

SS EE CU HA



SPECIAL ISSUE
WINTER 2006-2007



C O N T E N T S

SPECIAL ISSUE

- 3 *A Legacy of Skepticism: Remembering Mel Webber*
MARTIN WACHS
- 8 *Flexible Transit, the American City, and Mel Webber*
ROBERT CERVERO
- 13 *Skeptical Optimism in Transportation and Planning Research*
BRIAN D. TAYLOR
- 17 *Melvin M. Webber: Maker and Breaker of Planning Paradigms*
SIR PETER HALL
- 24 *Teaching with Mel*
ELIZABETH DEAKIN
- 27 *Learning from Mel*
JONATHAN RICHMOND
- 29 *Melvin Webber and the "Nonplace Urban Realm"*
MICHAEL B. TEITZ
- 35 *Beyond ITS and the Transportation Monoculture*
DANIEL SPERLING
- 38 *The Mel Webber Index*
- 39 *Further Reading*
- 40 *THE ACCESS ALMANAC:
Love, Lies, and Transportation in LA, Again*
CHARLES LAVE

The University of California Transportation Center, founded in 1988, facilitates research, education, and public service for the entire UC system. Activities have centered on the Berkeley, Davis, Irvine, Los Angeles, Riverside, and Santa Barbara campuses.

Copyright © 2007 The Regents of the University of California

Authors of papers reporting on research here are solely responsible for their content. Most of this research was sponsored by the US Department of Transportation and the California Department of Transportation, neither of which is liable for its content or use.



University of California
Transportation Center

Berkeley, CA 94720-1782
Phone: 510-642-5624
Fax: 510-643-5456
www.uctc.net

Mel Webber: 1920 – 2006

WITH THIS ISSUE, the University of California Transportation Center marks the fifteenth year of publishing ACCESS magazine. However, our celebration is tinged with sadness, because the founder and editor of ACCESS is no longer with us: Melvin M. Webber passed away on November 25, 2006. We miss him.

I met Mel long after he'd "retired" from teaching, and I knew very little about his long career in planning or of the widespread influence of his writings. He wasn't a person to trumpet his achievements; he was more interested in hearing what others thought about whatever issue was in front of us, be it an essay we were editing or what exactly the construction workers were up to outside our office. I was very lucky to be able to work with Mel every day, and although he slowed down considerably towards the end, he never really stopped working on ACCESS.



He had very high standards for this magazine—he wanted it to be fascinating and useful to every kind of reader. Translating academic prose into something interesting to lay readers was sometimes a great challenge. We were helped by the many excellent writers among our researchers, who over and over again showed us how well it could be done. But these good writers also spoiled us, a little bit. Not all our brilliant thinkers can easily express their ideas to people less schooled in their disciplines than they—people like me. But I soon learned, under Mel's gentle tutelage, that my own ignorance could be a useful tool for an

editor. Every day I got to see his curiosity at work; he had a way of asking questions that always surprised, and showed that he listened closely and deeply to the answers.

Mel could be very frank about essays he didn't think would work, but sometimes he recognized something in an article that seemed, at first, imperceptible. He would take up his editor's pencil and expertly cut through technical jargon and verbosity, paring an essay until he exposed the heart of an idea. His insistence on clear, simple writing sometimes perplexed authors who were used to adding words in an attempt to clarify their thoughts, but reactions over the years to the high quality and readability of ACCESS prove how right he was.

This special issue of ACCESS is a tribute to Mel Webber's work: to his teaching, his writing, and the influence he's had on the field of planning. In the following pages you will read about Mel from colleagues who knew him at various stages in his career. You will get a sense of what he was like, although the portrait remains, necessarily, incomplete. His interests were wide-ranging and his inspiration felt far outside the arena of his academic work. I hope that we have succeeded, even partially, in doing justice to his warmth, his fairness, and his intelligence.

Mel was a very unassuming person, and we undertook this special issue in tribute to him knowing full well that he would not really approve of all this attention. I dare to imagine, however, that he might have been a little bit pleased with the result. And I promise that with the next issue, ACCESS will continue its mission—publishing high quality research on transportation at the University of California—and hold itself to the highest of standards, set long ago by Mel Webber.

Melanie Curry
Managing Editor

The Photography of Mel Webber

During the course of his career Mel traveled extensively — to the Middle East, Far East, Europe, South America — and photographed the things he saw, especially as they pertained to transportation. All of the photos in the rest of this issue were taken by Mel. They are originally in color.



India

A Legacy of Skepticism: Remembering Melvin Webber

BY MARTIN WACHS

A MONTH BEFORE HIS PASSING I HAD THE PLEASURE OF meeting Mel Webber for lunch, as I had done many times before, at his favorite table in the corner of the bar at the Faculty Club on the Berkeley campus. Over his left shoulder was the large window through which the landmark campanile clock was clearly visible in the bright blue sky over the deep green of the trees that line Strawberry Creek. Mel was like no other person I knew well. After decades of warm friendship he still surprised me at every meeting by asking questions I never anticipated. This visit was no different. He took out a small notebook and a worn, stubby pencil, and placed them on the table. He ordered a modest, healthful lunch and when the waiter departed he leaned forward and in a voice made husky by his illness he asked me to tell him what he had contributed to the world. His life was ending, he said in a tone not so different than the one he used when he had ordered his sandwich, and he wanted to know how his friends would remember him. He picked up the pencil, opened the notebook to a blank page, and awaited my reply. Overwhelmed by the question and thoroughly intimidated by the realization that it was deeply important to a man who had given me so much, I did my best to reply sincerely.

Mel soon put the pencil down and he wrote nothing in the notebook. My answers did not impress him. Always the skeptic, when I told him how influential I thought his essays had been and that every student of planning made reference to his notion of “wicked problems” and knew after a week of planning school that there could be >

Martin Wachs recently retired as Professor of City and Regional Planning and Civil and Environmental Engineering at the University of California at Berkeley, where he was also Director of the Institute of Transportation Studies. He is currently Director of Transportation, Space, and Technology at the RAND Corporation (wachs@rand.org).

“communities without propinquity,” he said, apparently with complete honesty, “anybody could have done that. I would have hoped to have contributed more.”

Since that meeting, which we both knew could very likely be our last, I have thought often about his question. How does one measure the contributions of a person, no matter how unique, to a thoughtful and constantly changing community of scholarship and action in the world of policy? It is not easy because each of our contributions draws upon the wisdom and insight of those around us. Few of our ideas are exclusively our own. Mel understood this better than most. Though I had learned that from him I found it hard to find the right words on that occasion to tell him he had done exceptionally well in that world and had taught many others the importance of this idea. His greatest contributions were to our community and are not easy to point to in a book or journal. They are found in our collective capacity to teach and to plan; in our institutions and organizations and in our individual conceptions of our field. He took care of our organizations so very carefully. He tended to them like a master gardener looks after prized orchids. He never demanded perfection but constantly hoped for progress. Our collective inability to create increasingly harmonious and productive departments and research institutes worried him far more than his next project or essay.



THROUGH THE DECADE OF THE 1960S THE FIELD OF URBAN PLANNING was largely an offshoot of architecture. Planning mostly meant physical planning and university education for planners took place in studios at drawing boards. Most of the teachers were or had recently been practitioners, not scholars. They thought of cities in terms of geometries and relationships among land uses. Their students, they knew, would do their work shaping the physical world and not primarily through books. Certainly, relationships between the physical, economic, and social dimensions of cities were recognized. Planners cared about the influences of demographic and employment trends, but their focus was on the look and feel of the city. And on getting it built. They had inherited from their teachers and employers a commitment to improving the quality of life by improving the physical environment. While the object of planning thought was the physical environment, it is important that the dominant mode of thinking also came from the design professions. Ideas were strongly influenced by normative thinking; some conceptualizations were by consensus inherently considered more sound than others. The proof of an idea was in the experience and in the reactions of peers. The goal was synthesis—to assemble a plan sensitively and wisely. Styles and fashions and agreement were the modes of recognizing outstanding achievements.

Undoubtedly the most important shift to have occurred in the last century in planning education was the elevation of social sciences to equal status with the design professions among the root disciplines of planning. Young radicals, among them Melvin Webber, argued that one had to understand economics and social change using deeper, analytical, quantitative approaches, in order to wisely shape the future of urban areas. Many early planners were too taken with physical determinism. Better designs, it was believed, could create health and prosperity. Wiser heads asserted that cities were complex agglomerations of many different types of processes. Urban form was the result of

many forces. While the physical forms that made up the city were the most tangible, they could not be understood except in concert with an understanding of economic trends and changing societal norms. With many colleagues—he always worked in teams—Mel argued that the City Planning program at Berkeley needed to include sociologists, geographers, economists, and engineers. He set about bringing them into studios, classrooms, and ongoing dialogues. He succeeded in getting a federal grant that brought analysts and health specialists into contact with architects and designers. This was no happy marriage. Sparks flew and tempers flared; some walked out and kept their distance for decades; Mel simply said, “That’s okay.”

Modes of thinking are learned over many decades and handed down from teacher to student. The pace of real change is glacial. Gradually, we came to understand that what was happening was not just the addition to planning thought of concern for the analysis

*Mel’s greatest contributions were to our community and
are not easy to point to in a book or journal.*

of institutions and the study of social and economic influences. We were also learning, ever so gradually, to blend the analytical thinking of the sciences with the normative thinking of the design fields, and that was much harder to do. The integration of these modes of thought about problems is still very much needed but rarely realized despite the passage of fifty years. Today planning students still take classes in multivariate statistical analysis from one professor and design studios from another. Integration of the subject matter from different courses is left to the students mostly because it is too difficult an assignment for their professors to accept willingly. Rarely do professors from those two kinds of courses collaborate on research or in practical applications of their work. In only a small minority of planning programs do students find it possible to integrate the two subject matters or modes of thinking into a single project. Mel’s legacy is our collective realization that this is an important task. We have left it undone because it has been easier to be productive within our well-developed subfields than to focus in real depth on erasing their boundaries. We drill deeper into our specializations without questioning how to better fit them together in service of society.



MEL’S DEEP SKEPTICISM WAS ALMOST A CARICATURE. HE OFTEN ASKED such questions as: “How do you know that? What is the evidence? Where is the test? Where is the proof?” He had the audacity to ask, over and over again, and apparently from genuine curiosity, whether our most widely held beliefs could actually be supported by evidence. Why was rapid transit good for a region like the Bay Area? Why was the automobile bad for the environment? If you are concerned about air pollution why not make car exhaust cleaner rather than oppose more cars? Why is lower-density suburban development hated by planners and loved by families? Or is it, really? ➤



India

Our answers to his repeated questions were to him as inadequate as were my answers to his question at our lunch meeting. They reveal that some of us think normatively and synthetically: some approaches to urban problems are good because we believe them to be so. Others of us think analytically: we weigh the evidence and reshape our conclusions, but remain hesitant to arrive at recommendations for action on the basis of all that study. If we could better integrate these modes of thinking we could do a better job of answering his questions.

Smart growth is all the rage. New students enter schools of planning committed to making it happen. Books and journal articles abound that label suburban sprawl outmoded, wrongheaded, and damaging to the environment. High-density, mixed land use nodes at locations well served by public transit are seen by some as inherently good. They will revitalize the cores of our urban areas and slow the spread of low-density suburbs in which people have no choice but to drive to every destination. Smart growth will save energy, induce improvements in physical health through walking and cycling, and provide more fulfilling lifestyles. To others these claims are unconvincing, and lifestyles characterized by lower suburban densities and single family homes with three-car garages are an expression of personal preference and the workings of the free market. To still others, describing outcomes of the current system as an expression of the workings of the free market lacks credibility because mortgage subsidies, property tax deductions, zoning and subdivision regulations, and highly subsidized public services all channel city building into styles and locations that limit rather than enhance free choice.

This is the kind of controversy that made Mel Webber smile. He was skeptical of all positions and hopeful that systematic analysis could lead to important findings and genuine clarification. Ongoing scholarly investigations based on the honest application of increasingly sophisticated methods should be capable of resolving at least some of these points of contention. At the moment, however, our community of scholars is becoming more polarized by differences in belief and methodology. Journal articles are being rejected because their conclusions are not ideologically acceptable to one perspective or another. Reviewers discover “serious” flaws in methodology when a paper’s conclusions differ from their own, but overlook those flaws when they agree with a paper’s conclusions. Analyses are conducted that focus on the two percent explanatory power of the physical environment, while ignoring the eighty percent explained by social and demographic trends. In other words, we have come a long way in the complexity of our methods but the framework of inquiry continues to be inadequate. We are still falling into the trap of physical determinism, but are doing it more elegantly thanks to geographic information systems, multinomial logit models, and systems of structural equations models.

Melvin Webber cared more about asking the right question than finding the right answer. He cared more about building an inquiring community than proving a particular point. His values and hard work with his colleagues made a fundamental contribution to transportation systems thinking and to planning education over a span of fifty years and they can make a similar contribution in the future. They are needed today no less than when he came to Berkeley. I wish I had thought of saying that to Mel at lunch when he asked me to describe his accomplishments. Yet I know that he would have responded with skepticism, saying, “Are you sure that’s right?” ♦

Flexible Transit, the American City, and Mel Webber

BY ROBERT CERVERO

MEL WEBBER WAS ONE OF THE ORIGINAL “bus guys” in the transportation planning field. He was one of the few to show respect for that Rodney Dangerfield of public transportation, the one that gets very little respect: the rubber-tire bus. But Mel’s vision of public transit was not stodgy old buses lumbering along city streets. He had in mind a more nimble, versatile form of transit—one that could compete with, and sometimes even mimic, the private car.

Robert Cervero is professor and chair of the Department of City and Regional Planning at the University of California, Berkeley (robertc@berkeley.edu).

Mel Webber's views about public transit are rooted in his seminal writings on the city-altering impacts of telecommunications, what he called the *nonplace urban realm*. Mel was the first person, I believe, to articulate the connection between dispersed urban form and the need for a more versatile, flexible form of public transit. In a landscape with endless numbers of trip origins and destinations, point-to-point technologies like rail transit, he reasoned, were anachronisms of the past. The *geometry* of traditional, downtown-focused, radial rail systems, Mel told us, does not square with the increasingly "many-to-many" *geography* of travel.

In addition to recognizing the mismatch between transit technology and urban form, Mel also got the order right. The changing cityscape should define transportation investments, not vice versa. It is a basic tenet that is often ignored, but Mel understood as much as anyone that transportation is mostly a means, not an end. We travel to get to places, not for travel's sake, and those places are increasingly spread all over the map, courtesy

*Mel got the order right: The changing cityscape should
define transportation investments, not vice versa.*

of the powerful telecommunications revolution. Unfortunately, few urban policymakers heard Mel's message and if they did, other considerations—like the prospects of attracting federal mega-dollars and creating political legacies through monumental rail investments—took precedence.

Over the past half century, decisions to move ahead with large-scale rail investments in US cities have been made with little attention to land-use patterns and unfolding travel trends. In the words of Sir Peter Hall, great planning disasters like BART were inevitable. BART of course was just the tip of the iceberg. Almost all of the twenty-plus light rail systems opened in North America since the early 1980s have suffered huge cost overruns and failed to come anywhere close to projected ridership targets. Despite well-meaning smart growth efforts, transit continues to lose market share in all but the very largest, most congested US cities. The nonplace urban realm has proven too powerful a determinant of travel behavior.

Mel Webber's epiphany on why it's important to achieve a "glove-in-hand" fit between urban landscapes and transit investments was expressed in numerous essays, including ones that appeared in ACCESS. The titles of these essays, "The Joys of Automobile," and "The Marriage of Transit and Autos: How to Make Transit Popular Again," speak for themselves. But it was Mel's penetrating analysis of the BART heavy rail investment that many view as his *pièce de résistance* on the subject.

When Mel wrote his provocative and rather scorching critique of the BART investment, "The BART Experience: What Have We Learned?" in *The Public Interest* in 1976, he had the benefit of twenty years of hindsight. Mel's first major job upon graduating with a Masters in City Planning from Berkeley in the early fifties was to work for Parsons, Brinckerhoff, Hall, and MacDonald, Inc., BART's master planners and builders. ➤



Bangkok

Mel worked on the BART master plan, a beautifully crafted document, a well-worn copy of which, I'm proud to say, sits in my office at Berkeley. The plan is arguably the only time in the Bay Area's history that there has been a cogently articulated vision of the transportation/land-use future. It calls for the Bay Area to become a "sub-centered metropolis"... "something between the tightly nucleated clusters which form the typical metropolitan areas of the East Coast and the vast low-density sprawl of the West Coast's Los Angeles." It waxes poetically that with BART's coming, "mini-communities would mushroom around suburban rail stations."

But hopes that BART might ease traffic congestion were dashed by what today is understood as induced demand. On BART's traffic impacts, Mel wrote: "Traffic congestion within BART's district is about where it was before. That's in part because motorists who did switch to BART left vacant highway space that was then occupied by others, including those making trips they would not otherwise have made. It's in part also because BART has drawn many of its riders from buses, thus displacing low-cost transit service with high-cost service, while not significantly affecting traffic congestion."

*Mel's vision is uncannily similar to what is
taking shape today.*

It is axiomatic that what drives land-use change is not shiny space-age vehicles or political rhetoric but rather changes in accessibility—the ability to get to places people frequently want to go. Because there is a limited supply of places that are highly accessible, developers aggressively compete for choice plots of land, bidding up property prices and building as densely as zoning ordinances and market demand will allow. Mel eloquently tied BART's failure to bring about hoped-for land-use changes to accessibility. He wrote: "BART may have contributed significantly to CBD growth, but it has not yet restructured the suburbs. New rail access at suburban stations added new accessibility as planned. But the increments proved to be insignificant in proportion to overall accessibility. As a result very few developers were enticed into seeking sites adjacent to rail stations. They sought good pieces of land accessible to the road network instead. It looks as though it is now simply too late to use limited-access rail transit as an instrument for inducing urban centering."

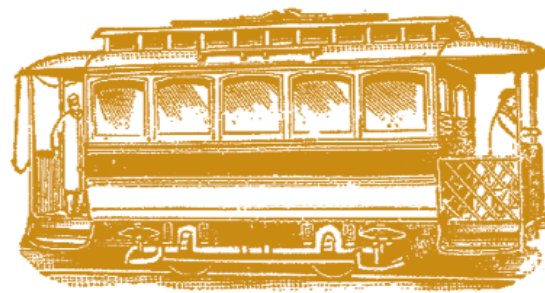
Mel's vision of how public transit systems of the future should look came out of the BART impact work. As mode-choice modelers well know, the scourge of public transit in America is the dreaded transfer—in techno-talk, we're told the disutility of out-of-vehicle travel time is around three times that of in-vehicle travel time. Mel told us the same thing in his analysis of BART, though in a more digestible format: "Because BART is laid out essentially as a mainline railroad, rather than as a network of lines, very few people find either their origins or their destinations adjacent to stations. For most, a train ride requires a supplemental trip-leg, either by foot, car, or bus at either the origin end, the destination end, or both. Travelers find these supplemental trip-legs to be most onerous." ➤

The logical alternative to rigid fixed-guideway transit is something that is flexible, demand-responsive, and many-to-many in its service coverage. Mel's vision presaged current-day interest in Bus Rapid Transit (BRT), with at last count over ninety BRT lines currently in operation or in the pipeline in the US.

For Mel, however, rail alternatives needed to go beyond 55-passenger buses. Among the swift-footed, atomized forms of mobility that blended the best of both worlds—transit and the car—Mel saw a future of carpools and vanpools on dedicated lanes, private jitneys that go when and where customers want (as in much of the developing world), and electronic hitchhiking. Mel's vision is uncannily similar to what is taking shape today.

Webber's future-casting talents are perhaps best revealed in "The Marriage of Transit and Autos." There he wrote: "We can now foresee metropolitan-wide transit systems, each focused on Transport Central's computer. A person wishing to go from here to there at a specified time phones the transport help line, say "711," and places a request by punching the phone buttons. The computer then searches for a neighbor traveling at that time to that place and willing to share an empty seat for a fee. If none is found, it searches for the nearest publicly or privately owned bus, or van, or taxi, which it sends to the caller's front door."

While in the early 1990s Mel might not have foreseen the coming of the Internet, cellular phones, and WiFi technology, and was slightly off the mark (though only by a single digit) with his suggested dial-in number, he more or less got it right. Go to the website of 511.org, serving the San Francisco Bay Area, and what you'll find before you is a menu of mobility options, including BRT and self-help ridesharing. It's just a matter of time before Webber's fuller vision of auto-like mass transportation, complete with door-to-door paratransit and real-time hitchhiking, is a reality. ♦



Skeptical Optimism in Transportation and Planning Research

BY BRIAN D. TAYLOR

I SUSPECT THAT EVERY ONE OF PROFESSOR MELVIN WEBBER'S colleagues experienced The Furrowed Brow at one time or another. Offer an assertion on almost any topic, and Mel would employ The Furrowed Brow—an exceedingly earnest and quizzical expression he wore while peppering you with questions challenging your proposition in a methodical point-by-point fashion. Conventional wisdom of any sort was especially likely to elicit The Furrowed Brow—"good planning requires public participation," "we can't build our way out of congestion," "urban travel is underpriced" or any similar statement was vulnerable. "Why?" Mel would ask. "How do we know?" "Are you sure?" On a few occasions he asked me "Why?" "Why?" "Why?" so many times in a row that I thought that he was pulling my leg. But he wasn't.

I eventually learned, with considerable relief, that Mel's skepticism did not indicate disagreement. Not at all. Mel simply abhorred sloppy, uncritical thinking, and he was a preternaturally curious person. He was especially interested in the application of new ideas and clever insights on the real world—particularly as they related to travel or urban life. Conventional wisdom among practitioners and complex but poorly-premised analyses by researchers were singled out for particular attention. His questions, however, were sincere and, if answered to his satisfaction, would elicit a nod and a smile. ➤

Brian D. Taylor is associate professor of urban planning and Director of the Institute of Transportation Studies at the University of California, Los Angeles (btaylor@ucla.edu).

Far from cynical, Mel was optimistic about the potential of quality research to improve transportation and planning practice. Confused thinking or illogical responses, on the other hand, evoked no nods or smiles. The Furrowed Brow remained, and the conversation would tail off awkwardly.

I believe that the sort of skeptical optimism long practiced by Mel Webber is in increasingly short supply and is needed now more than ever. Most transportation and planning scholarship is applied in that it aims to both describe and improve the state of the world. This applied relevance is what draws many scholars to work in these fields, and what causes some in the more traditional, liberal disciplines to view our work with some suspicion. To some from mathematics or English, an examination of how the Bay Area Rapid Transit system has affected travel and development patterns can appear intellectually bereft, even vocational. While absolutely untrue, such perceptions persist.

Further, the normative zeal with which some scholars approach their work—among some who advocate privatization or new urbanism for example—can exacerbate

The skeptical optimism long practiced by Mel Webber is in increasingly short supply and is needed now more than ever.

negative perceptions of the intellectual depth and rigor of transportation and planning scholarship. Such research can rightfully be viewed as advocacy, and lacking in the dispassionate research designs central to first-rate academic scholarship. While such advocacy research is often embraced by like-minded practitioners and elected officials, it tends to give short shrift to countervailing evidence and hence breeds cynicism about its objectivity.

Despite the advocacy in some research, the gap between the cutting edge of transportation and planning research and the day-to-day realities of practice has grown over time. For example, travel behavior research long ago left the four-step travel demand modeling process in the dustbin of history. Publishing refereed research on the four-step model today is akin to publishing on the newest developments in eight-track audio technology. But, scholarly disinterest notwithstanding, the four-step model remains firmly entrenched in practice, held steady by decades of legal precedent. Although researchers have made some encouraging progress towards developing better models of travel behavior, these models have not found their way into planning practice, and the research/practice gap continues to widen. (Some of the biggest advances in practice, it should be noted, have been in places like Sacramento and the San Francisco Bay Area, often in collaboration with University of California researchers).

Why has the research/practice gap in travel behavior analysis, and so many other areas of transportation and planning, grown so wide? Part of the reason is the inherent conservatism of practitioners, especially those in public agencies where deviation from established practice increases vulnerability to public criticism and legal challenges. But a large part of the gap is caused by researchers who are uninterested >



Paris

in translating their often highly abstract or technical research into forms easily understood by practitioners and elected officials.

Mel Webber's career, most notably his second career as creator and editor of ACCESS magazine following his retirement, sought to meaningfully translate academic scholarship for practitioners while insisting that arguments be carefully crafted to sway even the most skeptical reader. And while many of the top transportation scholars in the world have written for ACCESS, Mel's fingerprints are all over nearly every article. Good writing, the saying goes, makes readers feel smart, and for fourteen years Mel made ACCESS readers feel brilliant. The formula was simple: start with good research; engage a team of talented, patient co-editors; insist on high production values to create an entirely distinctive eye-catching look; and distribute it free to any and all interested readers.

From the first issue, with articles about demographic trends in vehicle use, compulsory ridesharing programs, environmentally friendly vehicles, pavement wear, and commuter stress, to the most recent articles on transit privatization, aesthetics in system design, climate change, and localized vehicle emissions exposure, the pages of ACCESS have made a stunning array of topics, well, accessible to practitioners and decision-makers. Most ACCESS authors will tell you that while refereed publications may be the coin of the academic realm, responses to ACCESS articles, from both practitioners and academics, tend to dwarf even the most high-profile academic publications. It's perhaps a sad statement about the state of transportation and planning scholarship that ACCESS has had and continues to have the field almost entirely to itself.

So while *The Furrowed Brow* was distinctively Mel, transportation and planning scholarship needs his brand of skeptical optimism more now than ever: to fend off academic critics of applied research; to push us to be as skeptical about conclusions we favor as those we oppose; to temper the excesses of advocacy scholarship; and most importantly, to pursue research that can meaningfully influence transportation and planning practice for the better. I'm optimistic that we *can* do these things. But will we? About that, I must confess, I remain skeptical. ♦



Melvin M. Webber: Maker and Breaker of Planning Paradigms

BY SIR PETER HALL

MELVIN M. WEBBER DIED TWO DAYS AFTER THANKSGIVING in the Berkeley home where he and his wife Carolyn had lived peaceably for nearly half a century; they would soon have celebrated their golden wedding anniversary, but at the age of 86 his multiple myeloma cheated them of their festival. With him passed an era in the history of Berkeley's Department of City and Regional Planning, where he had spent nearly all his long academic life and to whose international pre-eminence he had so profoundly contributed.

His importance to planning as an academic discipline, not merely in the United States but even more so on the international scale, would never be measured in quantitative terms. Indeed, as with so many leading academic figures of his generation, by today's standards his published output might appear negligible; in another time and place, he would have presented a problem for a harassed department head, struggling to raise collective output for a forthcoming Research Assessment Exercise. The truly astonishing fact was that his publications, though sparse, were of such extraordinary path-breaking quality. He transformed the way we thought about cities and about the ways we should go about planning them. Thomas Kuhn, when he published his celebrated >

Sir Peter Hall is professor emeritus of city and regional planning at the University of California, Berkeley, and professor of planning at University College London (p.hall@ucl.ac.uk).

book *The Structure of Scientific Revolutions* in 1962, might have been writing about him. He was truly a paradigm breaker and a paradigm maker.

It was just at that time, in fact, that he made his first major contribution to the literature in the form of two essays which have been cited and cited again. Their wonderfully intriguing titles aptly suggested both their subversive content and their elegantly classical style. “Order in Diversity: Community without Propinquity” was published in 1963, in a symposium, *Cities and Space: The Future Use of Urban Land*, edited by Lowdon Wingo of Resources for the Future, a Washington, DC think tank. “The Urban Place and the Nonplace Urban Realm” appeared the following year in a volume Webber himself edited, *Explorations into Urban Structure*, which contained several other essays from his Berkeley department, reflecting its sparkling intellectual pre-eminence at the time.

In them he argued, as he put it, that planners were seeking the wrong Holy Grail: they were obsessed with the concept of place, but place was rapidly becoming irrelevant in people’s lives, whether for their work or their residence or their patterns of consumption. The new service industries used immaterial inputs and had immaterial outputs, so were free to locate where they would; mass car ownership and freeway networks increasingly gave people the freedom to locate where they wished; and mass mobility gave the possibility of different lifestyles in all manner of places. Most significantly of all, he argued, people were losing their old ancestral attachment to places: they had complex and multi-layered social relationships, some local, some stretching across the world. What mattered was not the places where they happened to be, but the networks that connected them.

Looking back over more than forty years, it is evident even more so now than at the time how much this vision was a product of the uniqueness of Californian society in the early 1960s. It was, as I wrote years after,

...the high water mark of a certain self-created myth created by California about itself. The state was in the middle of its extraordinary boom years, fuelled by ten years of Cold War, by defense contracts and by the rise of Silicon Valley on the other side of the San Francisco Bay, except no one called it that then. Under the benign governorship of the late great Pat Brown, California was pumping its wealth into a huge investment program: into the brand new freeways that were everywhere multiplying, into massive expansion of the university system that would make it the greatest in the world.

In consequence life in California was displaying characteristics that then appeared totally exotic but have now become commonplace across the affluent world, not least here in the UK. Already, people in what would soon be known as Silicon Valley changed employers and workplaces as casually as if buying a cup of coffee. Already, people would get into their cars and drive an hour to a giant shopping mall. Already, people took planes to anywhere as if they were buses. Already, people would go off at the drop of a hat for a weekend in Acapulco or Puerto Vallarta. Even more significantly, in that pre-Internet age, Californians would spend literally hours on the telephone, indifferent as to whether >



Riyadh

they were talking to someone a mile down the road or 3000 miles across a continent. In 1963, Mel Webber had seen the future of the world already arrived around him, and found that it worked.

His papers reverberated far beyond California. I remember being transfixed by them when I reviewed them for the then-new magazine of the social sciences, *New Society*. That provoked a correspondence that in turn brought me to meet Mel for the first time in Berkeley in September 1966, initiating an intellectual comradeship and personal friendship that lasted the rest of our mutual lives.



IT WAS AN EXTRAORDINARY TIME IN HUMAN HISTORY, WITH THE FIRST vibrations across the Bay Area and the Berkeley campus of what soon after became that legendary Summer of Love in San Francisco. Ironically, no one could have been less personally attuned to that bizarre manifestation of mass human liberation than Mel himself. The very personification of New England rationality and slightly skeptical detachment, a sociologist/economist by training (and very much a scientist by inclination), he viewed the whole era with amused detachment, almost in the spirit of a social anthropologist. I will never forget the first class we co-taught at Berkeley in early 1974, a PhD seminar. Mel asked the students to make brief presentations of their research plans. After some reasonably coherent if slightly conventional proposals, it was the turn of an extremely intense female student at the corner of the table. She proposed, she announced, to study the contrast between the aggressive male-dominated alcohol-based culture and the all-embracing female marijuana-based culture. Mel took all this in his usual sympathetic way, gradually seeking to make a researchable topic out of it—with what result, I cannot now recall.

Meanwhile, our intellectual exchanges—and his influence on other British academics like Peter Rayner Banham, who repaid the debt by writing what remains the best book ever written on Los Angeles—had led to an invitation to spend an academic year in London as Visiting Scholar at the newly-founded Centre for Environmental Studies, an urban think tank. That sojourn produced a two-part paper in the *Town Planning Review* that further developed his ideas in an international context, but even more importantly led to his appointment by Richard Llewelyn Davies as advisor on the master plan for Milton Keynes, then just starting gestation. No one present at those inaugural seminars will ever forget the power with which he argued for a town freed of all conventional concepts of place or hierarchy. The basic concept that emerged, stamping itself indelibly on the plan as finally drafted, was also powerfully influenced by the ideas of Christopher Alexander, an English émigré to Berkeley, and in particular by his essay “A City Is Not a Tree;” hierarchy and determinacy were out, freedom of action was the governing principle, and automobility would be the key. At a time when a bare half of all British households owned a car, it was an audacious vision, and MK (as it soon became known) became the town that many planners loved to hate. But to this day its citizens, significantly, hail the quality of life there. Mel passionately believed in planning for people

and the way they wanted to live, not the way planners thought they ought to live: a very American, above all Californian, view of the world.

It was some time after that, in 1976, that he published another of the infrequent pieces that could truly be described by that overworked word, seminal. “The BART Experience: What Have We Learned?” was a research monograph from the Institute of Urban and Regional Development, which he headed for many years. A group had been tasked with undertaking an independent review of the then-new Bay Area Transportation System, a remarkable initiative in its own right: designed as an express transit system for the entire region around the San Francisco Bay, sixty miles from San Rafael to San Jose, thirty miles from the Pacific Ocean to Concord and Walnut Creek. Like everything else in California at the time, it was a visionary and hugely ambitious attempt to provide a viable alternative to what was already the reality of mass automobility. Studying the result, Mel, who had much earlier been an advocate of the project, concluded that it had not succeeded in its basic objective. It was based, he said, on the false

*Mel Webber believed in planning for the world as it actually was,
working within the limits of the possible.*

premise of extraordinarily high speed—eighty miles an hour under the Bay, between downtown Oakland and downtown San Francisco—and it ignored the basic fact that the dispersed pattern of residential development meant that people lived too far from the BART stations. In consequence, on a wet December or February morning—and there are many such in the California winter months—the typical East Bay commuter would get into her car and drive on to Highway 24, with the BART line running at speed through the central median. Commuters would reject the dash through the rain to the train, preferring to stay snug and dry, with the radio soothing their way through the gridlocked approach to the Bay Bridge toll plaza. BART could have worked for Paris, Mel concluded; the problem was that the Bay Area, and any American metropolis of similar ilk, wasn’t Paris. That lesson has since been relearned bitterly in other American cities; among transit planners, hope springs eternal.



BUT MEL WAS NEVER SEDUCED BY UNATTAINABLE VISIONS; HIS SCIENTIFIC bent, which he reinforced by assiduous reading of *Scientific American*, precluded that. He believed in planning for the world as it actually was, working within the limits of the possible. About that time he joined in an extraordinary intellectual collaboration with Horst Rittel, a German academic who spent half his academic year on the Berkeley campus. The result was a paper, “Dilemmas in a General Theory of Planning,” published in the journal *Policy Sciences* in 1973. In it Rittel and Webber stated, “The easy >

problems have been solved. Designing systems today is difficult because there is no consensus on what the problems are, let alone how to resolve them.” They argued that there is a set of “wicked problems” that defy any possibility of solution by conventional rational approaches: the apparent solution might reveal or create another problem, even more complex than the last. That insight has reverberated through the field of public policy ever since, generating academic contributions almost without number.

During the 1970s, like many others of the Berkeley professoriate, Mel suffered not only intellectually but also personally from the Marxist ascendancy in the social sciences, with which he never successfully grappled—new generations of students complained that his reading lists were outdated—and which led him to be branded almost as a counter-revolutionary. Ironically, in his own professional career he was the very personification of the aphorism of Antonio Gramsci: Pessimism of the Intellect, Optimism of the Will. And, by another rare academic irony, Manuel Castells, appointed to join the Berkeley faculty in 1979 as the world’s leading exponent of Marxist urbanism, later drew heavily on Mel’s insights to develop his hugely influential idea of the network society.

Mel’s deep grounding in social reality caused him to continue to hold out against changing intellectual currents, especially the environmental movement that gained sway over the Marxist ascendancy on campuses like Berkeley in the late 1980s and 1990s. Appointed to a prestigious committee of the American Association for Arts and Sciences on the future of the automobile, he held out steadfastly against virtually the entire membership, continuing to extol the virtues of the car as a liberator of the human spirit. That deep stubbornness, based on a clear understanding of ordinary people and their needs and preferences, did not always endear him to colleagues. But it spoke to a rare integrity of the intellect.

His intellectual flashes of genius were lights that lit a steady and satisfying life of service to the university he loved. He was a major figure on the academic Senate. He ran the Institute of Urban and Regional Development for nearly twenty years, and also directed the Transportation Center where, right to the end of his days, he continued to edit the journal he had founded, ACCESS. Here, in 1990, against all his instincts but in a typical spirit of scientific curiosity, he gave me a small grant to study the possible future of high-speed rail in California. The report, written with three graduate students, led indirectly to the establishment of the California High-Speed Rail Authority, with one of those students, Dan Leavitt, as Deputy Director. One day not too distant, boosted by Governor Schwarzenegger’s conversion to environmentalism, the proposal—one of the biggest civil engineering projects in Californian history—will go before the voters. If it wins their approval, that would be another rare academic irony. Mel would doubtless say, as he said to me in life, that it was yet another example of wish fulfillment. Time alone will then tell if the old master was again right at the end.

His end was quintessentially characteristic: his colleagues and friends received an email, dated the day of his death, saying simply: “Goodbye. Mel.” Simply, rationally, without fuss, he must have typed it and left it on his computer before he lay down to wait for death. It was, like so much he did and so much of what he was, quietly magnificent. ♦



India



Indonesia

Teaching With Mel

BY ELIZABETH DEAKIN

MEL WEBBER TAUGHT BOTH PLANNING THEORY AND transportation policy to graduate students in the Department of City and Regional Planning. I had the good fortune to co-teach the transportation policy class with him in the late 1980s, shortly before his retirement from the department. We each took responsibility for some of the sessions, but both of us participated in nearly every class.

When it was Mel's turn, he rarely lectured. Sometimes he started the class with a slide show or a few transparencies, then opened up the session to discussion. At other times he came to class with brief introductory remarks and an example or two, plus a list of questions to debate.

He brought his personal experiences, good and bad, into the classroom to make his lessons concrete. Mel showed students how BART, which he had initially advocated, provided too sparse a network of services to transform urban space as he had once thought it would. Students challenged him: Surely the lack of supportive land use policies had reduced BART's effectiveness. Mel thought that over and came back with readings on how transportation benefits should be capitalized into real estate values, as well as case studies of the zoning fights that had limited urban intensification around key BART stations. It was a successful exchange, in his view: conflicting viewpoints were uncovered and explored and everyone's perspective broadened.

Mel loved his car and believed that personal vehicles were the ideal mode of transport, offering door to door service at the driver's own schedule. The only problem with cars, he thought, was that some people couldn't drive them. He was dubious about environmentalists' criticisms of auto dominance, convinced that technology and better planning could reduce harm to minimal levels. Still, he could be convinced by data. Seeking to teach students how evaluations based on "average" emissions can produce bad policy, I used Mel's old Volvo to illustrate how cars lacking modern emissions technology produce pollution far disproportionate to the miles they are driven. Mel did some research of his own on emissions and fuel economy, and (with some regrets) replaced the car with a new model the next time the Volvo needed a major repair.

Elizabeth Deakin is professor of city and regional planning, director of the University of California Transportation Center, and co-director of the Center for Global Metropolitan Studies at the University of California, Berkeley (edeakin@berkeley.edu).

One thing that Mel insisted on was that alternative viewpoints be sought out and given a hearing. He was skeptical of “true believers” of any type, but especially those who seemingly knew how others should live. Planning’s great contributions, in Mel’s view, were its ability to help people identify and evaluate options, and its aim of leveling the playing field. With good information and a fair set of choices, people then could decide what was best for themselves.

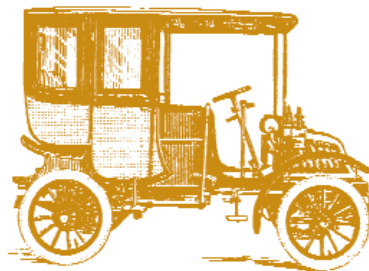
Students often were a bit in awe of Mel at the start of the semester. He was, after all, one of the founders of the department, the director of the Institute of Urban and Regional Development, the author of seminal works. The students quickly learned that he thought of them as fellow professionals. He wanted to hear about their experiences in the world of work and to find out what issues they saw as pressing. He listened to what they had to say with attentiveness and interest. His office door was open to their visits and his

Mel insisted that alternative viewpoints be sought out and given a hearing.

mind was open to their ideas. He might disagree, but his disagreement was gently offered, in the form of questions to think about and articles to read. Many of the students became regular visitors. A significant number continued their visits long after the class had ended.

When Mel retired from City and Regional Planning, he missed the regular contact with students. He was pleased whenever a PhD student would seek him out, finding the way to his office at the UC Transportation Center (UCTC) on the opposite side of campus from his old Wurster Hall digs. (Ironically, he had come full circle: the old Naval Architecture Building that housed UCTC for many years had been the home of City and Regional Planning when Mel was a student and a young faculty member there.)

As UCTC’s first director, Mel found new ways to work with students. He created a UCTC dissertation grant program that offered ten fellowships a year, available to support transportation dissertations at any UC campus. He recruited recent transportation PhDs to review the grant proposals and choose the winners. He read the dissertations that began to arrive and recruited some of their authors to write articles for ACCESS. He established an annual student-led conference and participated in it every year until his failing health limited travel. Mel never quit teaching; he just changed the form of teaching he did. ♦





Malaysia

Learning From Mel

BY JONATHAN RICHMOND

I FIRST ENCOUNTERED MEL WEBBER DURING A BRIEF STAY AT Berkeley. I had left MIT with a trail of debt and unwisely registered for a PhD at Berkeley with only partial financial aid. Rather than worry about the unpaid rent at International House piling up on top of the five months of unpaid dorm rent I had left at MIT, I became utterly absorbed in the two most astonishing courses I have taken anywhere. One was taught by C. West Churchman, the other by Mel Webber (very ably assisted by Karen Christensen).

The courses had similar themes, but a difference in emphasis. Both West and Mel had as their central concern the human failing of turning the complex into the (overly) simple—the attraction of the easy answer that rarely proves to be an effective solution. Both of these deepest of thinkers called on their students to identify and question assumptions in order to avoid such pitfalls. But while West led us to encounter the great philosophers as a way to lay bare the inadequacies of our own thought, Mel was more practical, and gave hope that there was in fact a path to better planning, one that we could all embrace.

Much of what is called “planning theory” is deadly boring, with too many courses serving as a sort of initiation ritual that students are made to undergo before they can become certified planners—after which they then forget everything they have read.

Mel’s course could not have been more different. He started with real examples that demanded attention—about real transportation systems, real cities, and real people. He connected these examples to theoretical readings. The readings, though voluminous, were carefully selected and came to life through the questions Mel led us to explore in class. And the most profound message that Mel gave us was that there was a way to confront those things we found complex.

Mel saw that even the most advanced technical analyses could prove inadequate without consideration of the larger urban context including its social and environmental dimensions. But Mel did not tell us to avoid technical studies. Instead, through the example of his own work and his questions about that of others, we learned that technical analyses can be a useful starting point for asking deeper questions, which could then lead to a more fruitful and instrumental reframing of the analysis and even of the questions to be addressed. >

Jonathan Richmond is visiting professor of logistics, transport, and tourism at the Conservatoire National des Arts et Metiers in Paris, France (richmond@alum.mit.edu).

Mel's teaching always had a great clarity which drew in his students. He explained the concept of "wicked problems" with such immediacy that it was readily understood and became a basic concept that nobody in the class could let themselves forget.

Wicked problems have no one solution and no ending point. They are messy, and often the obvious problem we first encounter requires other problems to be confronted to give any chance of progress. Is solving traffic congestion about providing more roads, or about allowing fewer cars on the roads we have? Is it about providing public transport? What sort of public transport? About changing our work patterns and the geography of our communities? About changing our very concept of community to recognize and respond to the "nonplace urban realm"—communities "without propinquity"—and the sorts of travel they imply? As we students examined the endless choices, it became clear that wicked problems can lead to endless other problem formulations and strategies, and to surprising new outcomes which then generate new wicked problems.

Mel found a way to teach his students such things without heaviness. The complexity he led us to confront may have been "wicked," but the concepts Mel taught us were vivid and compelling. And the message from Mel's course was that there are ways to tackle complexity and become better planners. We would all be better planners if only we would open up our minds and become aware of the multitude of choices available to us. Mel showed us, through examination of theory and practice, that we did not have to attack all elements of complexity. If we could recognize and act on at least a part of the problem, we would do good work. Despite the "wickedness" of problems, we could come up with solutions. They might not be the only possible solutions, and most likely would not be optimal—there is no such thing as an "optimal" solution to a social problem in any case—but they would provide good paths forward which could contribute to the development and well-being of cities.

We left Mel's classes feeling empowered and uplifted. Mel's students were primed to produce new ideas, reveal choices, take action. Powerful stuff.

Mel's gift to his students extended to writing. He himself was an excellent writer and he expected high standards from his students' written work. He never hesitated to identify defects and prescribe remedies. Too many academics write poorly, but Mel insisted that all writing is a form of communication and must grip the reader. Mel's demands for clear thinking permeated all areas of his work and had a lasting effect on those who learned from him. They are undoubtedly in evidence in this very issue of *Access*. For, if my original words have shown any sign of lapse, you can be sure that a Mel-trained editor will have cleaned them up before they meet your eyes.

Ideas can live on and are perhaps our only way to immortality. Mel's ideas were powerful as well as humane, demanding generosity of spirit and leading to paths of constructive change. If we can incorporate at least some of his principles into our own practice and research, the result will be anything but wicked. ♦



Melvin Webber and the “Nonplace Urban Realm”

BY MICHAEL B. TEITZ

THE QUESTION OF WHAT CONSTITUTES “urbanism” has vexed thinkers for as long as cities have been written about, but few have contributed more profound insights than Mel Webber. Over his fifty-year career, he distinguished himself as a teacher, researcher, builder of institutions, editor, and professional planner, but it is as a theorist and analyst of deep urban social changes that he may have made his greatest contribution. His theoretical insights have shaped the development of many ideas in planning, transportation, and spatial analysis, but none has had more influence than his idea of the “nonplace urban realm.” >

Michael B. Teitz is professor emeritus of city and regional planning at the University of California, Berkeley (teitz@berkeley.edu).

Webber's papers, "Order in Diversity: Community Without Propinquity" and "The Urban Place and the Nonplace Urban Realm," published in 1963 and 1964 respectively, challenged the foundations of urban studies and planning of the time. The fundamental view of urban development then was rooted in the concept of *place*—the physically based, economic, social aggregate that constitute a city. For urban planners, geographers, and transportation engineers, *place* was at the center of their work. Their job was to understand the city and its patterns of growth and change, and to plan and respond effectively. Webber had been deeply immersed in this point of view, both as a student in a new professional planning program at the University of California, Berkeley, and as a young professional engaged in the development of BART, the first new major rapid transit system in the US in decades.

However, when he joined the faculty in the Department of City and Regional Planning at UC Berkeley, he began to rethink the orthodoxy of the time. In lengthy discussions with his colleague, the sociologist Donald Foley, and through an extended network—one not dissimilar to those he would come to see as operating in nonplace realms—Webber reassessed the nature and future of urban development. He recognized

*In Mel's view, the city was a giant communications
mechanism (he described it as a switchboard),
which was extending to the entire world.*

what few had then seen, but many would see much later: that the changes in the speed and nature of communications were fundamentally changing the definition of "city." For companies and other organizations, the constraints of location seemed to be breaking down once they could locate and maintain their market contacts outside the traditional city. In Mel's view, the city itself was a giant communications mechanism (he described it as a switchboard), which was now extending to the entire world.

But there were also other implications of the development of communications technologies. For the huge majority of people, the world had been confined to one place, encompassing family, tribe, social interaction, work, and political life, but the transformation of communications and transportation was about to break those bounds. This change would not just be physical, with people traveling more, but it would affect patterns of mind and expectations in deep ways. How these would change is still open to debate; Mel's work did not answer all the questions it raised, but it established a framework for discussion. There can be no doubt that massive urban agglomerations will dominate the way in which the world's population will live in the coming century, although this was not fully evident at the time that Mel was writing.

Nonetheless, in the early 1960s, American cities were clearly undergoing massive change. Suburbanization, already in place since the 1920s, had accelerated in the ➤



Indonesia

post-World War II period, reflecting rising incomes, government housing policy supporting home ownership, and increased mobility. Industries and white populations were leaving the old central cities, which were increasingly home to impoverishment and ghettoization of African Americans. The outpouring of rage and frustration manifested in the riots in Detroit, Los Angeles, and other cities after 1963 was about to shock the American psyche and lead to huge changes. Forty years later, many of these problems remain unresolved, despite a large number of efforts to address them. We have seen government intervention replaced by market-based solutions; the “Great Society” and the “War on Poverty” have given way to housing vouchers and welfare reform. But the underlying problems of inequality and the inability of some groups to fully participate in the American economy and society are still with us.

Those problems seem to be stubbornly place-bound: segregation and bad schools are spatially defined. Furthermore, the consequences of the loosening spatial bonds that Mel identified are now threatening the livelihood and peace of mind of wider populations. Formerly stable industries have responded to global competition by outsourcing and plant closures that displace their workers. A new wave of immigrants creates other direct threats to current workers. Paradoxically, along with continuing suburbanization, we see simultaneous evidence of regeneration in central cities: downtown development based on entertainment, high technology specialization, cultural tourism, and a resurgence of higher-density living. Finally, since Webber’s essays were written, there has been a huge transformation in social perceptions of the environment and its importance. It may be a good time, therefore, to reexamine Webber’s ideas.



READING MEL WEBBER’S ESSAYS FORTY YEARS ON, ONE CANNOT HELP BUT be struck both by their prescience and by the fact that they are rooted in their time, the late 1950s and early 1960s. Further, it is clear that at that time Webber was deeply engaged in a dialogue about cities, planning, and metropolitanism with colleagues near and far, many of whom would eventually find themselves also at UC Berkeley. Planners were trying to understand the objectives and meaning of their work in a rapidly changing world.

It is in his prescient insights into urban life and its changes that the essays have their real power. A popular view of his notions of the *nonplace urban realm* and *community without propinquity* is that they note the vaporization of the traditional meaning of “city” into networks of relationships at varying distances, perhaps privileging elites. His image of a biochemist engaged in projects spanning the globe while simultaneously working in his laboratory was a powerful one, rooted in the university itself. Memorable though this is, it does not begin to encompass the intellectual program that Webber was setting forth. He was using the idea of non-propinquity as one element in a larger effort to recast our understanding of the nature of urban life. He sought to shift the focus of attention from *place* to *connectivity*, arguing that cities should be seen, in effect, as giant switchboards, and that to understand them we should be trying to measure and plan for the communications embedded in them. Again and again, he asserts that accessibility is the key to the existence of cities, and that with increasing accessibility the city itself becomes

transformed from a *place* into a web of interactions at varying geographic scales. He saw urban realms as manifestations of “interest communities” that exist at varying scales, from the local to global, with no distinct boundaries, and with an increasing tendency to grow in geographic scale as communications continue to improve.

Identifying and describing networks one by one turns out to be a lot easier than measuring their aggregate effect and influence, as pointed out by Peter Hall and Kathy Pain in 2006. Nonetheless, Webber was perhaps the first scholar in planning to enunciate an alternative to place both as the basis for defining the object of planning itself and as a more powerful paradigm for planning practice.

A second aspect of the essays is Webber’s insistence that the dominant role of accessibility would inexorably lead to low-density, widely spread new kinds of cities and of urban living. In this, he stood against conventional planning thought of the time, not just in asserting that attempts to maintain dense cities were unrealistic, but in defending suburbia as a manifestation of people’s preferences. In so doing, he established the initial basis for a counter-orthodoxy that has become very influential.

Another aspect of Webber’s essays also deserves note. In his concluding summary to *Explorations into Urban Structure*, Jack Dyckman observes that Webber’s contribution exemplifies the entry of social science into planning. That was indeed a major impulse at the time. Although the essays themselves are discursive and wide-ranging, part of their effect is, in Dyckman’s words, to fashion “a noose which they slip over the long-held planning simplification-of-the-goal question.” Mel did this by raising issues about the fundamental nature of urban space and the processes of urban growth that had to be resolved by empirical research.



OF COURSE, MEL MISSED SOME VERY IMPORTANT THINGS TOO. IN LINE with conventional thinking of his time, perhaps excepting followers of Patrick Geddes, Webber saw the environment purely in terms of human use. At the time of his writing, planners emerging from the Great Depression and the New Deal were interested in resource use and conservation, but not in ecology. The environmental movement and its attendant legislation were nascent in the early 1960s, and their subsequent influence on suburban growth has been mixed. If global warming does change the dominant patterns of development, it will have to be by virtue of an overwhelming imperative that can trump the forces that Webber described. Sustainability has been presented as that imperative, but it is not yet sufficiently grounded.

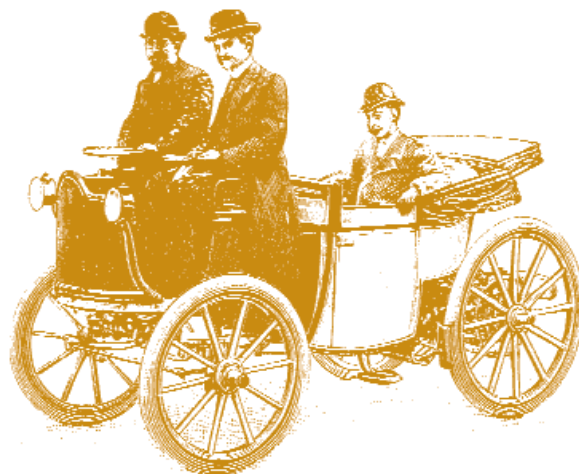
Webber’s essays did not anticipate the rise of localism and opposition to planning that has resulted in community development becoming a major part of the field. While he did not assert that central cities would wither away, the implication that they would is clear. That has not happened, even though central cities have experienced population decline. In reality, for many cities there has been a renaissance as communication centrality and amenity have grown. Webber himself noted this in a later essay.

Perhaps the most interesting aspect of urban history subsequent to Webber’s papers has been the continuing dominance of major world city centers. While affluent people in high-income countries seek low-density, rural lifestyles, albeit often in the form of ➤

second homes, the conjunction of world population growth with rising incomes and productivity has generated an astonishing explosion of cities in developing countries. The skyscrapers of Shanghai and Mumbai seem to call Webber's insights into question. In fact, of course, they are precisely manifestations of the broader webs of relations that he predicted. However, he did not foresee the continuing power of face-to-face communication and the necessity for close-by ancillary activities. Looking more closely at cities in China and India, we can see the desire for suburban lifestyles emerging, but whether it is sustainable except for a narrow group of elites may be in question.

To conclude, how might we assess Mel's remarkable essays? Without doubt, they have deeply influenced thinkers and researchers in planning over the past forty years. They continue to be seminal and relevant at a time when the vision of cities as networks is immensely popular, especially in the work of Manuel Castells. The continuing growth of suburbia and of automobile dominance also seems to bear out Mel Webber's vision of what was important in shaping urban growth in the 20th century. Reading current advocates of the "New Suburbanism" such as Joel Kotkin, one can see Webber's insights translated into an ideological form that he would probably deplore as much as he deplored ideological arguments for urban constraint. Even so, the currency of those arguments cannot be denied. At the same time, the force of arguments against dispersion has not diminished; efforts like that of New Urbanism to build high-density settlements that are not automobile dependent are probably flourishing more now than at any time in three decades. If these streams converge, we may witness an historic compromise.

In sum, the innovation and insight of Webber's nonplace essays still stands up to close examination forty years on. They marked the fertile beginning of a career that has shaped much of what city and transportation planning have become. And they still stand as documents that exemplify both the best of planning thought in their time, and the power of a remarkable intellect to see the world evolving. ♦



Beyond ITS and the Transportation Monoculture

BY DANIEL SPERLING

MEL WEBBER WROTE AND THOUGHT A LOT ABOUT CARS. He frequently pointed out that cars remain the first choice for transport for most people because their convenience and door-to-door accessibility are unmatched by any other mode. However, many cities are headed toward traffic paralysis because cars are so popular. Car ownership and use continue to increase, but there is little expansion in road capacity.

The principal response of transportation planners to increasing congestion over the past fifteen years has been development and deployment of “intelligent transportation system” (ITS) technology. But the improvements produced by ITS have been minute and incremental, largely limited to managing traffic flows, reducing delay resulting from crashes and mishaps, and providing better information to travelers. For fast-growing metropolitan areas, something more radical is needed. Mel understood this challenge. He sought ways of serving the desire for personal transport that do not add to congestion or pollution.

The desire for personal mobility is one of the defining traits of modernity. Even in places where fuel prices are high, transit services outstanding, and population density high—as in much of Europe—cars continue to be the first choice of most people. Cars have become so dominant in many countries that most travelers no longer reflect on their mode choice—they just routinely turn to personal vehicles. The result is an extravagant use of resources. Vehicles with masses twenty times greater than the person being transported—and a spatial footprint at least 100 times larger—are being used to move individuals for one hour or less per day. ➤

Daniel Sperling is director of the Institute of Transportation Studies and professor of environmental science and policy and civil and environmental engineering at the University of California, Davis (dsperling@ucdavis.edu).

Are these trends irreversible? Only with great difficulty. In the US, and increasingly elsewhere, we have created a transportation monoculture. Within metropolitan areas, almost everyone travels by car. All passenger vehicles are expected to serve almost all purposes. All roads serve all vehicles. Almost all vehicles operate on petroleum fuels. Parking is free virtually everywhere outside of city centers. Most roads are also free, and almost all are government-owned.

This monoculture is resistant to innovation. Transportation is arguably the least innovative sector in our society. Change is slow, even though what we have is far from ideal. The cost of motorization is high, for the individual as well as society, and the service provided is not as good as it could be. People spend large amounts of time driving, parking, and maintaining their vehicles. We own all-purpose vehicles that are ill-suited to many applications—a short neighborhood trip does not require the same vehicle as a trip to pick up furniture, for example.



The challenge facing the transport sector of the US and every other nation is how to provide access to activities that people want and need to perform without increasing vehicle travel and resource consumption. More mobility is revered as a fundamental attribute of progress and affluence. But the goal is not mobility; travel is a means to accomplish some task or participate in some activity. Recent research suggests that many people enjoy a small amount of private peaceful driving every day—an average of about fifteen minutes to and from work or school—but for the most part people do not strive to spend more time in cars. Indeed, in major metropolitan areas, traffic congestion is often the number one complaint.

With dramatically improved information and computing capabilities, the design and management of our transportation system can be transformed. The technical barriers to delivering greatly improved traveler information, facilitating intermodal connectivity, and creating institutions to provide appropriate vehicles and services are dwindling. It is now possible, using new information technologies, to provide more access at less cost. But doing so implies a sweeping transformation of transportation institutions and behavior. Mel Webber envisioned this future many years ago with his paper, “The Marriage of Transit and Autos: How to Make Transit Popular Again,” in which he proposed that transit should become more like cars in accessibility, convenience, and even size. How does one embark on such a path, in which new modes and new services are created? And why haven’t we?

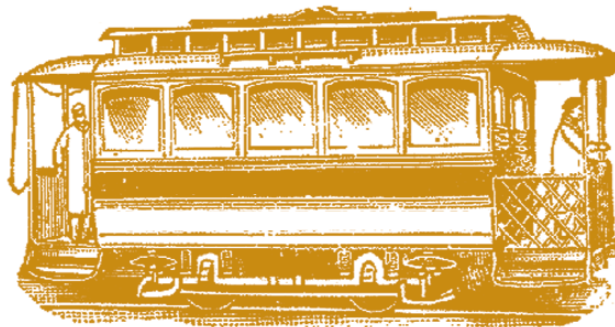
So far, the application of smart technologies to transportation has been aimed primarily at enhancing the facilities and services that already exist; very few have envisioned a true transformation of business or personal interactions. But telecommunications, travel planning and wireless communication management devices linked to the Internet, small personal vehicles, and new “smart” transport modes (carsharing and “smart” paratransit) all have the potential to transform business and lifestyles. These technologies have faltered until now because they have been introduced individually

and incrementally, rather than as part of a system. Furthermore, many have not been economically viable or even possible until now. And barriers like mismatched communication standards still hold back worldwide growth and compatibility.

Mel Webber broke ground when he wrote about the ways that telecommunications would transform mobility. Now we are beginning to see how these technologies may be used to replace, complement, *and* enhance travel. The key is to link mobility options to make various choices widely available and easily accessible. Real-time Internet travel planning services could direct travelers to the optimal choice for that traveler, with seamless transfers and billing. If carsharing and/or smart paratransit were available, a traveler could use one or the other for occasional trips to the office or airport. Short neighborhood errands or shopping trips could best be made with a small inexpensive vehicle. Under such a scenario, one can imagine a household eliminating one or even two of its full-size vehicles. The net effect may prove to be more overall travel, but it would be accomplished in a less costly and less consumptive fashion.

A future challenge, beyond interoperability, is the integration of several technology-based options to provide synergies and choices that lead to a healthier, more efficient, and more equitable transportation system. Promoting and integrating multiple technologies and systems within a supportive policy environment could foster innovative transportation solutions that can compete in accessibility and convenience with the conventional auto. The benefits of these interwoven mobility services may be large. Individuals could benefit from greater convenience and less cost; communities could benefit from less space devoted to vehicles, less noise, less infrastructure cost, and greater connectivity.

None of these alternatives are now flourishing in the United States, principally because none, by itself, can offer the versatility of a conventional automobile. For this new mobility system to function more effectively than single, stand-alone alternatives, the alternatives must be coordinated, and information technologies will play a huge role in facilitating this connectivity. ♦



The Mel Webber Index

UNIVERSITY OF CALIFORNIA TRANSPORTATION CENTER ACHIEVEMENTS, 1988–2006

(with apologies to *Harper's*)



Number of financial awards made to students : 2,000

Number of dollars awarded to students : 20,300,000

Proportion of total funds spent for students : 61 percent

Number of dissertation grants awarded : 190

Number of dollars awarded as UCTC Fellowships : 11,600,000

Number of Masters Degrees awarded : 1,700

Number of PhD Degrees awarded : 266



Number of research proposals received : 520

Number of research projects funded : 225

Number of dollars spent on research projects : 15,000,000

Proportion of total funds spent for research : 45 percent

Number of research papers published so far by UCTC : 768

Number of research papers downloaded from the UCTC website : 735,483

Number of professors having research funded by UCTC : 115

Number of UC professors in transportation : 107



Number of issues of ACCESS magazine published so far : 30

Number of persons receiving last issue of ACCESS : 19,000

Number of issues of ACCESS downloaded from the website : 140,726

Number of conferences and seminars held : 120

Number of participants in them : 6,650

SPECIAL ISSUE FURTHER READING

Christopher Alexander, "A City Is Not a Tree," in *Architectural Forum*, vol. 122, no. 1, April 1965 (Part I), and vol. 122, no. 2, May 1965 (Part II).

Reyner Banham. *Los Angeles: The Architecture of Four Ecologies* (London, Allen Lane, 1971).

Manuel Castells. *The Rise of the Network Society: The Information Age: Economy, Society and Culture*, vol. I. (Cambridge, MA; Oxford, UK: Blackwell, 1996).

John Dyckman, "Summary: Planning and Metropolitan Systems," in *Explorations into Urban Structure*, Melvin Webber and Donald Foley, editors (Philadelphia: University of Pennsylvania Press, 1964).

Peter Hall and Kathy Pain. *The Polycentric Metropolis: Learning from Mega-City Regions in Europe* (London: Earthscan, 2005).

Joel Kotkin. *The New Suburbanism: A Realist's Guide to the American Future* (Costa Mesa, CA: The Planning Center, 2005).

Parsons, Brinckerhoff, Hall and MacDonald Inc. *Regional Rapid Transit: A Report to the San Francisco Bay Area Rapid Transit Commission* (New York, 1956).

Horst Rittel and Melvin Webber, "Dilemmas in a General Theory of Planning," in *Policy Sciences*, vol. 4 (Amsterdam: Elsevier, 1973).

Melvin Webber, "The BART Experience: What Have We Learned?" in *The Public Interest*, no. 45, Fall 1976.

Melvin Webber, "A Difference Paradigm for Planning," in *Planning Theory in the 1980s: A Search for Future Directions*, Robert Burchell and George Sternlieb, editors (New Brunswick, NJ: Center for Urban Policy Research, Rutgers University, 1978).

Melvin Webber, "The Joys of Automobility," in *The Car and the City*, Martin Wachs and Margaret Crawford, editors (University of Michigan Press, 1991).

Melvin Webber, "The Marriage of Transit and Autos: How to Make Transit Popular Again," *Access*, no. 5, Fall 1994.

Melvin Webber, "Order in Diversity: Community without Propinquity," in *Cities and Space*, Lowdon Wingo, editor (Baltimore: Johns Hopkins Press, 1963).

Melvin Webber, "The Urban Place and the Nonplace Urban Realm," in *Explorations into Urban Structure*, Melvin Webber, editor (Philadelphia: University of Pennsylvania Press, 1964).

Melvin Webber, "Tenacious Cities," paper presented at the NCGIA Conference, Baltimore 1996.
<http://www.ncgia.ucsb.edu/conf/BALTIMORE/authors/webber/paper.html>

Papers In Print, Access Back Issues, and Order Form will return in the next issue, Spring 2007.

SPECIAL ISSUE, WINTER 2006-2007

Center Director
Elizabeth A. Deakin

Editor
Melanie Curry

Faculty Editor
Charles Lave

Design
Mitche Manitou

Webmaster
Michael Harvey

PHOTO CREDITS

p. 1: photo of Mel Webber by daughter Jane Webber
All other photos by Mel Webber

For address correction, please visit our website at

www.uctc.net



**University of California
Transportation Center**

Printed on recycled paper

Love, Lies, and Transportation in LA, Again

An Updated Almanac in Honor of Mel Webber

BY CHARLES LAVE

This was originally published in ACCESS in 1994, after a lot of encouragement and pushing by Mel. He thought people ought to know these data, and he figured a casual presentation would be remembered longer. I'm sure he is still watching, so I'll dedicate this 2007 update to him.

IN THE PAST FEW YEARS ANGELINOS HAVE BEEN SHAKEN BY EARTHQUAKES and scorched by brush fires, sort of like lumps of tofu in a stir-fry wok. But we're tough, we can take it.

What does scare us, though, is suffocation. We're about to go down for the third time in the sea of media clichés that followed the last quake. One more mention of “California's love affair with the car” and we're goners. That's not the local taste. If we wanted to fondle cars we'd be somewhere in Alabama.

But don't Californians drive a lot? Compared to whom? Well, the folks in 38 states drive more miles per capita than we do. But aren't Californians practically issued a driver's license at birth? Not exactly: 46 states have more drivers per capita than we do. As to greenhouse gas contributions, 45 states use more gasoline and diesel per capita than we do. Ah, but what about public transit? Yes, we have it and we ride it. Forty-one states use transit less than we do. That's all primary data, not hearsay from newspaper clippings.

So how did this love-affair story get started? I learned the inside history from a highly placed source. Once upon a time, a New York reporter came out here to learn about the horrors of Angelinos' daily commute. *Seek and ye shall find*. Especially if you start with the conclusion and then search until you find a fact that supports it. Ignoring the ordinary, this reporter eventually found someone with a ninety-minute commute. He could now go home and write his story: “People in Los Angeles travel ninety minutes to get to work!”

It was not exactly a scientific sample. Suppose I were to visit New York, search for a long time, and find a smiling New Yorker. Would it be fair if I wrote a story accusing New Yorkers of being happy?

But those pesky government statistics even have something to say about that commuter fish-story. It turns out the average commute in LA is 29 minutes and the average commute in New York is five minutes longer: 34 minutes. That's ten minutes a day Angelinos save on a round trip—extra time to fight brush fires, clear quake rubble, or hum a mantra.

So much for California's fabled auto dependence. What phrase might take its place to fill the cliché-gap? Well, we do have a lot of hot tubs. Why don't they write about California's love affair with hot water? ♦

RANK	MOTOR FUEL PER PERSON (IN GALLONS)		LICENSED DRIVERS PER 1,000 PERSONS		VEHICLE MILES TRAVELED PER PERSON		PERCENTAGE OF WORKERS WHO TAKE TRANSIT TO WORK	
	1991	2004	1991	2004	1991	2004	1991	2004
1	360 NY	376 NY	558 AK	585 NY	5,962 NY	7,172 NY	25.50% NY	25.70% NY
2	370 HI	396 HI	569 NY	604 MN	7,054 AK	7,613 AK	10.30% IL	10.30% NJ
3	408 RI	411 RI	574 MN	634 IL	7,124 RI	7,701 HI	9.00% NJ	9.20% MA
4	429 MA	517 MA	603 UT	634 CA	7,174 HI	7,841 RI	8.50% MA	8.40% IL
5	461 PA	525 CA	610 LA	643 DE	7,297 PA	8,289 NV	8.40% MD	8.10% MD
6	463 IL	528 IL	616 HI	647 TX	7,401 IL	8,374 NJ	7.60% HI	6.00% HI
7	466 CT	541 WA	616 IN	647 MD	7,640 NJ	8,536 MA	6.60% PA	5.30% PA
8	480 CA	542 PA	617 CO	653 MS	7,761 MA	8,584 IL	5.10% CA	5.00% CA
9	489 NJ	579 CO	638 IL	656 GA	8,091 CT	8,711 PA	4.70% WA	5.00% WA
10	494 MD	581 OR	640 AZ	659 AZ	8,163 LA	8,974 WA	4.10% VA	4.00% OR
11	497 AK	582 FL	650 KY	662 UT	8,185 NV	9,022 CT	4.00% CT	3.90% CT
12	511 OH	582 MD	651 TX	663 NV	8,216 CO	9,164 CA	3.80% MN	3.80% VA
13	514 CO	593 UT	656 CA	667 NJ	8,236 IA	9,744 OH	3.50% OR	3.30% MN
14	514 NH	594 MI	661 MD	668 NM	8,492 CA	9,878 LA	3.10% LA	2.90% NV
15	514 UT	596 DE	664 IA	668 HI	8,502 OH	9,903 OR	3.00% CO	2.70% CO
16	517 FL	600 OH	665 PA	670 OH	8,508 MD	9,947 MD	2.90% GA	2.40% DE
17	519 LA	603 WI	671 NE	673 OK	8,547 FL	9,973 CO	2.70% NV	2.10% AZ
18	520 MI	608 NJ	671 ND	677 AR	8,695 UT	9,982 AZ	2.60% AK	2.00% GA
19	522 WI	610 CT	672 CT	677 ID	8,746 MI	10,170 NH	2.60% IN	2.00% UT
20	535 WA	616 NV	674 RI	678 IA	8,817 OR	10,218 MI	2.60% OH	2.00% WI
21	544 AZ	618 AZ	675 NC	680 PA	8,848 NE	10,272 TX	2.60% RI	1.90% FL
22	557 WV	629 ID	675 SC	681 KY	8,857 MN	10,337 UT	2.60% WI	1.90% LA
23	558 MN	637 WV	683 OH	685 VA	8,898 WV	10,572 ID	2.50% DE	1.90% OH
24	567 VA	644 NH	685 ID	686 RI	8,991 NH	10,574 VA	2.40% UT	1.90% TX
25	568 DE	645 KS	685 TN	697 CO	9,151 TX	10,664 KS	2.30% TX	1.80% AK
26	576 ME	651 NC	685 WI	702 LA	9,174 WI	10,675 IA	2.10% AZ	1.70% RI
27	579 NC	668 MN	687 MI	702 MI	9,247 AR	10,964 WI	2.10% FL	1.50% WY
28	581 TX	669 LA	696 GA	703 MO	9,256 WA	10,972 NE	2.10% MO	1.30% MO
29	586 OR	674 VT	696 WA	708 SC	9,293 KS	11,090 MN	2.00% ID	1.10% MI
30	593 KS	674 TX	699 NM	710 WI	9,314 AZ	11,183 WV	1.70% KY	1.10% SC
31	595 VT	680 ME	701 MA	712 WV	9,372 ND	11,201 DE	1.70% MI	1.10% WV
32	599 ID	688 VA	708 NV	717 NC	9,484 KY	11,228 NC	1.50% WY	1.00% IN
33	601 TN	692 TN	712 SD	720 TN	9,543 TN	11,292 FL	1.40% TN	1.00% KY
34	610 IN	724 IN	714 KS	724 KS	9,546 SD	11,348 ME	1.30% IA	1.00% NC
35	611 SC	728 OK	714 WV	724 MA	9,594 ME	11,395 SD	1.20% NE	0.90% IA
36	612 IA	737 NE	718 MT	725 IN	9,605 MS	11,414 KY	1.10% SC	0.90% NM
37	616 KY	745 GA	719 AL	726 WA	9,631 NC	11,497 AR	1.10% WV	0.80% ME
38	619 NE	748 MO	719 OK	728 ND	9,673 IN	11,657 IN	1.00% NM	0.80% VT
39	621 MS	753 AR	720 ME	731 OR	9,679 SC	11,803 SC	1.00% NC	0.70% ID
40	624 NV	755 AL	724 MO	731 SD	9,720 VA	11,971 ND	0.90% ME	0.60% AL
41	635 OK	760 IA	725 AR	736 AK	9,884 DE	11,989 MO	0.80% AL	0.60% MS
42	644 MO	764 NM	727 VT	748 ME	9,884 MO	12,022 TN	0.80% MS	0.60% NE
43	653 AL	771 KY	728 DE	751 WY	9,931 ID	12,091 MT	0.80% VT	0.60% ND
44	670 GA	780 MS	729 NJ	753 NE	10,290 MT	12,579 NM	0.70% KS	0.60% TN
45	673 NM	782 AK	730 FL	756 FL	10,353 VT	12,641 VT	0.70% NH	0.50% AR
46	687 AR	787 MT	740 VA	759 NH	10,497 AL	12,755 GA	0.60% MT	0.50% MT
47	696 MT	791 SC	741 WY	769 CT	10,784 OK	13,031 AL	0.60% ND	0.50% NH
48	702 SD	801 SD	743 MS	769 MT	10,835 NM	13,181 OK	0.60% OK	0.50% OK
49	709 ND	826 ND	767 NH	798 AL	11,023 GA	13,583 MS	0.50% AR	0.50% SD
50	1,016 WY	1,358 WY	812 OR	886 VT	13,039 WY	18,283 WY	0.30% SD	0.30% KS
AVERAGE	570	663	683	700	9,040	10,681	3.23%	2.88%
MEDIAN	572	648	685	699	9,163	10,669	2.20%	1.75%

Comparative state statistics, 1991 and 2004 (ranked by environmental desirability)

The original 1994 almanac showed that California was doing pretty well. The latest data show that it has even improved over the thirteen years between measurements. For fuel per capita: California was in eighth place in 1991; it's now in fifth place. For licenses per capita: California was in thirteenth place; it's now in fourth place. For VMT per capita: in 1994, California was in fourteenth place; it's now in twelfth place. The only statistic where California dropped was in transit use: it fell one place, from eighth to ninth.

Source: Highway Statistics 2005



**UNIVERSITY OF CALIFORNIA
TRANSPORTATION CENTER
BERKELEY, CA 94720-1782**

ADDRESS SERVICE REQUESTED



1-18220-24885-44-X-*****.*****

**NON-PROFIT ORGANIZATION
U.S. POSTAGE PAID
UNIVERSITY OF CALIFORNIA**

Malaysia