

Eric Dumbaugh

Assistant Professor

Department of Landscape Architecture and Urban Planning

Texas A&M University, 428 Langford A, 3137 TAMU, College Station, TX 77843-3137

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Education

Ph.D., Transportation Systems [2005]

School of Civil and Environmental Engineering

Georgia Institute of Technology

Dissertation: *Safe Streets, Livable Streets: A Positive Approach to Urban Roadside Design*

Master of City and Regional Planning [2002]

Georgia Institute of Technology

Master's Paper: *Highest and Best Transit Use: Rethinking the Role of Transit Authorities in Encouraging Transit-Oriented Development*

Master of Science (Civil Engineering) [2002]

Georgia Institute of Technology

Bachelor of Arts, English Literature [1996]

Florida State University

Academic Experience

Assistant Professor 2006 - Present

College of Architecture

Department of Landscape Architecture and Urban Planning

Texas A&M University

Publications

Refereed Publications

Dumbaugh Eric. "Designing Communities to Enhance the Safety and Mobility of Older Adults: A Universal Approach." *Journal of Planning Literature*. Forthcoming.

Dumbaugh, Eric and Lawrence Frank. 2007. "Traffic Safety and Safe Routes to Schools: Synthesizing the Empirical Evidence." *Transportation Research Record: Journal of the Transportation Research Board*, 2009: 89-97.

Dumbaugh, Eric. 2006. "The Design of Safe Urban Roadsides." *Transportation Research Record: Journal of the Transportation Research Board*, 1961: 74-82. Awarded *Outstanding Paper in Geometric Design* by the Transportation Research Board.

Washington, Simon, Michael Meyer, Ida van Schalwyk, Eric Dumbaugh, Sudeshna Mitra, and Matthew Zoll. 2006. "Incorporating Safety into the Long-Range Transportation Planning Process." *National Cooperative Highway Research Program Report 8-44*. Transportation Research Board, National Research Council, Washington DC.

Dumbaugh, Eric. 2005. "Safe Streets, Livable Streets." *Journal of the American Planning Association* 71:3, pp. 283-298.

Mitra, Sudeshna, Simon Washington, Eric Dumbaugh, Michael Meyer, and Ashley Chang. 2005. "Relationships between Governor's Highway Safety Associations and Transportation Planning." *Journal of Transportation Statistics* 8:1, pp. 57-74.

Meyer, Michael and Eric Dumbaugh. 2004. "Institutional and Regulatory Factors Related to Non-Motorized Travel and Walkable Communities." Report Commissioned by the Transportation Research Board and the Institute of Medicine, July. Incorporated into *TRB Special Report 282: Does the Built Environment Influence Physical Activity?* 2005. Transportation Research Board, National Research Council, Washington DC.

Dumbaugh, Eric. 2004. "Overcoming Financial and Institutional Barriers to Transit-Oriented Development" *Journal of Public Transportation* 7(3): 43-69.

Ewing, Reid, Eric Dumbaugh, and Mike Brown. 2001. "Internalizing Travel by Mixing Land Uses: A Study of Master-Planned Communities in South Florida." *Transportation Research Record* 1780: 115-120.

Refereed Conference Proceedings

Dumbaugh, Eric and Lawrence Frank. 2007. "Traffic Safety and Safe Routes to Schools: Synthesizing the Empirical Evidence." Transportation Research Board 86th Annual Conference Proceedings. January, 2007.

Dumbaugh, Eric. 2006. "The Design of Safe Urban Roadsides: An Empirical Analysis." Transportation Research Board 85th Annual Conference Proceedings.

Dumbaugh, Eric, Michael Meyer and Simon Washington. 2004. "Incorporating Highway Safety Agencies into Safety-Conscious Planning Processes." Transportation Research Board 83rd Annual Conference Proceedings.

Dumbaugh, Eric and Michael Meyer. 2003 "Exploring the Relationship between Agency Performance Measures and Operations Investments in a Metropolitan Area." Transportation Research Board 82nd Annual Conference Proceedings.

Dumbaugh, Eric, Reid Ewing, and Mike Brown. 2001. "A Study of Internal Capture Rates for Mixed Use Developments in South Florida." Transportation Research Board 80th Annual Conference Proceedings.

Reports and Monographs

Eric Dumbaugh. 2007. "Recommendations for Examining the Emergency Response Effects of Smart Growth Streets." Submitted to the United States Environmental Protection Agency and the Congress for the New Urbanism.

Eric Dumbaugh and Lawrence D. Frank. 2006. "School and Community Design Factors Influencing Children's Travel Behavior and Physical Activity: A Review of the Literature." Submitted to the United States Environmental Protection Agency.

Eric Dumbaugh, Lawrence D. Frank, and Abby King. 2005. "Designing Communities for the Health, Safety and Mobility of Older Adults." Report Submitted to the National Institutes of Health.

Adjo Amekudzi, Eric Dumbaugh, Robert Eger, Gordon Kingsley, Sooho Lee, Michael Meyer, and Amanda Wilsker. 2005. "Feasibility Study on Comprehensive Maintenance Contract in GDOT." Report No. GDOT 04-03. Submitted to the Georgia Department of Transportation.

Karen Dixon, Eric Dumbaugh and Michael Meyer. 2004 "Urban Roadside Safety: Current Practice and Emerging Issues." Submitted to the National Cooperative Highway Research Program, Transportation Research Board, National Research Council.

Ashley Chang, Eric Dumbaugh, Mark Hickman, Michael Meyer, Sudeshna Mitra, Simon Washington and Matthew Zoll. 2003. "Incorporating Safety into Long Range Transportation Planning." Submitted to the National Cooperative Highway Research Program, Transportation Research Board, National Research Council.

Frank, Larry, Eric Dumbaugh, and Lauren Leary. 2002. "Assessing Land Use, Transportation, Air Quality, and Health Relationships in King County WA." Submitted to King County (Washington) Department of Transportation.

Eric Dumbaugh. 2001. "Flexibility in Transportation Financing: An Overview of State Experiences Using GARVEE Bond Financing." Submitted to the Atlanta Regional Commission.

Eric Dumbaugh. 2001 "Recommendations for Performance Measure Enhancements." Submitted to the Atlanta Regional Commission.

Eric Dumbaugh. 2001. "Engineering Roadways for Pedestrians: Roadway Design Standards and Tort Liability." Submitted to the Alternative Street Designs Task Force of The Georgia Regional Transportation Authority.

Presentations and Invited Speaking Engagements

Invited Speaker. "Narrow Streets and the Fire Truck." Congress for the New Urbanism XVI. April 4, 2008.

Invited Speaker. "Enabling Great Streets." Congress for the New Urbanism XVI. April 3, 2008.

Invited Speaker. "Enhancing TxDOT Business Practices through an Integrated Approach to Transportation and Urban Design." TxDOT Urban Thoroughfares Committee. March 5, 2007.

Invited Speaker. "Designing for Context: Addressing Safety and Mobility Through Urban Design." University Transportation Center for Mobility Colloquium. November 12, 2007.

"Traffic Safety and Safe Routes to Schools." Texas A&M College of Architecture Research Symposium. College Station, TX. October 29, 2007.

Invited Roundtable Speaker. EPA Forum on Smart Growth Streets and Emergency Response. Chicago, IL. October 24, 2007.

Keynote Speaker. "Incorporating Safety into Long-Range Planning Efforts." San Antonio Traffic Safety Forum. San Antonio, TX. July 31, 2007.

"Context Matters: Re-Examining the Role of the Built Environment on Traffic Safety." Third Urban Street Symposium. Seattle, WA. June 25, 2007.

Invited Speaker "Putting Traffic in its Place: Using the New CNE/ITE Manual". Congress for the New Urbanism XV. Philadelphia, PA. May 17, 2007.

"6 Practical Community Design Solutions for Addressing the Safety and Mobility of Seniors." International Conference on Sustainable Urbanism. College Station. April, 2007.

Invited Speaker. "Safe Streets, Livable Streets." Winter Meeting of the Texas Institute of Transportation Engineers. Houston, TX. February, 2007.

"Traffic Safety and Safe Routes to Schools: Synthesizing the Empirical Evidence." Transportation Research Board 86th Annual Conference. Washington DC. January, 2007.

"The Design of Safe Urban Roadsides." Texas A&M College of Architecture Research Symposium. College Station, TX. October, 2006.

"The Design of Safe Urban Roadsides." Transportation Research Board 85th Annual Conference. Washington DC. January, 2006.

"The Built Environment and Traffic Safety." Association of Collegiate Schools of Planning 46th Annual Conference. Kansas City. October, 2005.

"Safe and Livable Urban Streets: An Empirical Analysis." American Collegiate Schools of Planning 46th Annual Conference. Kansas City. October 2005.

Group Facilitator. Safety Conscious Planning Leadership Conference. Washington DC. August 31-September 1, 2004.

Invited Speaker. "On the Horizon: Future Directions in the Use of Traffic Safety Data." 30th Annual Traffic Records Safety Forum. Nashville, TN, July, 2004.

Invited Speaker. "Designing the Public Realm: Considering the Role of Context-Sensitive Solutions in the Design of Livable Streets." Urban Land Institute Committee on Smart Growth. Atlanta, GA, May, 2004.

Keynote Speaker. "Integrating Safety into the Transportation Planning Process." Federal Highway Administration's Safety-Conscious Planning Forum, Baton Rouge, LA, April, 2004.

"Incorporating Highway Safety Agencies into Safety-Conscious Planning Processes." Paper Presented at the 83rd Annual Conference of the Transportation Research Board. Washington DC. January, 2004.

"Exploring the Relationship between Agency Performance Measures and Operations Investments in a Metropolitan Area." Paper presented at the 82nd Annual Meeting of the Transportation Research Board. Washington DC. January, 2003.

"Rethinking the Role of Transit Authorities in Encouraging Transit-Oriented Development." Paper presented at the Wilbur Smith and Associates 50th Anniversary Conference. Atlanta, GA. May, 2002. Recipient of award for best paper.

"Highest and Best Transit Use: Rethinking the Role of Transit Authorities in Encouraging Transit-Oriented Development." Paper presented at the 2002 National Conference of the American Planning Association. Chicago, IL. April, 2002.

"The Freedom Parkway: Visionary Politics in Atlanta." Paper presented at the 9th Biennial Conference on Planning History. Philadelphia, PA, November, 2001.

Invited Speaker. "Engineering Roadways for Pedestrians: Roadway Design Standards and Tort Liability." Alternative Street Designs Task Force of The Georgia Regional Transportation Authority. Atlanta, GA. March, 2001.

"A Study of Internal Capture Rates for Mixed Use Developments in South Florida." Paper presented at the 80th Annual Meeting of the Transportation Research Board. Washington DC. January, 2001.

Press

"UTCM Colloquia Tackles Roadway Design." *Centerline*, December 7, 2007.

"Where the Sidewalk Ends: Behavioral psychology's unexpected lesson for urban design." *Seed Magazine*. December 6, 2006.

"Roadside Urban Trees: Balancing Safety and Community Values." *Arborist News*. December, 2006, pp. 56-57.

"More open street design is not wise." *Anchorage Daily News*, October 21, 2006.

"Urban trees encourage safer driving." *Architecture of Control in Design*. October, 2006.

"Researcher Takes on Traffic Engineers' Disdain for Tree Streets" *Local Government Briefings*, September 29, 2006.

“Research: trees make streets safer, not deadlier.” *New Urban News*. September, 2006.

“Trees, roads, and people: balancing safety and human desires.” *New Urban News*. September, 2006.

“Slow Streets, Safer Driving? Sidewalks, Trees Add Safety.” *Toronto Star*. July 26, 2005.

“APA finds pedestrian-friendly streets are safer than conventionally-designed urban roads.” *Transportation Management and Engineering*. July 22, 2005

Awards and Distinctions

- Chair, TxDOT Context-Sensitive Solutions Training Committee. 2008 – Present.
- Member, Texas Urban Thoroughfares Committee, 2007 – Present.
- Outstanding Paper in Geometric Design. Transportation Research Board, 2007
- Honorable Mention, Atlanta Regional Commission’s Create Communities Program. Henry County Comprehensive Transportation Plan, 2006
- Outstanding Graduate Teaching Assistant Award, College of Architecture, Georgia Institute of Technology, 2004
- Eno Transportation Leadership Fellow, 2003
- FHWA Transportation Scholarship, Georgia Institute of Technology, 2003
- President’s Fellowship, Georgia Institute of Technology, 2002-2003, 2003-2004, 2004-2005
- Best Paper. Wilbur Smith and Associates 50th Anniversary Conference, 2002
- Invited Participant, Atlanta Regional Commission’s Roadway, HOV and Freight Subcommittee, 2001.
- First Union/New Jersey Department of Community Affairs Housing Fellow, 2000
- Chappie James Memorial Fellowship, 1992
- Phi Theta Kappa Scholarship for Academic Excellence, 1992

Funded Research

Examining Challenges, Opportunities, and Best Practices for Addressing Rural Mobility and Economic Development under SAFETEA-LU’s Coordinated Transit and Human Services Framework

Sponsor: University Transportation Center for Mobility

Position: Co-Principal Investigator

Amount: \$100,000

Date: 2007-2008.

Examining the Design and Developmental Factors that Influence the Incidence of Urban Traffic Crashes

Sponsor: Southwest University Transportation Center

Position: Principal Investigator

Amount: \$45,000

Date: 2007-2008.

Developing an Interdisciplinary Certificate in Transportation Planning

Sponsor: University Transportation Center for Mobility
Position: Co-Principal Investigator
Amount: \$147,697
Date: 2007-2008.

Making Mobility Improvements a Community Asset

Sponsor: University Transportation Center for Mobility
Position: Research Specialist (Brian Bochner, PI)
Amount: \$170,000
Date: 2007-2009

Analysis of Roadway Departure Crashes on Two-Lane Roads in Texas

Sponsor: Texas Department of Transportation
Position: Research Specialist (Dominique Lord, PI)
Amount: \$315,765
Date: 2007-2009

Urban Access Management: Strategies and Applications

Sponsor: Atlanta Regional Commission (ARC)
Position: Principal Investigator
Amount: \$25,000
Date: 2006

Urban Form and School Siting: Implications for Journey to School Travel Choices

Sponsor: United States Environmental Protection Agency (EPA)
Position: Senior Research Scientist (Lawrence Frank, PI)
Amount: \$60,000
Date: 2005-2006

Ecological Analysis of Physical Activity, Neighborhood Quality of Life Study (NQLS)

Sponsor: National Institutes of Health
Position: Senior Research Scientist (Abby King, PI)
Amount: \$2,000,000
Date: 2005-2006

Feasibility Study on Comprehensive Maintenance Contracts

Sponsor: Georgia Department of Transportation
Position: Research Associate (Gordon Kingsley, PI)
Amount: \$340,000
Date: 2005

Design Guidelines for Safe and Aesthetic Roadside Treatments in Urban Areas (NCHRP 16-04)

Sponsor: National Cooperative Highway Research Program
Position: Research Associate (Karen Dixon, PI)
Amount: \$350,000
Date: 2003-2005

Incorporating Safety into Long Range Planning Processes (NCHRP 8-44)

Sponsor: National Cooperative Highway Research Program
Position: Research Associate (Simon Washington, PI)
Amount: \$450,000
Date: 2002-2004

Travel Behavior and Land Use Correlation Analysis in Central Puget Sound (LUTAQH)

Sponsor: Washington State Department of Transportation
Position: Senior Research Scientist (Lawrence Frank, PI)
Amount: \$220,000
Date: 2002-2005

King County Land Use, Transportation, Air Quality and Health (LUTAQH) – Phase 1

Sponsor: King County
Position: Senior Research Scientist (Lawrence Frank, PI)
Amount: \$350,000
Date: 2002-2005

Environmental and Ecological Analysis of the Silver Sneakers Households in the Central Puget Sound Region

Sponsor: Centers for Disease Control and Prevention
Position: Senior Research Scientist (Lawrence Frank, PI)
Amount: \$24,000
Date: 2002

Strategies for Metropolitan Atlanta's Transportation and Air Quality (SMARTRAQ)

Sponsor: Georgia Department of Transportation, Federal Highway Administration (FHWA), Atlanta Regional Commission (ARC), Turner Foundation
Position: Research Assistant (Lawrence Frank, PI)
Amount: \$1,640,000
Date: 2000-2001

Professional Service

Environmental Protection Agency/Congress for the New Urbanism

Invited participant in the development of guidelines for balancing emergency response needs with neo-traditional street design. (2007-present)

Texas Transportation Commission, Urban Thoroughfares Committee

Invited member of a working group tasked with identifying strategies for integrating context-sensitive solutions into the design practices of the Texas Department of Transportation (January 2008 – present).

Texas Transportation Commission, CSS Training Subcommittee

Chair of a working group tasked with developing a training course on context-sensitive solutions for TxDOT personnel (January 2008 – present)

United States Environmental Protection Agency

Invited participant in a roundtable forum aimed at identifying strategies for balancing emergency response needs with the design of pedestrian-oriented streets (October, 2007).

San Antonio Metropolitan Planning Organization

Participated in the development of, and served as keynote speaker at, a forum aimed at promoting a safety-conscious approach to regional planning in the San Antonio-Bexar County Metropolitan Region (July, 2007).

Congress for the New Urbanism

Invited speaker for an ongoing series of New Urbanism 202 training seminars on transportation and urban design (2007, 2008).

City of College Station

Directed student facilitation of public meetings in support of the College Station's Eastside Transportation Plan (March, 2007).

Atlanta Regional Commission

Development of guidance for the implementation of a coordinated access management program in the Atlanta Metropolitan Region (2006).

Henry County, Georgia

Member of a multi-disciplinary team tasked with the development of a comprehensive land use and transportation plan for the 4th fastest growing county in the United States. The public outreach program for this effort was awarded an Honorable Mention from Atlanta Regional Commission as part of its Create Communities program (2005-2006).

Transportation Research Board

Invited author for the development of a report aimed at identifying institutional and regulatory barriers that may impede the development of communities designed to enhance physical activity, as well as strategies for overcoming them. This report was incorporated into *TRB Special Report 282: Does the Built Environment Influence Physical Activity?* (2004-2005).

Federal Highway Administration

Group facilitator for a national, interdisciplinary forum on safety-conscious planning (2004).

Atlanta Regional Commission

Invited member of the Atlanta Regional Commission's Special Committee on Roadways HOV and Freight, a group responsible for the identification and selection of strategic transportation investments as part of the 2030 Regional Transportation Plan update (2001-2002).

Atlanta Regional Commission

Awarded a graduate research internship to examine the use of Grant Anticipated Revenue (GARVEE) bonds as a financial strategy as part of the 2030 regional transportation plan, as well as to provide a comprehensive examination and assessment of performance measures (2001)

New Jersey Department of Transportation

Development of guidance for the design of contextually-appropriate design treatments on state roadways acting as community main streets (1999-2000).

Delaware Department of Transportation

Development of traffic calming guidelines adopted by the Delaware Department of Transportation (2000) . Final guidance available online at:
http://www.deldot.net/static/pubs_forms/manuals/traffic_calming/DelDotFinal.pdf .

New Jersey Office of State Planning

Responsible for identifying strategies for leveraging \$9 billion in state-allocated school infrastructure investments for broader community revitalization efforts in New Jersey inner-cities (2000).

Academic Service

Program Coordinator, Transportation Planning Certificate Program. 2007 -Present.

Faculty Fellow, Sustainable Urbanism Program, 2007-Present.

Member, Center for Housing and Urban Development, 2008-Present

Advisory Board Member, University Transportation Center for Mobility, Texas A&M. 2007-Present.

Member, Poster Jury Competition. International Sustainable Urbanism Conference. April 1-2, 2007.

Organized Invited Speaker Visit: Troy Russ, Glatting Jackson, March 28-29, 2007.

Member, Master's of Urban Planning Guidance Committee, Texas A&M University. 2006-Present

Member, Community Outreach Committee, Texas A&M University, 2006-2007

Reviewer, *Journal of the American Planning Association*.

Reviewer, *Journal of Planning Education and Research*.

City and Regional Planning Faculty Search Committee, Georgia Institute of Technology, 2001.

City and Regional Planning Faculty Search Committee, Georgia Institute of Technology, 2002.

City and Regional Planning Faculty Search Committee, Georgia Institute of Technology, 2003.

Teaching

Principal Instructor

Fall, 2007 (Texas A&M)

PLAN 604: Planning Methods I

Evaluation: 4.72 (out of 5)

PLAN 670: Urban Public Transportation Planning

Evaluation: In 4.80 (Out of 5)

Spring, 2007 (Texas A&M)

PLAN 673: Design for Sustainable Transportation

Evaluation: 4.87 (out of 5)

PLAN 674: Transportation Systems Analysis

Evaluation: 4.84 (out of 5)

Fall, 2006 (Texas A&M)

PLAN 670: Urban Public Transportation Planning

Overall Student Evaluation: 4.81 (out of 5)

Fall, 2004 (Georgia Tech)

CP 6019: Quantitative Methods in Planning

Overall Student Evaluation: 4.75 (out of 5)

Co-Instructor

CEE 3000: Civil Engineering Systems (Georgia Tech). Spring, 2004.

Guest Lecturer

PLAN 365: “Transportation Planning” (Texas A&M). Spring 2008.

PLAN 675: “Biomimicry” (Texas A&M). Spring, 2008

PLAN 601: “Introduction to Transportation” (Texas A&M). Fall, 2007

PLAN 365: “What Transportation Planners Do” (Texas A&M). Fall, 2007.

PLAN 612: “Transportation Design for Pedestrians” (Texas A&M). Fall, 2007.

PLAN 365: “Transportation and Growth Management.” (Texas A&M). Spring, 2007.

PLAN 365: “What Transportation Planners Do” (Texas A&M). Fall, 2006.

CRP 889: “Innovating Transportation Design Practice” (Clemson University). Spring, 2006.

CEE 3000: “Travel Demand Modeling.” (Georgia Tech). Spring, 2004.

Teaching Assistant

CP 6023: Advanced Planning Methods (Georgia Tech). Spring, 2002, Spring, 2004.

Advising

Ph.D. Committees

| Name | Topic Title | Role | Degree | Graduation | Placement |
|-------------|---|-------------|---------------|-------------------|------------------|
| Theresa Qu | Investigating Highway Congestion Thresholds | Co-Chair | Ph.D. URSC | Spring, 2009 | |
| James Tu | Evaluating Mobility and Sustainability in San Francisco | Member | Ph.D. URSC | TBD | |

Master's Committees

| Name | Topic Title | Role | Degree | Graduation | Placement |
|---------------------|---|--------|--------|--------------|---------------------------------|
| Robert Rae | Examining the Safety of Livable Streets in San Antonio | Chair | MUP | Spring, 2008 | Kimley-Horn, Dallas |
| Rajanesh Kakumani | Examining the Traffic Impacts of Conventional and Neo-Traditional Communities | Chair | MUP | Summer, 2008 | |
| Nitin Warriar | Implementing Bus-Rapid Transit in India | Chair | MUP | Spring, 2008 | |
| Jun (Jade) Huang | Examining the Effects of Freeway Teardowns on Transportation and Economic Development | Chair | MUP | Spring, 2008 | |
| Hwa Young Kim | Implementing Transit-Oriented Development | Chair | MUP | Summer, 2008 | |
| Munmun Parmar | An Examination of the Costs and Benefits of State Roadway Privatization | Chair | MUP | Summer, 2008 | |
| Subrity Rajbhandari | Traffic Calming | Chair | MUP | Summer, 2008 | |
| Felix Landry | TBD | Chair | RPTS | Spring, 2009 | |
| Suzie Edrington | TBD | Chair | MUP | Spring, 2010 | |
| David Shoemaker | TBD | Member | BUSH | Spring, 2009 | |
| Andrew Burleson | Capturing the Value of Neo-Traditional Communities | Member | MSLD | Summer, 2007 | Marsh Darcy & Partners, Houston |
| Ben Sperry | Estimating Internal Capture Rates for Mixed-Use Developments | Member | MSCE | Spring, 2008 | |
| Cameron Williams | Methodology for Identifying Passing Lanes on Two-Way Rural Roads | Member | MSCE | Spring, 2008 | |
| Tara Ramani | Sustainable Approaches to Transportation Engineering | Member | MSCE | Spring, 2008 | |