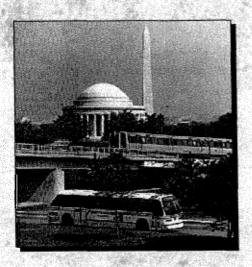
Issue No.

Nov/Dec1995

THE INTERNATIONAL JOURNAL OF TRANSPORTATION-RELATED ENVIRONMENTAL ISSUES

In This Issue:



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7,000 Transportation Professionals Converge on Washington, DC for the 75th Annual Meeting of The Transportation Research Board in January

Of the more than 280 technical sessions scheduled, 44 will address environmental topics of concern in transportation



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Domenick Billera of New Jersey DOT passes on gavel of Chair of TRB Committee A1F04 at end of 1995

Schedule of A1F04 activities at the TRB 75th Annual Meeting



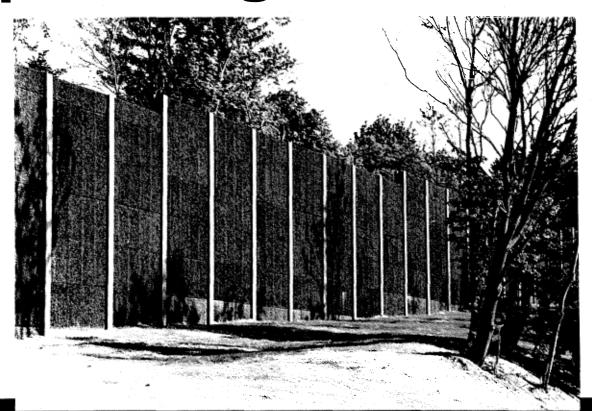
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Florida DOT's Win Lindeman gives an update on the status of noise barrier activity in the Sunshine State

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- p. 4 HMMH Announcement
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- p.23 Registration & Subscriptions

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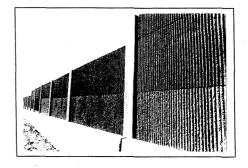
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The Wall Journal

The International Journal of Transportation-Related Environmental 1

Volume IV, 1995 Issue No. 20

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Editor El Angove

Director of PublicationsJohn G. Piper

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Subscription and advertising information are shown on pages 27 and 28.

* * * * *

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EDITOR'S CORNER

by El Angove

Cheers!

I hope there are a few readers out there who were fans of the Cheers TV show. I certainly was one. I lived in the Boston area for more than 30 years, and I became at one time a regular patron of the bistros along Beacon Street and elsewhere on the Hill.

I spent some happy hours in the very hotel bar which was the model for the Cheers TV set. A lot of Boston pols frequently toddled down the street into the bar, and their reception was much like Normie gets on TV. At one of the watering holes in the Back Bay, I was also accoladed with a loud greeting of "Elly, Baby" as I walked in the door and proceeded to my favorite stool, where I would find waiting for me a shaker full of my special mix martini. Ah, those were the days. Cheers.

I do not want to leave the impression that I was or am a toper. In that period, I was a sales executive running an open-end expense account, and wining and dining customers, and was known for generous tipping. I will never, repeat **never**, forgive the IRS for sticking their bean-counter noses into the wonderfully creative world of marketing and sales. Alas, poor Yorick.

They will never understand the true meaning of the Cheers theme song:

Sometimes you want to go where everybody knows your name, and they're always glad you came.

You want to be where you can see troubles are all the same, and everybody knows your name.

Fortunately, I have been able to locate certain establishments in my new environs, where hospitality and conviviality, if not paramount, are profferred in a friendly manner.

Which brings me to the photo at the top. This was taken in a waterside restaurant in Matanzas Pass behind Fort Myers Beach. This was in October before the snow birds began flying south, when everything is wide open to we permanent residents.

In the photo, you will see your favorite editor, and his eldest son, Garry. Now, Garry is an engineer, albeit an industrial engineer, who drives a black Porsche, has a rock band which



performs at Woods Hole and other Cape Cod establishments on weekends, has a condo on the beach at New Seabury on the Cape, and is living the free and easy life of a bachelor. He is not a good influence on his father.

However, we posed this photo for the purpose of toasting our readers to good cheer and health on the advent of the Christmas holidays (which are now upon us as I write this). Cheers.

Moving right along: In Issue No. 18 in my erudite and distinguished column, I asked for some comments and opinions which might engender discussion and perhaps even argument among our readers. I am happy to report that two readers have come boldly forward, and their views will be presented in Issue No. 21. They are:

Rudy Hendriks Caltrans

Title: To Absorb, or not to Absorb

Ed McNair

Title: The Very High NRC Problem

I couldn't have specified better topics for discussion. I can hardly wait. ■

New Product Announcement

NEW LIGHT-TRANSMITTING, SOUND ABSORBING HIGHWAY NOISE BARRIER

Quilite International, Culver City, CA, announces a totally new product designed specifically to reduce both transmitted and reflected noise from highways, airports, industrial sites, and sports/entertainment complexes.

The patented Quilite Noise Barrier is a factory-assembled panel system consisting of clear polycarbonate plastic blocks surrounded by noise traps and mounted in a steel frame. Its 83% sunlight trans mission gives it a transparent aesthetic quality unavailable with any other noise barrier system. Installed cost is competitive with concrete block, the most commonly used sound wall

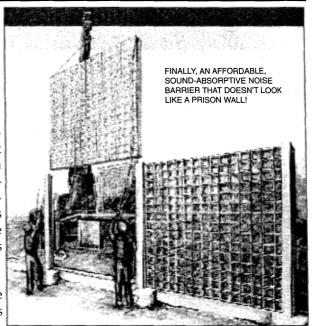
Acoustic lab tests conducted over a frequency range of 125 to 4000 Hz indicate that the Quilite design will reduce highway noise transmitted through the panels by more than 80%. Reflected

noise is reduced by an average of 60%, and by as much as 88% at 1000 Hz.

The Quilite barrier's structural stiffness and light weight facilitate use in both curved and flat wall architecture. Corrugated surfaces of the plastic blocks virtually eliminate glare from sunlight or headlights into the eyes of drivers.

Panels are 5" thick and are available in modular sizes to produce walls up to 20 ft.

high. Their light weight (6 lbs. per sq. ft.) permits easy handling and reduced foundation requirements. A three-man crew can erect 240 lineal feet of Quilite noise barrier in a single eight-hour shift.



For further information, contact:
Rod Kotter
Quilite International
10815 Molony Road
Culver City, CA 90203
Phone 310-838-0588 Fax 310-838-0583

ANNOUNCEMENT

HMMH ACQUIRES ANOMS

Harris Miller Miller & Hanson Inc. (HMMH) is pleased to announce its acquisition of the Airport Noise and Operations Monitoring System (ANOMS®) business of Larson Davis Incorporated (LDI). The ANOMS® technology is used by more than 20 airports in the U.S., Canada and Europe to help control noise. The management and staff for ANOMS® activities at LDI have joined HMMH.

The addition of ANOMS[©] technology to HMMH makes available a new level of excellence in assessment and control of airport noise. HMMH offers a full range of noise-related services to airports including consulting, hardware and software development and installation, operation of monitoring systems and management of noise control programs.

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CORRECTIONS

Following are some typos and omissions which observant readers found in Issue No. 19, for which we apologize. It's not easy to receive criticism, but it is good to see that people are really reading every line of the Journal.

pp. 10-11, Noise Barrier Comparison Matrix:

Top of text column 2, "Wa bash" should be "Wabash" Line 4 of Matrix column, "Phone No." should be "512 327-8481"

Bottom line of Matrix column, "Contact Person" should be Brian Lotz, not Richard Walker

pp. 24-25, Directory of TRB A1F04 Officials

- p. 24, under "Committee Officials" group, Jon Williams' correct telephone number is 202 334-2938
- p. 25, under "Oregon State Rep," should be David Goodwin, telephone is 503 986-3488, fax is 503 986-3524
- p. 25, completely omitted were:

WEST VIRGINIA State Rep. Jim Colby Phone 304 558-3226 Fax 304 558-2385

WISCONSIN State Rep. Jay Waldschmidt Phone 608 267-9806 Fax 608 266-7818

WYOMING State Rep. Harry C. Underwood Phone 307 777-4379 Fax 307 777-4773

Letter to the Editor

Editor The Wall Journal P. O. Box 1389 Lehigh Acres, FL 33970-1389

Dear Sir:

I am writing with regards your article entitled "The Acoustic Phenomena of the Temples at Chichen Itza," which I read with interest. Two things strike me as curious about the article, and these are:

- There are no quantitative comments recorded.
- Not all of the respondants of the various comments are identified.

With regards the first, this might explain why there have been so few responses from technically trained acousticians. Many things that *appear* to be unusual phenomena can be dismissed under the light of quantitative evaluation.

I recall an article that was published in Scientific American many years ago in which the supposed "extraordinary acoustics" of the theater in Epidaurus, Greece were examined. Tests were performed to determine the articulation index AI at various locations in the theater. The conclusion was that the measured Als were essentially the same as would be predicted using the inverse square law of propagation. The laws of physics were not violated and there were no "secrets" revealed from this study. Apparently the Greeks knew that if background noise was controlled, the audience placed as close as possible to the performers, and they provided for early reflections that direct the sound toward the audience, they could build a theater with reasonably good acoustics. No magic. By the way, it also helped that the performers wore large masks with built-in megaphones to further direct their voices to the audience.

It is difficult to separate the perception of extraordinary acoustics from the real thing without performing this kind of quantitative evaluation.

Regarding my second point: It sometimes helps to know who is responding to whom in these extended conversations.

Sincerely,

James D. Chalupnik, Professor Emeritus Department of Mechanical Engineering University of Washington Seattle, Washington

Telephone: (206) 543-5090

YOUR ATTENTION, PLEASE

The U.S. Postal Service has installed all new mail boxes in the Lehigh Acres Office. That's the good news. The bad news is that we now have a new box number — **1389**.

At about the same time, AT&T gave us a brand new area code — **941**. All of this just after we bought new stationery. ❖□●*▼❖❖ ❖❖●*▼❖❖◎ Please make a note:

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For registration information, call Mary Baechle at 502/852–6590.

For technical information, call Drs. Cohn or Harris at 502/852–6276 UNIVERSITY of LOUISVILLE

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software is going to

save me a lot of time."

-Craig Huntley, GIS Systems Analyst

Associates

Whitman, Requardt &

I can't wait to use what

On the Florida Front

By Win Lindeman, Senior Environmental Scientist, Florida Department of Transportation



On the Florida front, FDOT continues to build noise barriers at a steady pace. More importantly, there is a shift of focus from the 1-95 corridor in Broward and Palm Beach Counties to a statewide level. Several regions of the state that have not constructed noise barriers to date are now in the noise barrier mode. The construction of a noise barrier along State Road 40 near Ormond Beach has brought the DeLand District Office into the noise barrier owner circle.

Several other active projects in the Orlando area are expected to have one or more noise barriers associated with highway construction projects. At the same time the Lake City Office is proposing several barriers along 1-295 south of Jacksonville. This will be a "first" for this region as well. Meanwhile, the Miami Office hopes to begin construction on another noise barrier in Miami along SR 112 near Biscayne Bay. Details of this effort will be shared in a future article because of the special nature of this project. Barrier construction (completed or proposed) continues in the remainder of the state at a steady clip with the exception of our sparsely populated Northwestern region. Right now of course, rebuilding much of the beachfront area damaged in this year's hurricanes is far more important to these folks than a noise barrier wall.

By the way, you can tell you're getting old when they're considering rebuilding a noise barrier that you designed 20 years ago. That is now the case along 1-75 in eastern Hillsborough County where an existing earthen berm is planned for enhancement based on citizen complaints about the effectiveness of the current version. It seems that the earthen berm has settled some in the middle, something 1 can relate to very well. Goodness knows it's an eerie feeling to know that you've been around that long!

Another item you may find of interest is that I have requested funding from FDOT for a noise related research project. The request, entitled "A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations", is designed to provide research funds for development of a methodology that can be incorporated into FDOT's noise procedures used by all FDOT district and consultant noise specialists on FDOT projects. If funded, the research project is expected to begin in July, 1996 and take about one year to complete. The completed project will provide a uniform methodology to be

applied statewide when the issue of providing noise abatement at special use facilities (such as parks, churches and schools impacted by highway traffic noise) arises.

Finally, I am seriously considering a Noise Abatement Workshop that would be held in conjunction with the annual FDOT Environmental Management Statewide meeting currently scheduled for October 8-10, 1996 in Orlando. More details on this event will be provided in the future.

(Ed. Note: Win also sent along a copy of <u>EnviroNews</u>, a quarterly publication of The Environmental Management Office of FDOT. It is very well done and I am very happy to print this excerpt, entitled "What's New in the Library" by Win Lindeman.

One of the new titles to appear in the environmental library recently includes a Transportation Research Board Special Report on Expanding Metropolitan Highway: Implications for Air Quality and Energy Use. Produced by the Committee for Study of Impacts of Highway Capacity Improvements on Air Quality and Energy Consumption, Special Report 245, published in 1995, is a 387 page look at the impact of the 1990 amendments to the Clean Air Act. The study team of 16 area experts, headed up by Paul Peterson of Harvard University, focused on the effects of investment in highway capacity on air quality and energy use in metropolitan areas. Its primary audience is metropolitan planning organizations (MPOs), state officials, legislators, and courts with oversight responsibilities. Check it out!

Another new Study Design to Assess the Effects of Highway Median Barriers on Wildlife. Published in June, 1995, this 49 page research report from the Ontario Ministry of Transportation was prepared by Anne Hubbs and Rudy Boonstra to provide the study design for a continuing project related to road-kills of small mammals on freeways. Based on this study design, the MOT will continue to gather data with maintenance crews under the supervision of professional biologists. It is anticipated that the road-kill data will be analyzed annually, and decisions will be made to complete the project when the power of the statistics are sufficient to determine the effects of median barriers on animal crossings of freeways and road kills.

Let's not ignore the interest in those who have departed from this earth! A Biophysical Model for Prehistoric Archaeological Sites in Southern Ontario, written by Penny Young and others for the Ontario Ministry of Trans-

portation, is a 73 page report published in June, 1995. This project was initiated as a part of a strategy by MOT to evaluate the need for archaeological site investigation for aggregate pits. The model development and its evaluation are based upon relationships between site observations and several biophysical factors found to be significant. The model quantifies the probability that a site will have an actual archaeological "find", and provides a basis for quantifying the intuitive feelings that professional archaeologists have about various sites.

All library material can be checked out for up to 3 weeks by contacting Win Lindeman at 904/488-2914. For a detailed listing of all of the references contained in the environmental library, FDOT users can surf the net and check it out on the FDOT mainframe using TSO. Select the Engineering Menu and follow it through the environmental program maze to the X-Index program. If you still can't figure it out, contact Win and he can send you a users manual for novice users. Those outside of FDOT will have to contact Win Lindeman directly about the contents of the library.



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TRB COMMITTEE A1FO4 ON TRANSPORTATION RELATED NOISE AND VIBRATION

By Domenick Billera, Chairman



Big doings are on tap for A1F0404 at the 1996 TRB Annual Meeting. Not only do we have a Paper Session on a mix of noise related topics and a double Panel Session covering Developing a

Noise Barrier Policy (Part A) and Ambient Based Noise Criteria (Part B), but you can see for the first time anywhere the recently developed and soon to be released Traffic Noise Model TNM and the Integrated Noise Model INM 5.0. These will be presented during the Highway and Aircraft Subcommittee meetings on Monday January 8th. Of course we also will have our Annual A1F0404 Best Paper Award dinner, this year on Tuesday evening. A full schedule of events is listed elsewhere in this issue of The Wall Journal.

This will be my swan song Chairman's Column for the Wall Journal. After seven years (two three year terms plus one extra year for good behavior) I am stepping down from the position of Committee Chairman. Taking my place will be Gregg Fleming of the USDOT Volpe Center. With his diverse experience in all modes of transportation noise, Gregg is in an excellent position to steer the future course of the Committee and I wish him the best.

The subcommittee structure used by A1F0404 has been a source of great strength for the Committee and I would like to acknowledge the tremendous contributions made by my subcommittee chairmen Eric Stusnick, Jim Nelson and Ken Polcak. Without their efforts only a small fraction of what the Committee has caused to happen would have happened. A Committee is only as good as its members and ours is certainly top-notch, due to the knowledge. skills and enthusiasm of our members and friends - thank you everyone. Someone else I certainly owe thanks to is El Angove for providing me this space

in each issue of The Wall Journal to expound on Committee activities and happenings. El has been a great supporter and I speak for the whole Committee in saying thanks a million!

As I look back at my tenure as chairman and my Committee activities under previous chairmen, what the committee was and what it has become, I like to think that I leave the Committee with its special blend of eagerness to pursue scientific knowledge, report on and implement that knowledge, and comraderie between members, firmly in place as it was when I took over the Chairmanship. I certainly couldn't do any better than that

That's about all I have to say. It's been fun and I look forward to seeing you all in January. Hmmmm...is that a ringing in my ears or do I hear a fat lady singing??

SCHEDULE OF SUBCOMMITTEE MEETINGS AND TECHNICAL SESSIONS

Monday, January 8th

9:00 AM AIF04-3 (Highway) State 2:00 PM AIF04-1 (Aircraft) Bancroft 7:30 PM AIF04-2 (Guided Transit) Chevy Chase

Tuesday, January 9th

9:00 AM AIF04 (Full Committee) Jefferson West 7:00 PM Awards Dinner Hogates - at the Marina

Wednesday, January 10th

Thoroughbred

8:30 AM Session 196
Transportation Noise Issues
Lincoln East
2:30-4:15 PM Session 223A
Issues involved in developing a
Transportation Policy
Thoroughbred
4:30-? Session 223B
Practical application of ambient
based noise criteria

Technical Sessions of the 75th Annual Meeting of the Transportation Rsearch Board which were sponsored by the A1F04 Committee (also included in the TRB Selections on the next pages)

196 Wednesday, 8:30 a.m., HILTON (Lincoln East) TRANSPORTATION NOISE ISSUES
Melissa Burn, Wyle Laboratories, presiding
Sponsored by A1F04 Committee on Transportation-Related Noise and Vibration

Traffic-Noise Impact Study for Least Bell's Vireo Habitat Along California State Route 83 Douglas E. Barrett, Harris Miller Miller & Hanson Inc. A Method for Measuring Vehicle Noise Source Heights

and Subsource Spectra
Robert Coulson, Florida Atlantic University
Noise Reduction Retrofit on Historic Structures
Suzanne DiGeronimo, DiGeronimo, P.A.

Residents' Perceptions and Field Measurements of Helicopter Noise

Panos D. Prevedouros and B. Prasad, University of Hawaii at Manoa

A HITEC Evaluation of the USG Sight and Sound Screen

Louis F. Cohn and Roswell A. Harris, University of Louisville

223A Wednesday, 2:30-4:15 p.m., HILTON (Thoroughbred)

ISSUES INVOLVED IN DEVELOPING A NOISE BARRIER POLICY

Domenick J. Billera, New Jersey Department of Transportation, presiding Sponsored by A1F04 Committee on Transportation-Related Noise and Vibration

Written Noise Policies: Who Needs Them? Robert E. Armstrong, Federal Highway Administration A Policy for Meaningful Noise Abatement Domenick J. Billera, New Jersey Department of Transportation

Central Office/District Policy Considerations
Win Lindeman, Florida Department of Transportation
A Policy to Withstand Political Pressure
Jay Waldschmidt, Wisconsin Dept of Transportation
Type II Policy

Roy Osborne, Pennsylvania Dept of Transportation

223B Wednesday, 4:30 p.m., HILTON (Thoroughbred)
PRACTICAL APPLICATION OF AMBIENT-BASED
NOISE CRITERIA

James T. Nelson, Wilson, Ihrig, and Associates, Inc., presiding
Sponsored by A1E04 Committee on Transportation

Sponsored by A1F04 Committee on Transportation-Related Noise and Vibralion

Panel Discussion:

Carl E. Hanson, Harris Miller Miller & Hanson Inc.; Eric Stusnick, Wyle Laboratories, Inc.; James L. Sowell, Los Angeles County Metropolitan Transportation Authority; Thomas Odebrant, DNV Ingemansson, Sweden

(Editor's Response. Thanks for all your kind words, the Best Friend Award, your contributions to The Wall Journal and your constant support of this endeavor. You have been a good friend and I shall miss your columns. However, I think an occasional column from the Chairman Emeritus is in order).



NATIONAL RESEARCH COUNCIL

By Jon Williams Senior Programs Officer Transportation Research Board



The Transportation Research Board was founded in 1920 as an office of the National Research Council, with the purpose of stimulating and disseminating highway research.

Through the years, the mission of TRB has broadened to include attention to all factors pertinent to the planning, design, operation and impact of systems for the safe and efficient movement of people and goods.

TRB is celebrating its 75th Anniversary in 1995, and the Annual Meeting being held January 7—11, 1996 in Washington, D.C. will provide a grand finale to the celebration. Each year, the meeting attracts 7,000 transportation professionals, and provides a unique opportunity for the exchange of transportation information and research findings. The 75th Annual Meeting will include over 280 sessions with presentations covering all aspects of transportation research and practice, In addition, seven specialty workshops will he held on Sunday, January 7 and 200 committee meetings will take place over the four-day period.

Following is a description of forty-four Annual Meeting sessions that address environmental topics in transportation. You are cordially invited to attend The meeting and participate in these or any other sessions that may interest you. If you are unable to attend this year, the 1997 Annual Meeting will be held in Washington on January 12—16. We look forward to seeing you this year or next.

Annual Meeting registration information is available on the Internet at http://www.nas.edu/trb/index.html. For further information on the meeting or TRB environmental activities, contact Jon Williams at (202) 334-2938, or Jennifer Swerda at (202) 334-3205. ■

Transportation Research Board 75TH ANNUAL MEETING JANUARY 7–11, 1996

OMNI SHOREHAM HOTEL SHERATON WASHINGTON HOTEL WASHINGTON Hilton Hotel

Selected Sessions

ENVIRONMENTAL TOPICS IN TRANSPORTATION

<u>TOP1C</u>	SESSION #
AIR QUALITY	114 A&B, 173, 195, 247
ENERGY	60, 174, 195, 201 A&B, 282
ENVIRONMENTAL ANALYSIS	25, 27, 86, 195, 199
ENVIRONMENTAL & AESTHETIC DESIGN	19, 50, 70
ENVIRONMENTAL JUSTICE	225 A&B
HISTORIC PRESERVATION	224
LAND USE	87 & 244
LEGAL ISSUES	153
MODAL ISSUES	110 & 240
NATURAL RESOURCES	79, 80 A&B, 271
NOISE AND VIBRATION	196, 223 A&B
PUBLIC INVOLVEMENT	123, 193, 245
ROADSIDE MANAGEMENT157	
WASTE MANAGEMENT & TRANSPORT	107, 128A, 155, 203, 267 A&B Conference on Waste and Recycled Materials



The TRB is a unit of the National Research Council, which serves as an independent advisor to the federal government on scientific and technical questions of national importance. The NRC, jointly administered by the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, brings the resources of the entire scientific and technical community to bear on national problems through its volunteer advisory committees.

Sunday, 2:00 p.m.

CONFERENCE ON WASTE AND RECYCLED MATERIALS IN THE TRANSPORTATION INFRASTRUCTURE

(Sheraton Washington Hotel, 2:00 p.m. until 4:30 p.m.) Sponsored by Group 2, Design and Construction of Transportation Facilities (A2000). Information may be obtained from Frederick D. Hejl, G.P. Jayaprakash, or Amelia Johnson at 202/334-2952 or fax 202/334-2003.

19 Monday, 8:30 a.m., SHOREHAM (Palladian)

TRANSPORTATION AESTHETICS, PART 1 (Part 2, Session 50) Donald J. Flemming, Minnesota Department of Transportation, presiding

Sponsored by Committee on General Structures and Committee on Landscape and Environmental Design

Innovative Computational Support in Bridge Aesthetics, 961161 C.J. Moore, J.C. Miles, and S.N. Evans, University of Wales, United Kingdom

Aesthetic Design for the Akashi Kaikyo Bridge, 960389 Hiroyuki Fujikawa, Yoshitaka Kishimoto, and Seigo Nasu, Honshu-Shikoku Bridge Authority, Japan

Washington - A City of Beautiful Bridges,

Paradigms to Emulate, 960152

Donald B. Myer, Commission of Fine Arts; Abba Lichtenstein, Tenafly, New Jersey

Aesthetic Design of Haneda Sky Arch, 960356

Masaki Shiomi, Japan Ministry of Transport; Yosio Nakamura, Tokyo Institute of Technology

Aesthetic Guidelines for Older Bridges, 960244

Gregory F. DeMond, HNTB Corporation

Objectivity and the Aesthetic Design Process, 96043

Ernst H. Petzold III and Brian E. Carlson, Sverdrup Civil, Inc.

25 Monday, 8:30 a.m., HILTON (International Ballroom West) **ENVIRONMENTAL ANALYSIS IN TRANSPORTATION**

Thomas L. Weck, Louis Berger and Associates, Inc., presiding Sponsored by Committee on Environmental Analysis in Transportation

Environmental Assessment for Trans-European Networks I.M. Eriksson, Swedish National Road Administration

Using the Hazardous Materials Tracking System to Estimate the Potential Environmental Impact of Maquiladora Industry in the United States, 960748

Suleiman A. Ashur, University of Texas, El Paso; K. David Pijawka, Arizona State University; M. Hadi Baaj, American University of Beirut

An Analysis of Household Solid Waste and Its Impacts on Transportation Network of Kuwait. 960044

Parviz A. Koushki and Abdul Lateef Al Khaleefi, Kuwait University; Osama Al-Duaij, Kuwait Municipality

Methods and Tools to Assess Factors of Community Cohesion and Aspects of Environmental Justice, 960950

Robert S. De Santo, DeLeuw Cather & Company; C. Leroy Irwin, Florida Department of Transportation

Public Interface on a Highway - Generated Noise Problems Antony Mason, Louis Berger International, Inc.

27 Monday, 8:30 a.m., HILTON (Lincoln East)

GLOBAL POSITIONING SYSTEMS

Roger G. Petzold, Federal Highway Administration, presiding Sponsored by Committee on Computer Technology and Committee on Photogrammetry, Remote Sensing, Surveying, and Related Automated Systems

U.S. Department of Transportation Role in Civil Management of GPS

George Wiggers, U.S. Department of Transportation

National Continuous GPS Reference Network

William Strange, National Geodetic Survey

GPS Implementation at Minnesota DOT

David M. Gorg, Minnesota Department of Transportation

Application of GPS for Train Control

Richard C. Shamberger, Federal Railroad Administration

GPS Applications for Traffic Engineering Studies, 960214

John Harding, Arthur Salwin, and Dwight Shank,

The MITRE Corporation; Raj Ghaman, Federal Highway Administration

Future Directions in GPS Technology

Charles Trimble, Trimble Navigation

50 Monday, 2:00 p.m., SHOREHAM (Palladian)

TRANSPORTATION AESTHETICS, PART 2

(Part 1, Session 19)

E. LeRoy Brady, Arizona Department of Transportation, presiding Sponsored by Committee on General Structures and Committee on Landscape and Environmental Design

A Visual and Ecological Environmental Quality Model for Transportation Planning and Design, 961227

Jon Bryan Burley, Michigan State University

Glenwood Canyon Tunnel Aesthetic Design, 960481

Craig A. Frey, Scott L. Danielson, and Douglas M.

Slakey, Parsons Brinckerhoff

Aesthetics and Other Community Values, 960003

Joseph Passonneau, Joseph Passonneau & Partners

Fusion of Creativity in Rail Transit Stations:

A Retrospective and Critique, 960053

Hanan A. Kivett, Parsons Brinckerhoff

Public Transportation as Collaborative Art:

MetroLink, St. Louis, 960678

Emily Blumenfeld, Arts In Transit, Bi-State Development Agency; Tanya Yatzeck, St. Louis, Missouri

60 Monday, 2:00 p.m., HILTON (Lincoln West)

C02 EMISSIONS FROM PERSONAL VEHICLES: A POSTMORTEM ON "CAR TALK"

Daniel Sperling, University of California, Davis, presiding

Sponsored by Committee on Transportation Energy

Policy Implications of Car Talk

Linda Lance, Office of the Vice President of the United States
Results of Analyses Developed for the Committee Process

Lew Fulton, U.S. Department of Energy

Lew ruiton, O.S. Department of En

Panel Discussion

John M. DeCicco, American Council for an Energy-Efficient Economy; George Eads, Resources for the Future; Sonia Hamel, Massachusetts Office of Environmental Affairs; Patsy Brownson, Cox Enterprises; Lee Lynd, Dartmouth College

70 Monday, 7:30 p.m., SHERATON (Virginia C)

LANDSCAPE AND ENVIRONMENTAL DESIGN

Harlow C. Landphair, Texas Transportation Institute, presiding Sponsored by Committee on Landscape and Environmental Design

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Aesthetics and the Urban Freeway: The Phoenix Experience

Joseph R. Salazar, Arizona Department of Transportation

Aesthetics and the Urban Freeway:

The Good, the Bad, and the Ugly

Wilfred Gates, Gates, Leighton & Associates

Highways That Sustain Intrinsic Qualities of Place:

The Pacific Coast Highway US-101, Oregon to Washington

Grant R. Jones and Curt Miller, Jones & Jones

Roads That Sustain Intrinsic Qualities of Place:

Paris-Lexington Road, an Integration of Intrinsic Qualities,

Civics of Design and ComputerTechnology, 961333

Dennis Oost, Jones & Jones; Ron Thomas,

Community Design Exchange

Aesthetics and Public Lands: The USDA Forest Service and Arizona Department of Transportation Joint Guidelines

Patrick J. Higgins, Higgins and Associates

Ten Years of Design Excellence: A Graphic Data Base

Fredrick Skaer, Federal Highway Administration

79 Monday, 7:30 p.m., SHOREHAM (Palladian)

HYDROLOGIC AND WATER-QUALITY ELEMENTS OF STORMWATER MANAGEMENT

Kenneth Young, GKY and Associates, presiding Sponsored by Committee on Hydrology, Hydraulics and Water Quality

Washington State DOT's Stormwater Management Program, 960370

Shari Schaftlein, Washington State Department of Transportation

Semiarid Precipitation Frequency Project Contrasted with Previously Published Rainfall Atlases, 961363

John L. Vogel and Lesley T. Julian, National Weather Service

Adjustment of Regional Regression Equations for Urban Storm-Runoff Quality Using At-Site Data, 961321

C. Shane Barks, U.S. Geological Survey

Characterization of Metals and Solids in Urban Highway Winter Snow and Spring Rainfall-Runoff, 961287

John J. Sansalone and Steven G. Buchberger, University of Cincinnati

Transport of Heavy Metals During Infiltration of Simulated Highway Runoff Through Large-Scale Soil Columns, 960259

Ronan V. Igloria, Wade E. Hathhorn, and David R.Yonge, Washington State University

The Effects of Natural Organic Matter on Heavy Metal Transport During Infiltration, 960258

Ronan V. Igloria, Wade E. Hathhorn, and David R. Yonge, Washington State University

Multicriterion Stormwater Control of Discharge Rates, Channel Erosion, and Water Quality, 961071

Richard H. McCuen, University of Maryland; Glenn E. Moglen, Weather Service

80A Monday, 7:30-9:15 p.m., SHOREHAM (Diplomat)

REAUTHORIZATION OF THE CLEAN WATER ACT: A DIALOGUE TOWARD IMPROVING AGENCY REGULATORY PROGRAMS – ENVIRONMENTAL REGULATORS

Terry Huffman, Huffman & Associates, Inc., presiding Sponsored by Committee on Ports and Channels and Committee on Environmental Analysis in Transportation

Role of the U.S. Congress: Current Status Toward Improving Agency Regulatory Programs

Steve Shimburg, Senate Committee on Environment and Public Works

The Clinton Administration's Program and the Role of the Corps of Engineers in Improving Agency Regulatory Programs

Michael Davis (Invited), U.S. Army Corps of Engineers

The Role of EPA in Improving Agency Regulatory Programs

Greg Peck, U. S. Environmental Protection Agency

States' Perspective Towards Improving Agency Regulatory Programs

Jon Kusler, Association of State Wetland Managers

80B Monday, 9:30 p.m., SHOREHAM (Diplomat)

REAUTHORIZATION OF THE CLEAN WATERACT: A DIALOGUE TOWARD IMPROVING AGENCY REGULATORY PROGRAMS – STAKEHOLDERS RESPONSE

Terry Huffman, Huffman & Associates, Inc., presiding Sponsored by Committee on Ports and Channels

Environmental Council's Perspective

Jerry Jackson, Skadden, Arps, Slate, Meagher, and Flom

Environmental Interest Group's Perspective

Steve Moyer, Trout Unlimited

Great Lakes Industry Perspective

Davis Helberg, Seaway Port Authority of Duluth

East Coast: Industry Perspective

Lillian C. Borrone, Port Authority of New York and New Jersey

Session Summary

James E. Broadway, Huffman and Broadway

86 Monday, 7:30 p.m., HILTON (International Ballroom West)

USE OF COMPUTER TECHNOLOGY FOR TRANSPORTATION PLANNING AND PROJECT DEVELOPMENT

Charnelle Hicks, Parsons, Brinckerhoff, Quade and Douglas, Inc., presiding

Sponsored by Section on Environmental Concerns

Application of 3D and 4D Visual Modeling for Transportation Systems (NCHRP Project 20-5)

Terry R. Larson, Texas A&M University System

Use of Satellite Imagery and GIS for Environmental Features Mapping and Transportation Project Alternatives Analysis

Edward S. Gabsewics, Rettew Associates, Inc.

Use of Composite Imaging for Visualization of Environmental Impacts and Mitigation of Transportation Project Alternatives

Doug Eberhard, Parsons, Brinckerhoff, Quade and Douglas, Inc.

Use of GIS for Transportation Systems Planning

Keith Johnson, Southwest Pennsylvania Regional Planning Commission

87 Monday, 7:30 p.m., HILTON (Lincoln East)

CONTENDING WITH CHANGE IN SMALL URBAN AREAS

Robert T. Alguire, University of Arkansas, presiding Sponsored by Committee on Transportation Planning Needs and Requirements of Small and Medium-Sized Communities

Managing Growth from a Legal Viewpoint

Charles L. Siemon, Siemon, Larsen and Marsh

Effect of Highway Bypasses on Medium and Small Urban Areas

Jesse L. Buffington, Texas Transportation Institute

Downtown Economic Trends Related to Traffic and Parking

John D. Edwards, The RBA Group

One-Way Versus Two-Way Traffic in the CBD: Case of Controversy

Frederick J. Wegmann and Arun Chatterjee, University of Tennessee

Large-Scale Commercial Site Development

William H. White, Flint, Allen, White and Radley Consulting Engineers

107 Tuesday, 8:30 a.m., SHOREHAM (Empire)

RECYCLED RUBBER IN ASPHALT PAVING

Anne Stonex, Western Technologies Inc., presiding Sponsored by Committee on Characteristics of Nonbituminous Components of Bituminous Paving Mixtures

Evaluation Systems for CRM Binders and Mixtures, 960082

Kenneth Troy, Peter Sebaaly, and Jon A. Epps, University of Nevada, Reno

Short-Term and Long-Term Aging Behavior of Rubber-Modified Asphalt Paving Mixture, 960464

Robert Y. Liang and Suckhong Lee, University of Akron

Hot-Mix Asphalt Rubber Applications in Virginia, 960079

G. W. Maupin, Virginia Transportation Research Council

Arkansas' Experience with Crumb-Rubber-Modified Mixes Using Marshall and SHRP Level 1 Design Methods, 960825

Gary V. Gowda, Kevin D. Hall, and Robert P. Elliott, University of Arkansas

Babbitt, Minnesota: A Case Study of Pretreated

Crumb-Rubber-Modified Asphalt Concrete, 960827

Mary Stroup-Gardiner, Bruce Allen, and David E. Newcomb, University of Minnesota

Evaluation of Pyrolized Carbon Black from ScrapTires as an Additive in Hot-Mix Asphalt, 960065

Taesoon Park and Brian J. Coree, Indiana Department of Transportation; C. W. Lovell, Purdue University

Development of Rubber/Asphalt Binders by Depolymerizational/Devulcanization of Scrap Tires in Asphalt, 960241

Ludo Zanzotto, University of Calgary, Canada;

Gerhard J. Vennepohl, Ontario Ministry of Transportation, Canada Use of Scrap Tire Chips in an Asphaltic Membrane, 961036

Kamyar C. Mahboub and Phillip R. Massie, University of Kentucky

110 Tuesday, 8;30 a.m., SHOREHAM (Hampton)

ENVIRONMENTAL AND SAFETY ISSUES RELATED TO HIGH-SPEED GROUNDTRANSPORTATION SYSTEMS

John A. Harrison, Parsons, Brinckerhoff, Quade and Douglas, Inc., presiding

Sponsored by Committee on Guided Intercity Passenger Transportation

Green Design in the Rail Industry--Threat or Possibility, 960212 Maria Signal, ABB Traction, Inc.

Environmental Compliance Process for the Electrification of Amtrak's New Haven-Boston Line

Erin Clarke, National Railroad Passenger Corporation

Update on Federal Railroad Administration's High-Speed Rail Noise and Vibration Methodology

Carl E. Hanson, Harris, Miller, Miller, & Hanson, Inc.

Development of Amtrak's High-Speed Trainset

John G. Bell, National Railroad Passenger Corporation

Rehabilitation of the Railroad Test Track in Pueblo, Colorado

Robert J. McCown, Federal Railroad Administration

Passenger Train Crashworthiness - Primary Collisions, 961073 Subhasish Chatteriee and John F. Carney, III,

Vanderbilt University

Passenger Train Crashworthiness - Secondary Collisions, 961074

Subhasish Chatterjee and John F. Carney, III, Vanderbilt University

Stability of an Elasto-Damper Coupler Wheelset for High-Speed Rail Vehicles, 961075

Junghsen Lieh and Jie Yin, Wright State University

114A Tuesday, 8:30-10:15 a.m., HILTON (International Ballroom West)

METHODS AND TRENDS IN AIR QUAI,ITY ANALYSES

Michael J. Clifford, Metropolitan Washington Council of Governments, presiding

Sponsored by Committee on Transportation and Air Quality

Project-Level Air Quality Assessment Actions: Interrelating Conformity with the NEPA Process, 960534

James A. Frazier and John L. Henneman, COMSIS Corporation

Evaluating the Travel and Air Quality Cost Effectiveness of TDM Projects, 961020

Eric N. Schreffler, San Diego, California; Teresa Costa and Carl B. Moyer, Acurex Environmental Corporation

The Role of Off-Model Tools in Network-Based Regional Conformity Analysis, 960533

Laureen I. Hartnett and Matthew J. Lawlor, COMSIS Corporation

A Transportation Perspective of Ozone Trends in Clean Air Act Nonattainment Areas, 961190

Yoram Shiftan and John H. Suhrbier, Cambridge Systematics, Inc.; Don Pickrell, Volpe National Transportation Systems Center

114B Tuesday, 10:30 a.m., HILTON (International Ballroom West)

AIR QUALITY IMPACT ASSESSMENT STUDIES

Dorriah L. Page, D.L. Page Associates, Inc., presiding Sponsored by Committee on Transportation and Air Quality

Estimating the Emissions Contribution of Intercity Freight Transport, 960513

Sergio J. Ostria, Jack Faucett Associates, Inc.

An Emissions Comparison Between Truck and Rail: A Case Study of California I-40, 960629

Matthew Barth and Ramakrishna Tadi, University of California, Riverside

An Emissions Analysis of Southern California's Metrolink Commuter Rail, 960630

Matthew Barth, Theodore Younglove, and Ramakrishna Tadi, University of California, Riverside

Air Quality Impact of HOV Facilities, 960425

Arun Chatterjee, Terry L. Miller, and Ching Cheng, University of Tennessee

Economic Incentives to Mitigate the Impacts of a State Low-Emission Vehicle Standard for Heavy-Duty Vehicles, 960668

Thomas Kornfield and Jonathan Skolnik, Jack

Faucett Associates

123 Tuesday, 2:00 p.m., SHERATON (Maryland A)

RESOLVING DISPUTES - ALTERNATIVE DISPUTE RESOLUTION AND BEYOND

Robert L. Wilson, Arkansas State Highway and Transportation Department, presiding

Sponsored by Committee on Contract Law

Resolving Disputes - A New York Perspective

Eric M. Kerness, New York State Department of Transportation

Mediation in the Dispute Process

Peter Badala, Barrington Consulting Group

Dispute Resolution Processes

Theodore J. Trauner, Jr., Trauner Consulting Services

Dispute Avoidance

Randolf H. Thomas, Jr., Pennsylvania State University

(Continued on next page)

128A Tuesday, 2:00-3:45 p.m., SHERATON (Virginia C) **REMEDIATION OF CONTAMINATED HIGHWAY RIGHTS-OF-WAY**

Steven. M. Huddleson, Camp Dresser and McKee Inc., presiding Sponsored by Committee on Physicochemical Phenomena in Soils

Remedial Investigation of State Road 63, New Mexico, 960462 Steven M. Huddleson, Camp Dresser and McKee, Inc. Aerobic Biodegradation of Petroleum-Contaminated Soil: Simulations from Soil Microcosms, 961216

David W. Ostendorf, Sharon C. Long, and Theodore H. Schoenberg, University of Massachusetts; Samuel J. Pollock, Massachusetts Highway Department

Characteristics and Performance of Prefabricated Vertical Drains for Enhanced Soil Flushing, 960906

J. D. Quaranta, M. A. Gabr, K. Hewes, and D.Szabo, West Virginia University; John J. Bowders, University of Texas, Austin

State Transportation Agency Practices in Remediation of Petroleum Contaminated Soil

David J. Friend, Bedford, MA

153 Tuesday, 7:30 p.m., SHERATON (Maryland A)

CONFLICT OF INTEREST AND CONSULTANT SELECTION IN PREPARATION OF NEPA DOCUMENTS

Richard A. Christopher, Illinois Department of Transportation, presiding Sponsored by Committee on Environmental Issues in Transportation Law

Panel Discussion

Helen H. Mountford, Federal Highway Administration; Richard L. Walton, Jr., Attorney General's Office, Commonwealth of Virginia **155** Tuesday, 7:30 p.m., SHERATON (Maryland C)

RISK, MATERIAL FLOW, AND EVACUATION PLANNING FOR HAZARDOUS MATERIALS TRANSPORTATION

Eugene R. Russell, Kansas State University, presiding Sponsored by Committee on Transportation of Hazardous Materials

Modeling of Transport Risk For Hazardous Materials, 960524 Erhan Erkut, University of Alberta, Canada; Vedat Verter, McGill University, Canada

Hazardous Materials Transportation Risk and Vulnerability Analysis: A Model for Statewide Multimodal Assessment, 960767 Seshadri Iyengar, Patricia Weaver, and Carl E. Kurt, University of Kansas

Estimating Specific Local Hazardous Materials Flow for a Boston Transportation Facility, 961128

Alan Chachich, Massachusetts Institute of Technology Technological Advancements in Hazardous Materials Evacuation Planning, 961292

Mark D. Abkowitz, Vanderbilt University; Eric Meyer, University of Kansas

157 Tuesday, 7:30 p.m., SHERATON (Delaware B)

NATIONAL PERSPECTIVE ON CONTROLLING NOXIOUS WEEDS

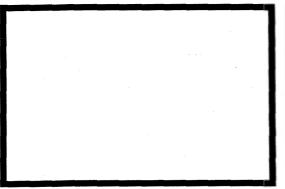
Bernard G. Williams, New York State Thruway Authority, presiding

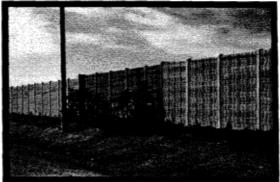
Sponsored by Committee on Roadside Maintenance

Nationwide Need to Control Noxious Weeds

John Randall, The Nature Conservancy

Utah's Use of Technology and Planning to Control Noxious Weeds Ira Bickford, Utah Department of Transportation





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Update on the Federal Weed Act, Weed Summit and FICNMEW Sean Furniss, U.S. Fish and Wildlife Service

Research Needs to Address Noxious Weeds Issues Neal T. Calton, Burlington Northern Railroad

Personnel and Public Training on the Control of Noxious Weeds Bonnie L. Harper-Lore, Federal Highway Administration

173 Tuesday, 7:30 p.m., HILTON (Georgetown E/W)
MEASURING COST-EFFECTIVENESS OF TDM

Eric N. Schreffler, COMSIS Corporation, presiding
Sponsored by Committee on Transportation Demand Management

Commuter Assistance Program Cost-BenefitAnalysis: An Evaluation of Central Ohio's Rideshare Program, 961060 Brad Gregg, Mid-Ohio Regional Planning Commission

A Comparison of Policy Implementation Approaches: Voluntary Versus Mandatory Trip Reduction Ordinances, 960151

Eric Lindquist, Texas Transportation Institute

The Equity and Cost-Effectiveness of Employee Commute Options Programs, 960078

Z. Andrew Farkas, Morgan State University

The Evolution of New Jersey TMA Grant Program, 960103 Claire E. McKnight, City College of New York;

Roy Sparrow, New York University

Cost-Effectiveness of TDM

Gary Erenrich, COMSIS Corporation

Determining Program Effectiveness:

The CTR Mode Choice Model

Brian Lagerberg, Washington State Energy Office

174 Tuesday, 7:30 p.m., HILTON (Monroe East)

CONSIDERATION FOR ENERGY EFFICIENT TRANSPORTATION

Marianne M. Mintz, Argonne National Laboratory, presiding Sponsored by Committee on Alternative Transportation Fuels and Committee on Transportation Energy

Strategies for Reducing Energy Consumption in the Texas Transportation Sector, 961118

Mark Allen Euritt, Angela Jannini Weissmann, Jiefeng Qin and Michael Martello, University of Texas, Austin; Stephen Bernow, Mark Fulmer, Jeffrey Hall and Irene Peters, Tellus Institute

Visions of a Super-Efficient Family Car

Steve Plotkin, Rockville, Maryland; K.G. Duleep, Arlington, Virginia

Discussant

Timothy Lipman, University of California, Davis

Using NPTS Data to Indicate Electric Vehicle

Market Potential in Rural Areas, 960552

Martin J. Bernard III, Q4 Associates

Infrastructure Implications of the Commercialization of the 80 mpg Supercar

Larry R. Johnson, Argonne National Laboratory
Impacts on Home Heating Costs of Incentives for

Alternative-Fuel Vehicles, 960667

Thomas Kornfield and Michael F. Lawrence, Jack Faucett Associates

(Continued next page)

NEW High Performance Transportation Sound Barriers

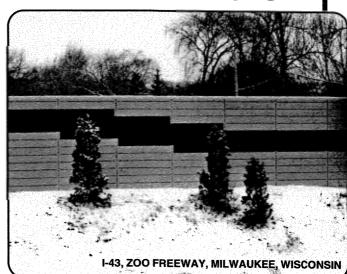
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TECHNICAL REPRESENTATION IN PRINCIPAL CITIES THROUGHOUT THE WORLD

193 Wednesday, 8:30 a.m., HILTON (International Ballroom East) **HOW TO INTEGRATE PUBLIC INVOLVEMENT AND TRANSPORTAION ANALYSIS**

Sponsored by Commillee on Cilizen Parlicipalion in Transportation

Part 1

Marcy S. Schwartz, CH2M Hill, presiding

Establishing the NEED for a Project or Plan: Citizen Jury

David Van Hattum, Hubert H. Humphrey Institute of Public Affairs; Adeel Lari, Minnesota Department of Transportation

Underrepresented Stakeholders: Beyond BilingualNoticesTo Be Announced,

Process and Criterial Development

Connie Sorrell, Virginia Department of Transportation Part 2

Janet Bell, Jefferson County Planning Department, presiding Transportation Alternatives Development:

Transportation Alternatives Developm New Haven Experience

To Be Announced,

Alternative Evaluation: Major Investment Study, West Corridor Denver

Carol O'Doud, Athena's Consulting Network, Inc.

Moving Toward a Censensus: Erie, Pennsylvania Karen Beardsley-Petit, Pennsylvania Department of

Transportation

Discussant

Margaret Campbell-Jackson, Howard Stein-Hudson Associates

195 Wednesday, 8:30 a.m., HILTON(International Ballroom Center)

EXPANDING METROPOLITAN HIGHWAYS: IMPLICATIONS FOR AIR QUALITY AND ENERGY USE (SPECIAL REPORT 245)

Paul E. Benson, California Department of Transportation, presiding Sponsored by Committee on Transportation and Air Quality and Committee on Transportation Planning Applications and Committee on Transportation Energy

Land Use and Travel Behavior Considerations

Genevieve Giuliano, University of Southern California

Induced Travel - Findings of a European Study

Peter Bonsall, Leeds University, Great Britain

Modeling Transportation Systems

Gordon A. Shunk, Texas Transportation Center

Modeling Air Quality and Energy Impacts

David L. Greene, Oak Ridge National Laboratory

Panel Discussion

Kenneth Sulzer, San Diego Association of Governments; Kenneth J. Leonard, Wisconsin Department of Transportation; Richard P. Schoeneberg, Federal Highway Administration; Michael A. Replogle, Environmental Defense Fund; William L. Schroeer, Environmental Protection Agency

196 Wednesday, 8:30 a.m., HILTON (LincolnEast)

TRANSPORTATION NOISE ISSUES

Melissa Burn, Wyle Laboratories, presiding Sponsored by Committee A1F04 on Transportation-Related Noise and Vibration

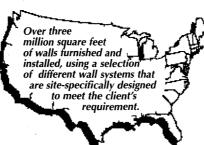


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Traffic-Noise Impact Study for Least Bell's Vireo Habitat Along California State Route 83, 961100

Douglas E. Barrett, Harris, Miller, Miller, and Hanson, Inc.

A Method for Measuring Vehicle Noise Source Heights and Subsource Spectra, 961220

Robert Coulson, Florida Atlantic University

Noise Reduction Retrofit on Historic Structures, 961141

Suzanne DiGeronimo, DiGeronimo, P.A.

Residents' Perceptions and Field Measurements of Helicopter Noise, 961337

Panos D. Prevedouros and B. Prasad, University of Hawaii at Manoa

A HITEC Evaluation of the USG Sight and Sound Screen, 960699 Louis F. Cohn and Roswell A. Harris, University of Louisville

199 Wednesday, 8:30 a.m., HILTON (Conservatory) **APPLICATIONS OF GIS**

Wende A. O'Neill, Utah State University, presiding Sponsored by Task Force on Geographic Information Systems for Transportation (GIS-T)

Part 1

A Geographic Information System-Based Transportation Forecast Model for Use in Smaller Urban and Rural Areas, 960172 Michael D. Anderson and Reginald R. Souleyrette, Iowa State University

A GIS-Based Simultaneous Transportation Equilibrium Model, 960251

Harvey Miller and John Storm, University of Utah Multimodal Statewide Travel Demand Modelling Within a GIS, 96032

Stephen Lawe and Norm Marshall, Resource Systems Group

Congestion Management System Architecture for Controlled Access Facilities, 960363

Cesar A. Quiroga and Darcy Bullock, Louisiana State University Access Management Using GIS and Tramc Management Tools in Pennsylvania, 960593

Jin-Hyuk Chung and Konstadinos G. Goulias, Pennsylvania State University

Using Geographic Information Systems for Intermodal Planning in the Chicago Region, 960594

Daniel F. Rice, F. Gerald Rawling, Marietta C.L. Bailey, and David Zavattero, Chicago Area Transportation Study

Part 2

GIS For Emergency Medical Services Analysis, 960867 Lawrence H. Nitz and Karl Kim, University of Hawaii; Dunno Maiava, State of Hawaii Department of Health

GIS Applications to Household Activity Travel Patterns, 960913 Yuanjun Li, Lane Council of Governments; David T. Hartgen, University of North Carolina, Charlotte

National Framework Data: Models for Ground Transportation, 961003

Kenneth J. Dueker, Portland State University

A GIS Framework for Mobile Source Emissions Modeling, 961079 William Bachman, Wayne Sarasua, and Randall Guensler, Georgia Institute of Technology

201A Wednesday, 8:30 a.m., HILTON (Monroe East/West)

MOVING TO ALTERNATIVE FUELS: IMPLICATIONS OF A FLEET

MARKET FOCUS

Larry R. Johnson, Argonne National Laboratory, presiding Sponsored by Committee on Alternative Transportation Fuels and Committee on Transportation Energy

(Continued next page)

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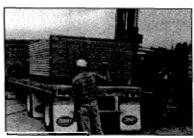


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AFV Fleet Mandates versus Incentives: Who Pays the Bill for Energy Security?

David Rodgers, U.S. Department of Energy

State Vehicle Fleets and Their Potential Acquisition of Alternative-Fueled Vehicles Under EPACT 507, 961307

Patricia Hu, Oak Ridge National Laboratory; Michael Wang, Argonne National Laboratory

Potential Coverage of Alternative Fuel Industries Under EPACT Section 501, 961315

Patricia Hu, Oak Ridge National Laboratory; Michael Wang, Anant Vyas, and Marianne Mintz, Argonne National Laboratory

Potential Impacts of the Energy Policy Act on Electricity and Natural Gas Provider Fleets, 961308

Anant Vyas and Michael Wang, Argonne National Laboratory

AFV Market Analysis and Consumer Survey

Kraig Rodenbeck, Runzheimer International

201B Wednesday, 10:30 a.m., HILTON (Monroe East/West) IS THERE A FUTURE FOR ALTERNATIVE FUELS IN LIGHT-DUTY VEHICLES?

Ann Hegnauer, U.S. Department of Energy, presiding Sponsored by Commillee on Allernalive Transportation Fuels and Committee on Transportation Energy

Alternative Fuel Vehicles and the EPACT Goals: How Many? How Soon?

Richard Bechtold and Michael Laughlin, EA Engineering, Science and Technology

Understanding the Potential Uses of Electric Vehicles in California and in France: Inferences from Parallel, In-Depth Surveys

Martin E.H. Lee-Gosselin, Laval University, Canada; Thomas Turrentine, Laval University, Canada and University of California, Davis

The Future of Alternative Fuel Vehicles in California: Projections from a Microsimulation Forecasting System

David S. Bunch, University of California, Davis; David Brown stone and Thomas F. Golob, University of California, Irvine

Fyperts' Projections of Technical, Cost, and Market Achieves.

Experts' Projections of Technical, Cost, and Market Achievements for Electric and Hybrid Vehicles: 2000-2020

Danilo J. Santini, Henry Ng, and John Anderson, Argonne National Laboratory

203 Wednesday, 2:30 p.m., SHERATON (Maryland B) PUBLIC PERCEPTIONS OF THE RISKS OF TRANSPORTING RADIOACTIVE MATERIALS

Theodore S. Glickman, KPMG Peat Marwick, presiding Sponsored by Committee on Transportation of Hazardous Materials

Risks of Transporting Radioactive Materials: Issues and Public Perceptions

Hank C. Jenkins-Smith, University of New Mexico Panel Discussion:

Richard W. Brancato, U.S. Department of Energy; Robert J. Halstead, Nevada Agency for Nuclear Projects; James K. O'Steen, U.S. Department of Transportation; Chris Wentz, New Mexico Radioactive Waste Task Force

223A Wednesday, 2:30-4:15 p.m., HILTON (Thoroughbred) ISSUES INVOLVED IN DEVELOPING A NOISE BARRIER POLICY

Domenick J. Billera, New Jersey Department of Transportation, presiding

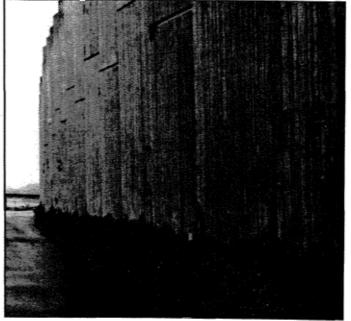
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Written Noise Policies: Who Needs Them?

Robert E. Armstrong, Federal Highway Administration

A Policy for Meaningful Noise Abatement

Domenick J. Billera, New Jersey Department of Transportation

Central Office/District Policy Considerations

Win Lindeman, Florida Department of Transportation

A Policy to Withstand Political Pressure

Jay Waldschmidt, Wisconsin Department of Transportation **Type II Policy**

Roy Osborne, Pennsylvania Department of Transportation

223B Wednesday, 4:30 p.m., HILTON (Thoroughbred)

PRACTICAL APPLICATION OF AMBIENT-BASED NOISE CRITE-

RIA James T. Nelson, Wilson, Ihrig, and Associates, Inc., presiding Sponsored by Committee A1F04 on Transportation-Related Noise and Vibration

Panel Discussion

Carl E. Hanson, Harris, Miller, Miller, & Hanson, Inc.;

Eric Stusnick, Wyle Laboratories, Inc.;

James L. Sowell, Los Angeles County Metropolitan Transportation Authority;

Thomas Odebrant, DNV Ingemansson, Sweden

224 Wednesday, 2:30 p.m., HILTON (Conservatory)

MANAGING HISTORIC RESOURCES: IMPLEMENTING THE VISION OF LONG-RANGE TRANSPORTATION AND LAND USE PLANNING Kathleen H. Quinn, Federal Highway Administration, presiding

Sponsored by Committee on Historic and Archeological Preservation in Transportation

Panel Discussion

Kathleen H. Quinn, Federal Highway Administration; Charles Scott, New Jersey Department of Environmental Protection; Kenneth Basalik, Cultural Heritage Research Services; Robert McCullough, Vermont Agency of Transportation; Robert Newbury, Wisconsin Department of Transportation; Kristen Beckman, Skelly and Loy,

225A Wednesday, 2:30-4:15 p.m., HILTON (Georgetown E/W) ENVLRONMENTAL JUSTICE: EXECUTIVE ORDER 12898 AND RESEARCH STUDIES ON DISTRIBUTIONAL IMPACTS

Lori Kennedy, DeLeuw, Cather and Company, presiding Sponsored by Committee on Social and Economic Factors of Transportation

Introduction

Thomas N. Harvey, Harvey Consultants, Inc.; Lori Kennedy, DeLeuw, Cather and Company

Executive Order 12898: DOT Proposed Order

Eugene W. Cleckley, Federal Highway Administration

Research Study on Distribution of Transportation Investments

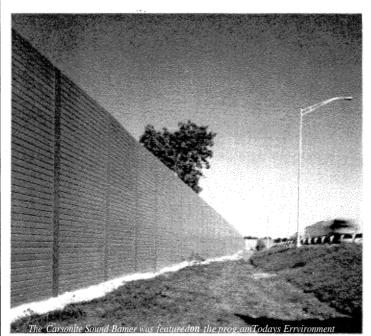
Don Chen, Surface Transportation Policy Project

Distributional Impacts of Congestion Pricing on Low-Income Groups, the Disadvantaged, and Those With Limited Transportation Alternatives

Martine Micozzi, Federal Highway Administration

(Continued next page)

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225B Wednesday, 4:30 p.m., HILTON (Georgetown E/W)

EVALUATING ENVIRONMENTAL JUSTICE IN THE TRANSPORTATION COMMUNITY

Lori Kennedy, DeLeuw, Cather and Company, presiding Sponsored by Committee on Social and Economic Factors of Transportation

Transportation and Environmental Justice: Policy ImplicationsRobert Bullard, Clark Atlanta University

What Is the Law of Environmental Justice?

David Oedel, Mercer Law School; Bill Lee, National Association for the Advancement of Colored People Legal Defense Fund

Methods Used to Assess Disproportionate Impacts

Robin Joseph and Bill Novak, DeLeuw, Cather and Company Planning Tools of Consensus Building for the Public and Review Agencies

Robert DeSanto, DeLeuw, Cather and Company

240 Wednesday, 7:30 p.m., SHOREHAM (Hampton)

AIRPORT MITIGATION PLANNING: MINIMIZING COSTS AND IMPROVING THE ENVIRONMENT

George W. Blomme, Port Authority of New York and New Jersey, presiding

Sponsored by Task Force on Environmental Impacts of Aviation

Can "Pollution Prevention Pay" on Airports?

Nona B. Dennis, Environmental Science Associates, Inc. Environmental Remediation and Economic Impact

Carl V. Robert, TRA.BV Airport Consulting

Airport Noise Management: Assessing the Benefits and Costs of Noise Management Strategies at U.S. Airports

David Gillen, University of California, Berkeley

Low-Cost Solutions to Subsurface ContaminationPeter R. Guest, Parsons Engineering Science

Practical Ways to Reduce the Cost of Aircraft Sound Insulation Programs While Improving Homeowner Satisfaction

Andrew S. Harris, Harris Miller Miller & Hanson, Inc.

244 Wednesday, 7:30 p.m., HILTON (Lincoln E/W)

TRANSPORTATION LAND USE POLICY STUDIES

To Be Announced, TBA, presiding Sponsored by Committee on Transportation and Land Development

Land Use Solutions to Transportation Problems? Jobs-Housing Balancing and Residential Location, 960970

Jonathan Levine, University of Michigan

Household Motor Vehicle Ownership and Use: How

Much Does Residential Density Matter?, 960472

Paul Schimek, Volpe National Transportation Systems Center

Transit-Oriented Development in the Sunbelt, 960915

Todd Messenger and Reid Ewing, FAU/FIU Joint Center for Environmental and Urban Problems

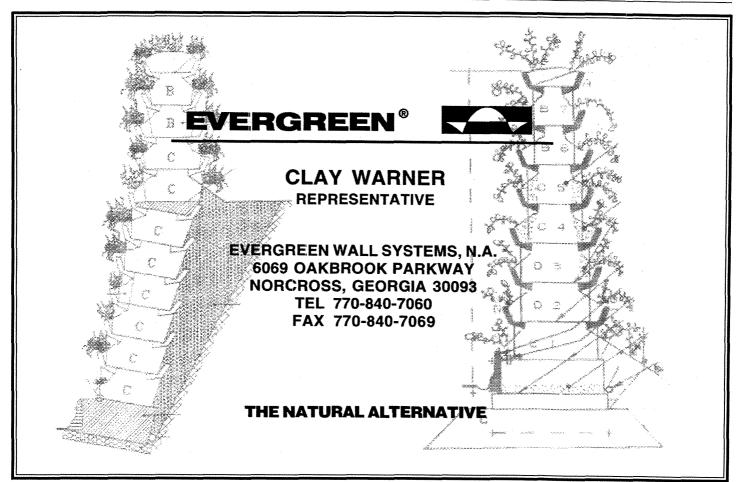
Urban Form and Pedestrian Choices: A Study of

Austin Neighborhoods, 961356

Susan Handy, University of Texas, Austin

Discussant

Ruth Steiner, University of Florida



245 Wednesday, 7:30 p.m., HILTON (Thoroughbred)

TRANSPORTATION PLANNING AND PUBLIC PARTICIPATION

Mountasser A. Rahman, Maryland State Highway Administration, presiding

Sponsored by Committee on Citizen Participation in Transportation and Committee on Intergovernmental Relations and Policy Processes and Committee on Transportation and Economic Development and Committee on Strategic Management and Committee on Transportation Planning Applications

Incremental Regionalism: A Staged Approach to Development of Regional TransportationOrganization, 961028

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Monica I. Francois, Federal Highway Administration

Accessibility and Connectivity in the Proposed Interstate 73/74 "High Priority" Corridor, 96045

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Gerald T. Underwood, INTRX Associates

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Daniel S. Turner, Jay K. Lindly, and Rodney N.

Chester, University of Alabama

Transportation Modeling for Air Quality Emissions Estimates: State of the Practice, 961284

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Barbara L. Nelson, Nelson and Associates; Robert C. John, University of Minnesota

247 Wednesday, 7:30 p.m., HILTON (Monroe E/W)

AIR-QUALITY EMISSIONS MODELING

Paul E. Benson, California Department of Transportation, presiding Sponsored by Commiftee on Transportation and Air Quality

Simulating Automobile Emissions in an Integrated Urban Model, 960254

William P. Anderson, Pavlos S. Kanaroglou and Ronald Buliung, McMaster University, Canada;

Eric J. Miller, University of Toronto, Canada;

Modal Emissions Modeling: A Physical Approach, 960905

Matthew Barth, Feng An, and Joseph Norbeck,

University of California, Riverside; Marc Ross,

University of Michigan

Using GPS Technology to Relate Macroscopic and Microscopic Traffic Parameters, 960903

Matthew Barth, Eric Johnston, and Ramakrishna Tadi, University of California, Riverside

Considerations for Developing New Mobile Source Emissions Models, 961359

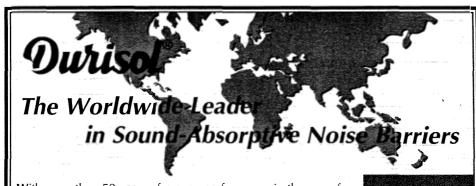
Simon P. Washington, Georgia Institute of Technology

Operating Mode Fractions on Urban Roads Derived by Traffic Assignment, 960796

Arun Chatteriee, University of Tennessee:

P. Murali Reddy, Strafford Regional Planning Cornmission, New Hampshire; Mohan M. Venigalla, Volpe National Transportation Systems Center; Terry Miller, University of Tennessee

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916 Gist Avenue Silver Spring, MD 20910 Tel: (301) 495-7738 • FAX -7739 **Travel Demand Analysis Impacts on Estimation of Mobile Emissions**, 961173 Peter R. Stopher and Haoqiang Fu, Louisiana State University

267A Thursday, 8:30-10:15 a.m., HILTON (International Ballroom East)

PRACTICAL RISK ASSESSMENT METHODS FOR DEPARTMENT OF TRANSPORTATION PROJECTS

Douglas E. Zimmerman, Pennsylvania Department of Transportation, presiding Sponsored by Task Force on Waste Management in Transportation

Assessing and Managing Acute Exposures to HazMat Contamination

William F. Curra, Texas Department of Transportation
Conducting Practical Risk Assessments

David Homer, Ph.D., PRC Environmental Management Inc.

267B Thursday, 10:30 a.m., HILTON(International Ballroom East)

DEPARTMENT OF TRANSPORTATION COST RECOVERY STRATEGIES WHEN DEALING WITH CONTAMINATED PROPERTIES

Douglas E. Zimmerman, Pennsylvania Department of Transportation, presiding Sponsored by Task Force on Waste Management in Transportation

Development of Transportation Facilities Involving Contaminated Properties

Scott D. Springer, Roy F. Weston, Inc.

New Jersey Department of Transportation Cost Recovery Strategies for Contaminated Property Acquisition
David A. Kuzma, BEM Systems, Inc.

271 Thursday, 8:30 a.m., HILTON (Conservatory)

NATURAL RESOURCES AND TRANSPORTATION ISSUES

Peter J. Dodds, KCI Technologies, presiding Sponsored by Task Force on Transportation and Natural Resources

Avoidance of Nonanadromous Fish PassageImpedance Caused by Highway Culverts, 960330

G. Michael Fitch, Virginia Transportation Research Council The Current State of Biodiversity Impact Analysis Among State Transportation Agencies, 961237

Anne D. Marble, A. D. Marble & Company

Mitigation Banking: A Tool for Conserving and Enhancing Biodiversity

Kevin L. Erwin, Kevin L. Erwin Consulting Ecologist, Inc. Water Quality Mitigation for the San Joaquin Hill Transportation Corridor

Stanley D. Polasik, De Leuw, Cather and Company; James Lenhart, CSF Treatment Systems, Inc.

282 Thursday, 2-00 p.m., HILTON (Thoroughbred) ELECTRIC VEHICLE AND FUEL CELL TRANSIT BUS DEVELOPMENT PROGRAMS

Ron D. Kangas, Federal Transit Administration, presiding Sponsored by Committee on New Transportation Systems and Technology and Committee on Blls Transit Systems

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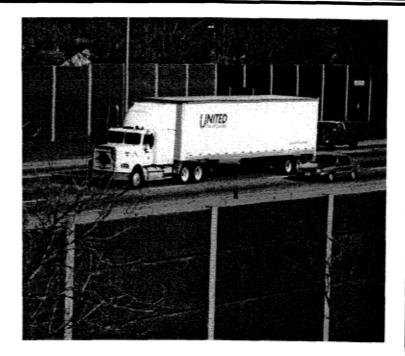
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Paul Helliker, CALSTART

ALABC Rapid Recharging Technology

Patrick J. Moseley, Advanced Lead Acid Battery Consortium

New York State Consortium Hybrid Electric Bus

Robert D. King, General Electric

Editor's Note: I am well aware that many of you will be reading this after the 75th Annual Meeting of TRB, due to the combination of our late start on this, our bi-monthly publishing schedule and the vagaries of the U.S. Postal Service's distribution of bulk mail.

However, Jon Williams has made the effort to select from all the more than 280 sessions only those 44 which are concerned with environmental issues. He has widened his scope of topics beyond those of air, noise and water pollution addressed by the Environmental Protection Act of 1972 (see index of topics on page 8).

Jon will make a similar selection of sessions from the 76th Annual Meeting, and we will publish them in an earlier issue than the Nov/Dec, in order to allow readers to make plans to attend the meeting, if they wish.

In the next Issue (Jan/Feb 1996), we hope to have summaries of the presentations made by members of the A1F04 Committee (see list on page 7) at the 75th Annual Meeting, as well as committee reports and an 'inaugural' column by the new A1F04 Committee Chair, Gregg Fleming.

For those readers who wish to obtain copies of papers presented in the 44 sessions in this article, call the TRB Publications Office at 202 334-3214. Papers registered at this time are indicated by the numbers at the end of the paper Title. Copies will be mailed postpaid for \$10.00 each.

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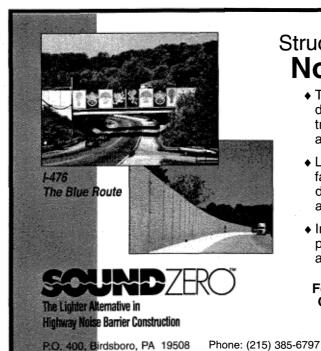
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No, this is not the Editor's Corner, nor am I lost in the pages of my own publication. But, if you have read the Reader Subscription box above,

you will notice that the price of a subscription has risen slightly. I figured that I ought to spin around in my chair and face the readers myself. When we started this venture in 1993, we were printing issues of four, eight and 12 pages, and figured \$17.95 was O.K. But we are now up to 24 and 28 pages, and the increased costs of printing and mailing are simply not being covered. We considered raising the price to \$19.95, but that makes us sound like cheap retailers. So we rounded it off to \$20.00. Anyway, you can't even buy penny candy for a nickel any more.

Also, our Ad Rate Schedule is dated May, 1993. (Hmmmm.....) ■

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