to better meet future needs.

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3. *Success Stories Within The Road Transport Sector On Reducing Greenhouse Gas Emission And Producing Ancillary Benefits*. European Environment Agency, 2008. Accessible via reports.eea.europa.eu/technical_report_2008_2.

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5. Litman, Todd. "Efficient Vehicles Versus Efficient Transportation: Comparing Transportation Energy Conservation Strategies." *Transport Policy*, Vol. 12, No. 2 (March 2005): 121–129. Accessible via www.vtpi.org/cafe.pdf.

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Todd Litman
Victoria Transport Policy Institute

SIMPLE IS BEST

DEAR EDITOR:

The left turn is the traffic engineer's biggest problem. It happens to be an artificial one.

An intersection is a space of limited dimensions that we should use in some sequence that minimizes mutual interference. Common sense tells us to let people get out of a confined space—an elevator, phone booth, or airplane—before we get in. The traffic control system employs the opposite principle.

The law in all states requires the driver of a vehicle about to turn left to yield the right of way to the vehicles from the opposite direction. Drivers from the opposite direction have the right of way to enter the intersection and obstruct the left-turning vehicle as it is trying to exit. All those who want to go straight ahead get blocked behind it.

This practice—and the frequent remedy of installing left-turn lanes and multiphase signals—severely reduces capacity, wastes time and fuel and pollutes the air. The practice may be justified at unsignalized, low-volume intersections in rural areas, but any traffic expert who implements its use elsewhere should show it to be safer, more efficient and more cost-effective than the simple device of making oncoming traffic yield to the left-turners and letting them clear the intersection.

Kenneth Todd
kennethAtodd@aol.com