



# METROS

## Quarterly

A QUARTERLY NEWSLETTER FROM THE ASSOCIATION OF METROPOLITAN PLANNING ORGANIZATIONS

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## Public Participation: Dead or Alive?

By Hannah Twaddell

When I first started working on MPO plans in the 1980's, most of us used the DEAD approach to public involvement: Decide, Engineer, Announce, and Defend. We did the technical analysis first, which mostly consisted of updating the traffic model and then trying to "get the red out" of the future network by adding projects until the failing roads (inked in red) finally performed better. When we'd done the best we could do to create a scenario that worked, we'd put it out for comments.

In the really old days, that meant we just advertised that it was available for review and told people they could write in or speak at a designated MPO hearing time. Later we got more creative and tried open-house meetings in big rooms where we put up posters of network plots and cross-sections of the road projects, and let people fill out comment sheets. Most of the comments we got were either complaints about projects people opposed, or complaints from people who were tired of waiting for a project to get built.

Either way, there usually wasn't much we could do about them. The projects people didn't like were obviously necessary according to the technical analysis, and we only had so much control over the funding and engineering process. So we documented the comments in a book and then put together the final plan. We'd have an official public hearing at the end, usually in City Hall or somewhere with an auditorium and a microphone, and the comments were usually the same as the ones made before. We'd duly document them and then adopt the plan.

After ISTEA, we tried to do better. We tried creating Citizen Advisory Committees, which meant a lot more meetings. We jazzed up our meeting advertisements, conducted surveys, and distributed the draft plans more widely. The comment books got thicker, but in the end, it still boiled down to the same old DEAD process. No matter how many creative ways we tried to involve people, we seemed to wind up spending most of our time defending the technical analysis and trying to explain why we couldn't meaningfully consider ideas that we couldn't run through the model. Attendance at meetings might bloom for a while, but the people who stuck it out were usually the same old crowd of folks who either wanted to

stop a project or push one (and often it was the same project).

With conditions like that, it would take a miracle to raise public participation from the DEAD.

But in the past few years, I've had an opportunity to meet some miracle workers. There is a growing body of MPO's, cities, and counties who are making a fundamental change in their whole approach to transportation planning. They've decided to stop putting the model in charge of their planning process. They've put their community in charge of it instead. They are crafting new models and methods that allow them to seek out and analyze creative ideas in a meaningful way. Their plans are becoming more flexible, more dynamic, and more complex. And their public participation is coming to life.

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What do these innovative MPO's and communities do differently? I call it the ALIVE approach: Ask, Listen, Integrate, Verify, and Engage.

**Ask:** As the very first step in their planning process – before any models are run – these folks go out and ask people what they want for their community. They conduct broad-based surveys by phone, mail, and the internet. They hold meetings on Sunday afternoons in church basements and conduct workshops at elementary schools. They conduct interviews and host focus groups with transit riders, bicycling advocates, freight companies, realtors and developers, and social service providers. They facilitate webcasts and huge town-hall meetings with the aid of computer technology (see [www.NeighborhoodAmerica.com](http://www.NeighborhoodAmerica.com) and [www.PlaceMatters.com](http://www.PlaceMatters.com) for more ideas about new technologies for public engagement).

At this stage, the conversations aren't highly technical. Instead, people are asked about their daily experiences — walking around the neighborhood, getting to work and school and day care,

helping their elderly parents get to the doctor, and making the rounds of soccer games and grocery shopping on the weekends. They talk about the places they love, and the ones they hate. They talk about the successes and challenges they face as local employers, shippers, and retailers. Through these stories, a picture emerges of those aspects of their community people value, and what they want to see changed, particularly by improving the transportation network.

And planners promote these discussions in creative, effective ways. Gone are the days of the cryptic black-box ad, thick with fine-print jargon, duly printed three times before the meeting somewhere in the local paper. In these communities, you see huge ads on the sides of buses; posters in bike shops and senior centers; dialogue flying through cyberspace via listserves and websites; plugs and interviews on radio call-in shows; videos running on local government cable channels and special interest stories on TV news programs.

**Listen:** Planners don't talk too much at these meetings. After at most a brief overview of the planning process, they turn the floor over to the participants. They organize interactive workshops, usually with a lot of small-group break-outs. People mark up maps and pictures of their town, and their ideas fill up reams of flip chart paper and hundreds of post-it notes stuck around the walls of the meeting room. Kids write stories and draw pictures about their dreams for the future. In big meetings, hundreds of people complete visual preference surveys, using keypads to vote on their favorite community design images, and see the results in real time. Meanwhile, during drop-in sessions at the library, groups of four or six folks sit around a small table and just talk.

The key to success here is that the planners and officials who conduct the meetings understand how to be good facilitators. They learn how to carefully structure meetings to ensure fair, comprehensive discussions and techniques, and how to keep groups on track while encouraging a free flow of ideas. They practice active listening skills to ensure they are clearly understanding and properly reflecting participants' comments. They discipline themselves to sit on their hands, resisting the temptation to jump in and correct a minor misperception or

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subtly steer a conversation the way they want it to go.

Not everyone is innately comfortable with groups of people, but more folks than you'd think can be good facilitators. Introverts generally prefer to listen than to talk, so taking notes and closely observing meetings is right up their alley. Extroverts complement this role by drawing people out and guiding conversations with an open, friendly demeanor.

It's helpful to recruit and train a lot of volunteer facilitators, and organize them in complementary teams that make the most of their skills and personalities. Often these include staff from government agencies involved in the plan, but facilitators don't have to be technical experts. In fact, it can be helpful to encourage members of community advisory committees or interest groups such as people with disabilities to take on this role. The only requirement is that they have to set aside their personal or organizational agendas in order to act in a fair and neutral way.

**Integrate:** This is the step that requires a real re-thinking of the traditional planning process. Before any public meetings are held, planners sit down and think through very carefully *how* they can use the information people provide. They look hard for ways to organize the technical analysis and expand upon their planning tools and models so they consider the kinds of questions, concerns, and qualitative goals people may bring to the table.

It's been said that "to a man with only a hammer, everything looks like a nail." These planners make sure their planning toolbox includes more than a hammer – e.g. a traditional four-step traffic model - by seeking out and even inventing new tools.

For example, lots of people say they want their communities to be more walkable, and they want their kids to be able to ride bikes to school. To meet this goal, it might be necessary to take out traffic lanes on some streets in order to widen sidewalks or put in bike lanes. A regional traffic model isn't well suited to analyze trips at this fine grain. It would likely identify a degraded vehicle LOS in that situation without providing useful data about upgraded pedestrian or bicycle mobility. In response to this limitation, planners are developing an array of tools to define and measure pedestrian and bicycle level of service, which can take into account the quality of the walking and biking experience as well as simple accessibility measures such as miles of sidewalk.

Many communities have developed broad visions for sustainability that include policies to balance environmental health with economic vitality. This means transportation planners have to consider the ways in which new road and transit access could influence development patterns. Again, a traditional four-step traffic model isn't the best tool for examining this kind of question. But an evolving host of scenario planning tools is helping planners examine the relationships between land use and transportation, and to better predict potential economic and environmental impacts of different strategies.

**Validate:** Just as it's important to consider people's questions and ideas, it's equally important to make sure people *know* their concerns are being addressed. Too often people tell us they don't have any idea how, or even if, their ideas made any difference in the plan. If the MPO launches a plan with a big public involvement blitz, but then hunkers down to develop it without regularly checking back, people wonder why they bothered to give their opinion. If community meetings are held in a disconnected fashion with long periods of silence in between, people get confused or lose interest.

Meanwhile, business leaders and freight haulers are unlikely to want to participate in sustained, frequent meetings, and are usually so busy focusing on the coming six months that a 20-year plan may seem to be nothing more than a bureaucratic exercise. "Checking-back" discussions with them need to be short, to the point, and relevant to their concerns.

Again, this requires thinking through the process ahead of time. Planners need to have a strategy for involving people each time they are ready to take an important step, and for making sure the time frame between steps is reasonably regular. This helps people

**When it comes time to update the long range plan again, an educated, committed body of community members will be ready to participate.**

stay tuned into the process rather than drifting away when nothing appears to happen for months.

At each of those milestone events, the planners provide people with an explanation of what was said at the last meeting, what's been done since then, and how the ideas and concerns they shared have been put to use. And – importantly – they take time to ask people if there are key issues that haven't been considered before fully moving forward into the next phase.

To be effective at this point, planners need to have a clear understanding of what types of issues are appropriate for each stage of the process, as well as an ability to handle concerns diplomatically. The facilitator in this type of discussion must be ready to help the group discern the right way to address a new issue that is raised. In some cases, the concern may truly need to be resolved at that moment before the process moves on. But in other cases it may be more appropriate to plan the discussion of that issue for a later phase or a different forum, and move ahead.

**Engage:** Public participation doesn't end once the plan is adopted. When projects click into gear, planners need to encourage the public to be as engaged in the implementation of the plan as they were in creating it. This means formatting the plan and the TIP so it's easy to find out what's happening with each project, and providing

regular progress reports to the community. It also means continuing to meet with people through a blend of venues such as standing advisory councils, periodic rounds of focus groups, a speakers' bureau for community presentations, and well-publicized annual meetings.

Building this kind of sustained relationship with the community can help the MPO deal with the issues that inevitably pop up when they are programming funds for projects. For example, in fast-growing areas, hundreds or thousands of new people and companies are arriving every year, none of whom are likely to know anything about the transportation plan. Good venues for regular public dialogue can help new residents and businesses learn about projects that may affect them and discuss their concerns with the MPO effectively, rather than storming in at the public hearing and calling to stop a project because it's the first they've heard of it.

Active relationships with a wide spectrum of community members can also spark new partnerships to help fund projects. In many communities, public health officials and advocates are joining with the MPO to apply for neighborhood improvement grants from the Active Living by Design program ([www.activelivingbydesign.org](http://www.activelivingbydesign.org)) that include sidewalks, bike lanes, and transit improvements. PTO's and teachers can sponsor bicycle and pedestrian education programs and urge local and state legislators to fund safety and enhancement projects that provide safe routes to school. Business associations can sponsor local transit shuttles and support Job Access grants to get their employees to work. In each of these types of cases, and more, the MPO is an ideal champion to facilitate and sustain productive relationships.

Finally, when it comes time to update the long range plan again, an educated, committed body of community members will be ready to participate. Not only will their continued involvement enrich the plan with valuable experience and perspective, they can encourage their neighbors, civic groups, and colleagues to get involved in the process, thus expanding the effectiveness of the MPO's outreach.

With a foundation of effective, thoughtful public participation, the planning process becomes something dynamic that evolves and changes over time in sync with the growth and development of the community. In short – it's ALIVE! **M**

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## AMPO Holds National Conference – Recognizes 7 Outstanding MPO's and Individuals

**A**MPO and the San Antonio – Bexar County MPO hosted the 13th Annual AMPO National Conference in San Antonio, Texas from October 12-15, 2004. The event drew record numbers, with attendance reaching close to 200 participants. The conference culminated on Friday with the presentation of the Annual Awards. This year, three individuals and four MPOs were recognized for their leadership and efforts in advancing critical transportation work. For a full description of the awards and the recipients, visit <http://www.ampo.org/awards/index.html>.

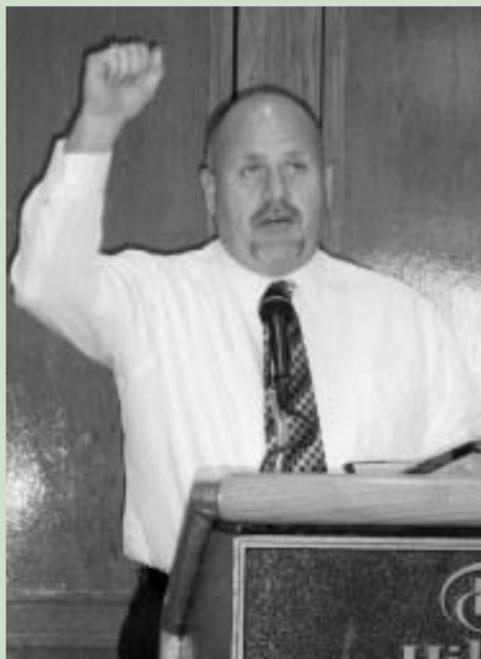


▲ **Michael Morris**, Executive Director of the North Central Texas Council of Governments received the award for Outstanding Professional Achievement in Metropolitan Transportation Planning. Morris was instrumental in bringing together the eight TMA's in Texas to quantify the true transportation needs of the state in the hopes of closing the funding gap between prioritized needs and traditional funding allocations.

▲ **Senator John Warner (R-VA)** received the newly created Senator Daniel Patrick Moynihan Award. Late last year Sen. Warner worked to pass an amendment that would increase planning funds to MPOs. Sen. Warner's leadership showed his commitment to MPO work. Sen. Warner and Sen. Moynihan were close friends and shared many interests—one of these being planning.



▲ **The Delaware Valley Regional Planning Commission** received the National Award for Outstanding Technical Merit in Metropolitan Transportation Planning for an MPO Over 200,000. DVRPC has focused its efforts on incident management and intermodal and interregional travel information. DVRPC took the lead in promoting ITS in the Delaware Valley with its efforts beginning as early as 1998. Through its contributions to ITS, DVRPC has positively shaped its region.



▲ **Peter Palmer**, Chairman of the North Jersey Transportation Planning Authority received the award for Outstanding Achievement in Metropolitan Transportation Planning as an Elected Official. Palmer is considered a visionary and consensus builder, and has improved the effectiveness of government by forging a bond among local elected officials, state agencies, the public, and private interests.

▲ **The Thurston Regional Planning Council** received the National Award for Outstanding Technical Merit in Metropolitan Transportation Planning for an MPO Under 200,000 for its plan, "2025 Regional Transportation Plan – Guiding our Future." The Plan uses land use and performance measures as key components in developing plan alternatives. Ultimately, it facilitates the effective use of planning tools and builds strong, result-oriented coalitions.



**The Southern California Association of Governments** received the Honorable Mention National Award for Outstanding Achievement in Metropolitan Transportation Planning for an MPO Over 200,000. In an effort to provide local decision-makers with the tools they need to plan more effectively for the six million new residents projected to live in Southern California by 2030, SCAG undertook a growth visioning initiative called Southern California Compass.

▲ **The Sacramento Area Council of Governments** received the National Award for Outstanding Achievement in Metropolitan Transportation Planning for an MPO Over 200,000. With the population rising, and traffic congestion expected to worsen, SACOG decided to explore the relationship between land use patterns and transportation. The Blueprint Project is a comprehensive examination of land use patterns in the Sacramento region, using state of the art modeling tools to estimate transportation, air quality, economic and other effects of current land use patterns, and develop alternatives to those patterns for future growth. **M**

# Leave a better place behind: Context Sensitive Solutions Online Resource Center

Phil Myrick, Project for Public Spaces

We invite you to participate in the beta-launch of an online resource center for context sensitive solutions.

Project for Public Spaces (PPS) was commissioned in September 2003 by the FHWA to work with key stakeholders in the transportation field to create an online resource center on Context Sensitive Solutions.

Context Sensitive Solutions, also known as "Thinking Beyond the Pavement" and "Community Sensitive Design," is an innovative approach to the design of streets, roads, and highways. CSS recognizes that every transportation project – urban, suburban, and rural – has a specific context. To preserve and even enhance a road's context, CSS requires transportation agencies to partner with civic leaders and community stakeholders in identifying problems and coming with "solutions" to address those problems. CSS recognizes the fundamental role that transportation plays in our lives and that the public has an important role to play in shaping the design of transportation facilities to support its context.

Many professionals already know about CSS/CSD and want to implement it but need help in doing so. This website is a way to help professionals, and in doing that, it enables the FHWA to accomplish one of its "Vital Few Strategies" (VFS): the integration of CSS in the project development process in all 50 states by September 2007.

The resource center is meant to promote the CSS approach; disseminate information on CSS projects, process, and progress; and provide tools for its primary audience of transportation professionals and agencies, consultants, and environmental review agencies – as well as other important audiences that include local governments, citizen groups, transit agencies, historic preservation groups, universities and contractors.

These tools offer cutting-edge research and information on CSS policy, projects, and process, and on key topics such as liability, flexible design standards, design speeds, stakeholder involvement, and new directions in road design.



With its database-driven technology, the resource center offers access to information in many ways for a number of audiences, not just engineers. For example, an engineer can look for CSS projects by searching under the Green Book road classifications, while another user could find the same projects through one of many alternative classification systems developed by the CSS field. A third user might search the site by looking at problems that CSS projects address, such as speeding or vehicle accidents.

Based on many interviews and meetings with target customers and partners, the resource center offers the following key content and features:

- **Best Practices** showing CSS in practice, with pictures, representing urban, rural, and suburban contexts in the U.S. and overseas (especially Denmark, Germany, Sweden, Netherlands, but also Latin America and Asia)
- **CSS Core Topics.** Most will be culled from existing resources (books, reports, web pages, etc.), but some may be so recent that new materials will have to be written for the resource center. We are looking for partners who can help us to build the best possible online library.

- **Summaries of State CSS programs.** PPS will be contacting each state to learn about CSS training, projects and policies (to the extent that they exist).
- **News and updates**
- **Standards and schematics** of CSS-related design elements
- **Speakers/teachers** – leading-edge DOT practitioners and consultants in every region could be highlighted as "experts" and "champions"
- **Links** to existing websites, and state and local transportation offices
- **Community-building tools** including a newsletter, listserv and threaded forums
- **The legal framework** for CSS
- **Where to get help**, including trainings, a calendar of events, and consultants
- **Image Database** including everything from crosswalks to lane widths, sidewalks to roundabouts. PPS would partner with a variety of organizations to find the best images.
- **Bibliography** of core CSS reading and other recommended articles and publications



The CSS site will be launched to the public in early winter, 2005. In the meantime, please check out the beta at [www.contextsensitivesolutions.org](http://www.contextsensitivesolutions.org). Your feedback is welcome. Practitioners and advocates with suggestions and recommendations, or who wish to contribute in any way should contact Steve Davies or Phil Myrick at Project for Public Spaces, (212)620-5660 or [pmyrick@pps.org](mailto:pmyrick@pps.org). Visit PPS at <http://www.pps.org>. ■

# Voters Overwhelmingly Support Funding Transit

Michael Montag, AMPO

Counter to prevailing sentiments on Capitol Hill, on November 2nd voters across the country came out strongly in favor of funding public transportation projects. This round of approved measures adds 24 to the 18 transit-funding initiatives approved earlier in the year, adding up to an 80% win rate for transit and making 2004 a record year.

As encouraging as the number of transit measures passed is their breadth; voters in large metropolitan areas aren't the only ones demanding more transportation options – small and medium sized areas passed initiatives as well. Additionally, transit funding isn't the partisan issue among voters it is among politicians. Of the 11 states that passed transit measures on November 2nd, 7 went for President Bush and 4 for Senator Kerry.

Several of the initiatives extend existing sales taxes dedicated to funding transportation. In both San Diego and Phoenix, voters chose to extend half-cent sales taxes, raising \$14 and \$16 billion respectively, to improve both roads and transit. In San Diego, each year \$1 million of the funds raised will be earmarked for bike paths and facilities. Phoenix will fund a 27 mile addition to its planned light rail system. Even residents of smaller cities, such as Branson, MO, chose to extend sales taxes to fund road and transit projects.

In Denver, voters approved a sales tax increase to fund \$4.7 billion in transit improvements, including expanding light rail lines, new bus rapid transit service and increased parking capacity at park-and-ride facilities. Charleston, SC again passed a sales tax, which had been embroiled in legal disputes, to fund

transit. In San Antonio, TX voters also approved a transportation sales tax. In Arlington and Fairfax Counties, in the Washington, DC area, voters decisively supported issuing bonds that will primarily fund transit.

The initiatives mentioned above are merely a snapshot of those passed this year. Voters in metropolitan areas across the country are expressing their desire for more, better transportation options, and their willingness to do something about it as uncertainty reigns over federal transportation funding. Their message is clear, and hopefully is loud enough to convince lawmakers to give transit its due in TEA-21's inevitable reauthorization.

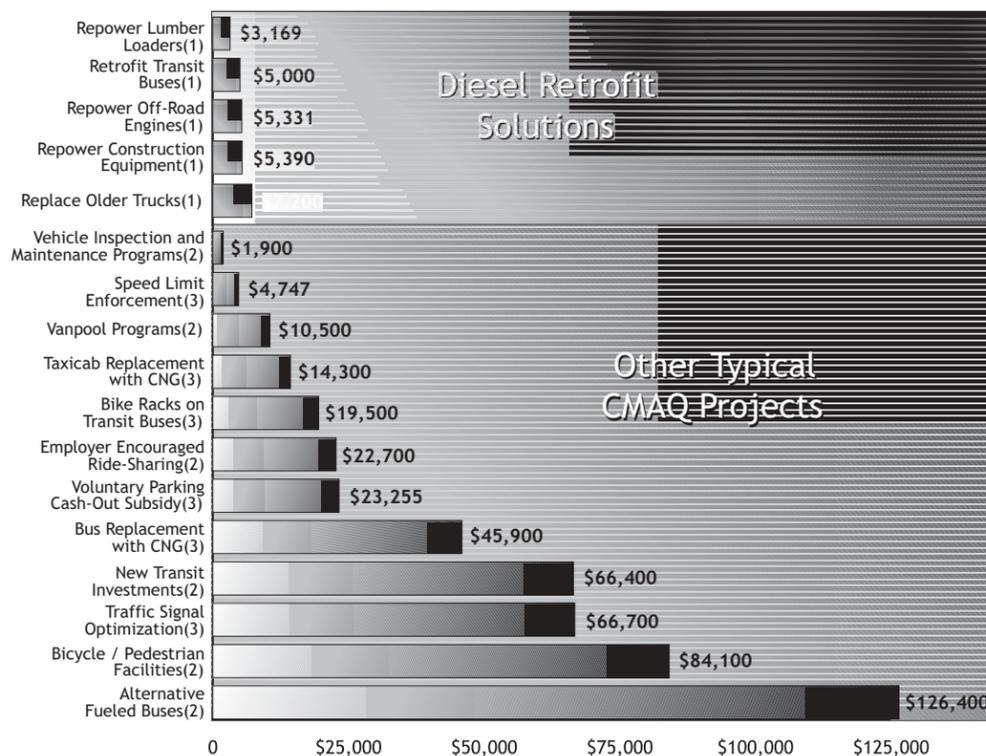
For more information on transit initiatives, visit the Center for Transportation Excellence at <http://www.cfte.org>. **M**

## Clean Diesel Retrofit Tool Kit: A Guide to More Clean Air for Your Dollar

Kristen Gifford, Diesel Technology Forum

State transportation officials and metropolitan planning organizations (MPOs) nationwide are faced with the challenge of meeting the U.S. Environmental Protection Agency's (EPA's) stringent clean air requirements for ozone and particulate matter (PM). Yet, they also have fewer cost-effective options for reducing these emissions to meet planning requirements and keep transportation projects moving forward.

States developing clean air plans and MPOs looking for emissions reductions and to achieve real and immediate air quality benefits will find that implementing a diesel retrofit program is one of the most cost-effective emissions reductions strategies eligible for funding under the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. The following chart compares cost-effectiveness data from specific diesel retrofit projects with data collected by both the Washington (DC) Council of Governments and the Transportation Research Board measuring the cost-effectiveness of other typical CMAQ-eligible projects, primarily transportation control measures (TCMs). In general, TCMs



tend to reduce emissions only marginally, although there may be other transportation-related reasons to implement some of these projects. As automobiles have become cleaner and cleaner, the cost effectiveness of implementing these TCMs to achieve emissions reductions has decreased.

The Diesel Technology Forum has designed a comprehensive tool kit to educate transportation planners and air quality officials about the value of diesel retrofit programs and to assist in getting started with your own program. One section of the tool kit provides useful information on how to get a program started and builds upon experiences to date in implementing diesel retrofit projects. There are a number of steps you may need to consider.

- Step 1:** Determine Target Emissions
- Step 2:** Identify Candidate Equipment and Vehicles

- Step 3:** Identify Technology Options
- Step 4:** Assess Cost Effectiveness
- Step 5:** Emission Credits
- Step 6:** Consider Implementation Issues

The tool kit provides examples of retrofit success stories for a variety of equipment types and vehicles, and it also provides helpful information for developing, funding and implementing retrofit projects in your community. By providing this resource to practitioners, the Diesel Technology Forum hopes to assist environmental and transportation decision makers as they look for effective strategies to clean the air and maximize return on their investment.

For the comprehensive online guide to implementing a diesel retrofit program, check out the Retrofit Online Tool Kit on the Diesel Technology Forum's website at [www.dieselforum.org](http://www.dieselforum.org). **M**



# Benefits from Alternative Land Use Strategies

**Background.** Research and applied practice have attempted to define the nature of land use and travel behavior for several decades. Seminal figures in planning, architecture, human health, engineering, and environmental fields have each placed their imprint on the understanding of how human living environments shape the actions of people within those environments, as well as measuring the consequences of human-environment interactions on both parties.

Since the 1970 and 1990 amendments to the federal Clean Air Act of 1963, an increasing number of studies have suggested that land use can also indirectly influence emissions of airborne pollutants. These pollutants are largely produced through the use of internal combustion engines operated in private automobiles and trucks, among other point and area sources. The theories have a similar origin, suggesting that land use patterns influence trip making frequency, trip lengths, choice of what mode of transportation to take, and so forth. A

wide variety of approaches and technical strengths are exhibited in this body of literature, but the overwhelming majority of conclusions cite that land use patterns do (1) influence the trip making behavior of individuals; and (2) when measured, these travel changes in turn exert some positive influence in the aggregate level of emissions from private automobiles and trucks when measured over a broad area. There have been a minority of studies that found these changes to be very small, and, on occasion, some studies were sufficiently detailed as to suggest that these changes actually have a negative impact (increased VMT and emissions) within a small area where the proposed land use change is the most concentrated.

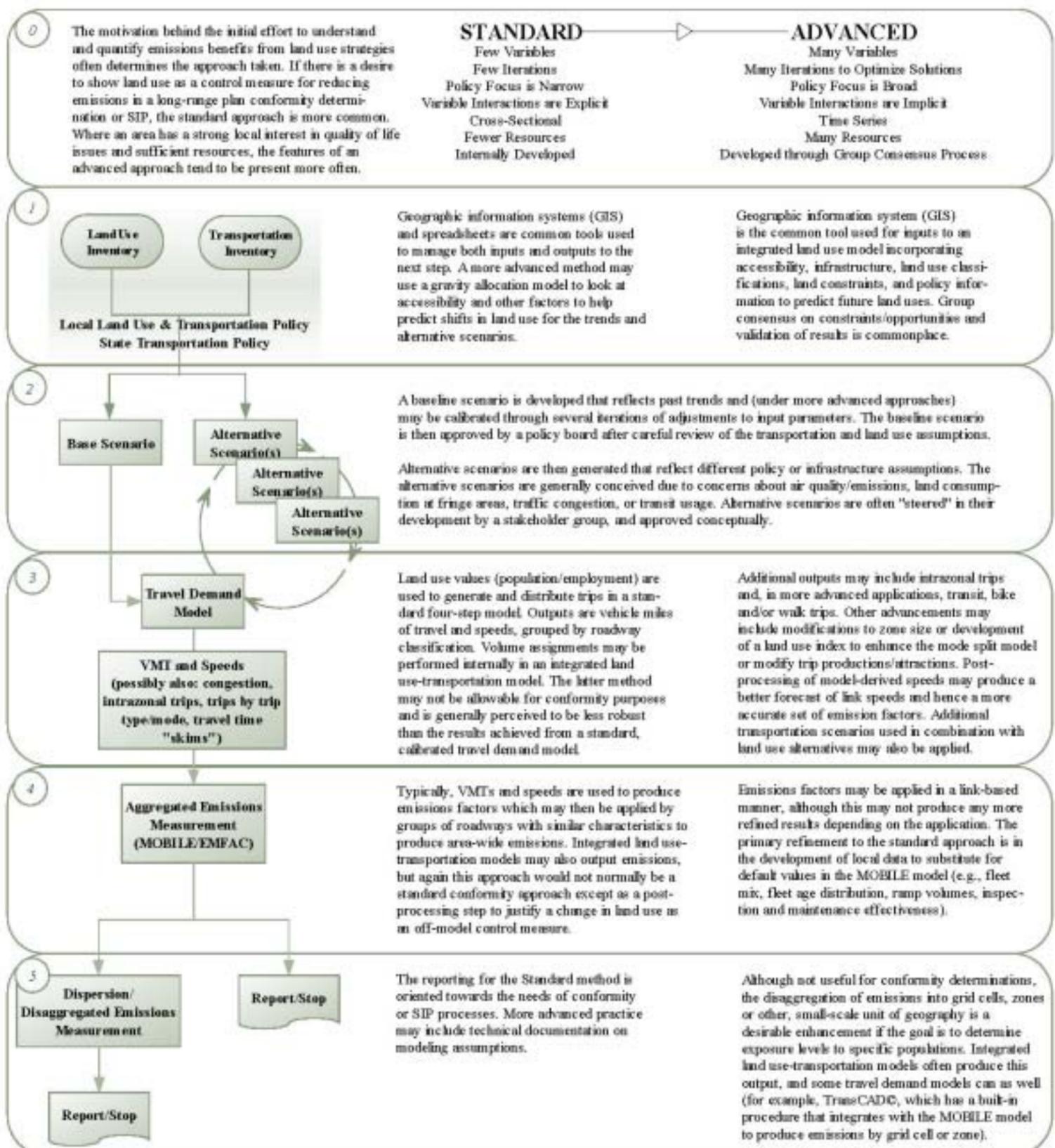
To understand the past research and current practice, the Federal Highway Administration sponsored a research project that addressed the following objectives:

- Critically review existing literature and research on the topic of land use, travel behavior, and emission interactions;
- Conduct a series of interviews and case studies with acknowledged experts and practitioners that are currently conducting or supporting work in the area of quantifying the effects of land use on emissions; and
- Outline the state-of-the-practice and recommend improvements and research that can aid practitioners in the future.

The report findings were oriented towards practitioners that are or might be conducting land use-emissions studies.

**Key Findings<sup>1</sup>.** Sixty-seven literature items were critically reviewed as part of this project, although more items were rejected after an initial review indicated that they did not discuss quantifiable results. The literature generally recognized the importance of density, diversity, and design elements (the “three D’s” referenced by several authors) on

**Figure: State-of-the-Practice Quantification of Emissions Benefits from Land Use Strategies**



trip-making behavior and therefore emissions. Researchers were able to develop elasticities to describe these effects, which ranged from near-zero to 0.35. Typical values ranged from 0.03 to 0.10. Although all of these figures imply that the relationship between land use characteristics and travel are relatively inelastic, they still indicate a responsiveness to change.

Many researchers acknowledged problems with data collection/availability, cross-correlation of key variables, objectivity in measurement, and boundary effects.

In addition to the critical review of the literature, the Research Team interviewed a number of researchers, private agencies, USEPA staff, and metropolitan planning organizations. A number of FHWA staff reviewed the draft report and offered suggestions as well. The results of these interviews and the 10 case studies were synthesized to outline a state-of-the-practice methodology (see Figure) for conducting quantifiable analyses of land use changes and their impacts to mobile source emissions. This process generally follows a four- or five-step progression, the number of steps depending on the need/desire to disaggregate emissions into small subareas:

1. Develop inventories of land use and transportation infrastructure according to modeling needs;
2. Create a baseline (or "trend") scenario describing how future land uses might look if existing policies remain unchanged, and develop one or more alternative scenarios;
3. Input land use and transportation information for all alternatives into a travel demand model or other gravity-based tool;
4. Extract vehicle miles of travel by transportation facility, vehicular speeds, and other information required to estimate emissions into an emissions factor model (e.g., MOBILE or EMFAC); and

5. If the objective of the study includes examining emissions benefits conferred to subareas, disaggregate emissions into individual grid cells or other small units of geography. This can be done by some travel demand models (e.g., TransCAD™ by Caliper Corporation) and emissions packages such as MODELS3 and CALINE.

More advanced applications make use of sophisticated land use models, integrated land use-transportation models, modified travel demand modeling techniques, or dispersion modeling to refine impacts on small areas and populations. Only two of the 10 case studies applied the results of their testing to attempt to receive an emissions reduction credit in a conformity or state implementation plan (SIP). In the Atlantic Steel case, while the project was included as a transportation control measure (TCM) in the Georgia SIP, no emissions credits were taken for the project. All cases were either "visionary" exercises to study quality of life issues undertaken by MPOs and local governments, or were generated by a proposed large development that might affect the air quality standing in a transportation conformity maintenance area.

**Recommended Improvements.** The Research Team proposed a number of improvements to state-of-the-practice methods as well as ways to increase the dissemination of information and promote good practice in this area. Providing consistent document guidelines; establishing a central clearinghouse for case studies and guidance; and specific modeling improvements are recommended. Appendices to the main report provide information about data resources, specific elasticity values, brief summaries of all case studies, and the critical review of literature stored in a MS-Access® database on CD-ROM. This CD-ROM also includes the final report and papers/reports that were available to the Research Team during the course of this study. **M**

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*Please note that the Association of Metropolitan Planning Organizations (AMPO) has invited members of the Research Team to present this project at a meeting of the AMPO Air Quality Work Group on December 13-14.*

1 The project report is under review when this article was prepared. The key findings and recommended improvements included in this article should be considered draft. The final project report is expected in December, 2004.

# AMPO Survey Results: Policy Board Structure

Michael Montag, AMPO

In response to requests from new MPOs and several existing MPOs considering re-designation, AMPO has completed a survey to gather information on the composition and basic functioning of MPO Policy Boards. The survey was sent to all MPOs and received 133 responses (35% response rate).

The results uncover remarkable diversity in the number and type of individuals that makeup MPO Policy Boards. Respondents' Boards range from 3 to 103 members, and are comprised of 0% to 100% elected officials. There is some correlation between MPO size and Board size, ranging from a median of 10 members at MPOs in areas with fewer than 200,000 people to a median of 22 members in those with populations between one and five million. Overall, the typical Policy Board is 14 members strong with 71% (about 10) elected officials, and the latter figure doesn't appear correlated to size. Though only 2 responded to the survey, extremely large MPOs (those representing populations

greater than 5 million), may be anomalous, with an average Board size of 17, only 44% (about 7) of them elected.

More predictable is the organizational participation on MPO Policy Boards. Nearly all include local cities and counties as voting members (98% and 92% respectively), while 78% include their state department of transportation as a voting member, and 57% include a transit agency. At the other end of the spectrum, no MPOs report transit labor unions as having a vote on their board, though 2% give them a non-voting seat, and school boards/districts and freight only weigh in on 4% and 7% of Boards. Citizen groups vote on 12% of Policy Boards.

MPO Policy Boards vary procedurally as well. 29% meet monthly, but 38% of Policy Boards meet at half that frequency or less. One in three has weighted representation, weighted primarily by population. Only 15% percent have a provision for weighted voting, 40% of whom invoke it all the time,

25% never, and the remainder in between. One quarter of Boards require consensus decision making, though another 27% often use it, and 12% sometimes use it. Some of these MPOs define "consensus" as a majority of members present, and others define it as unanimous agreement among all affected parties. 79% allow designated alternates to vote for Board members.

In some cases, where the MPO is part of a council of governments, the MPO Policy Board's decisions are subject to the approval of the council's board. In other cases, the MPO Board has some type of executive committee that can act for the Board, and meets more frequently than the whole. Overall, MPO Policy Boards reflect the diversity of the regions they represent and the flexibility the law allows for them adapt to each area's unique needs.

These results can be viewed, along with the results of all AMPO Surveys, at: [http://www.ampo.org/survey\\_results.html](http://www.ampo.org/survey_results.html)



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# AMPO's Travel Modeling Work Group Shares Modeling Practices in Kansas City

Rich Denbow, Denbow Consulting

AMPO's most recent Travel Modeling Work Group meeting took place in Kansas City, Missouri. Over 30 modelers from MPOs, consulting firms, and US DOT were present to hear from their peers about modeling tips and techniques and continue an ongoing dialogue about MPO modeling practices.

Participants began with presentations on coding procedures and data management for travel models. Guy Rousseau from the Atlanta Regional Commission (ARC) discussed how the MPO codes its extensive networks. The current travel model has more than 1700 traffic analysis zones. Guy said that one way his staff verifies networks is by comparing coded link lengths to GIS-derived link lengths. ARC also codes ITS strategies in the travel networks as well as transit, rail, and bus rapid transit. Larry Blain of the Puget Sound Regional Council talked about the integration of databases at his MPO to better manage the coding and modeling process, validate networks, and perform what-if type scenarios.

Ken Cervanka of the Dallas-Fort Worth MPO gave a thoughtful presentation on current modeling practices and the use of "next generation" models in his MPO area. He placed a strong emphasis on training staff and other model users, as well as developing good model documentation that gets at the "why" questions. He then turned to activity-based forecasting, suggesting that it's time to find out where things stand with these models. The modeling community needs to address the current readiness and worthiness of activity based models. He suggested several simple sensitivity tests and next steps if it is found that current activity based models are not ready for the real world.

Two MPOs shared their experiences using UrbanSim, a model for integrated planning and analysis of urban development that incorporates interactions between land use, transportation, and public policy. Larry Blain discussed how the Seattle-area

MPO is using UrbanSim to determine if the policies the region has put in place will result in the forecasts they desire. John Britting of the Wasatch Front Regional Council in Salt Lake City said his MPO is using UrbanSim to inform decision makers as to the effects of infrastructure policy on the timing and intensity of development in the region. UrbanSim allows them to consider "what if" scenarios that they were not previously able to analyze.

The Group also heard a presentation from FTA on the SUMMIT model used to forecast travel for new start transit projects and SUMMIT application experience from Salt Lake City. They received an update on the Transportation Research Board synthesis of practice for travel modeling, which has recently gotten underway. AMPO provided input to TRB at the previous meeting for development of the project scope.

AMPO established the Travel Modeling Work Group to bring together MPO technical staff and our federal partners in a forum where MPOs share practices and identify solutions to the transportation planning challenges they face. The Group meets twice per year, usually at a host MPO. The Mid-America Regional Council graciously hosted the September meeting. Staff found excellent meeting space for the Group at the Discovery Center Urban Conservation Campus, a green building located among gardens and wetlands. The next meeting will be in early 2005. **M**



Guy Rousseau of the Atlanta Regional Commission highlights modeling procedures at the September 2004 AMPO Travel Modeling Meeting

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