



## Christopher J. Bajdek

### Senior Consultant

#### Experience

Mr. Bajdek has 15 years of experience as a consultant in noise and vibration control, managing numerous transportation, industrial and community projects, including noise studies for wind energy facilities. His responsibilities encompass a wide variety of issues from initial measurement programs and environmental documents through complex noise barrier final-design studies and public involvement.

Mr. Bajdek's recent experience includes acting as HMMH's Assistant Project Manager for the noise analysis for the Philadelphia International Airport (PHL) Runway 17-35 Extension Project EIS. The U.S. Secretary of Transportation identified the Runway Extension Project, along with a proposed major airfield redevelopment at PHL known as the Capacity Enhancement Program, as among thirteen nationwide projects receiving expedited environmental reviews. Together, the two PHL projects represent the nation's first airport application of the environmental streamlining process. The Draft EIS for the runway extension project was delivered on schedule.

Mr. Bajdek is proficient in the use of the Federal Highway Administration's (FHWA's) Traffic Noise Model (FHWA-TNM<sup>®</sup>). During HMMH's development effort for the FHWA, he was involved with the testing of the acoustical algorithms for multiple barrier diffraction within the FHWA-TNM<sup>®</sup>.

In addition to his work on transportation projects, Mr. Bajdek has worked on a variety of industrial and community noise studies. His experience with public utilities includes noise measurement programs to evaluate compliance with local regulations for two wind energy projects in Wisconsin.

#### Education

B.S. Mechanical Engineering, Northeastern University, Magna Cum Laude, 1990  
Penn State Summer Program in Acoustics, June 2003

#### Affiliations

Member, Institute of Noise Control Engineering (USA)  
Member, American Society of Mechanical Engineers  
Member, Greater Boston Chapter, Acoustical Society of America  
Registered Engineer-in-Training, Massachusetts

#### Representative Projects

##### Aviation Noise Studies

- Philadelphia International Airport (PHL) Runway 17-35 Extension EIS, 2004
- Manchester Airport (MHT) Noise Exposure Map Update, 2004-2005
- Lehigh Valley (ABE) Part 150, Analysis of Measurement Data, 2003
- East Hampton (HTO) Noise Mitigation Study, 2003
- Pittsfield Airport (PSF), Noise Measurements, 2002
- Tampa International Airport (TPA) Part 150, Noise Measurements, 1996
- MCAS Cherry Point and MCALF Bogue (NC), Aircraft Noise Survey, 1992
- DeKalb-Peachtree (PDK) Part 150, Aircraft Noise Analysis, 1992
- Aircraft Noise Measurement and Analysis of the T-45, NATC Patuxent River (MD), 1991

##### Sound Insulation Programs

- BOS Residential Sound Insulation Program (MA), 2004-present
- TPA Residential Sound Insulation Program (FL), 2004-present
- PIT Residential Sound Insulation Program (PA), 2004-present
- MKE Residential Sound Insulation Program (WI), Noise Measurements, 1998

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**Representative Projects (continued)**

**Rail Noise Studies and Noise Barrier Design Studies**

- Chicago Metra Southwest Service Extension (IL), Noise Analysis, 2001
- Chicago Metra UPW Line Extension (IL), Noise Analysis, 2001
- Merger of CSX - ConRail - Norfolk Southern Railroads, Noise Analysis, 1997
- Massachusetts Bay Transportation Authority Red Line, Evaluation of Wayside Noise and Vibration, Noise Barrier Design, 1995
- Old Colony Railroad Rehabilitation Project, Massachusetts Bay Transportation Authority, Noise Analysis and Noise Barrier Design, 1993

**Highway Environmental Impact Studies and Noise Barrier Design Studies**

- Capital Beltway Improvement Study DEIS (VA), 1997-2004
- FDR Drive Reconstruction 56<sup>th</sup> Street to 63<sup>rd</sup> Street, New York City, 2001
- Yale Avenue Widening, Tulsa (OK), 2001
- District of Columbia Freeway Noise Barrier Feasibility Study, 2000
- I-87 Rumble Strip Noise Analysis, Albany (NY), 2000
- I-95/I-395/I-495 Interchange Improvements (VA), Noise Barrier Design Study, 1997-2000
- Interstate 15/40 Widening and Interchange Reconstruction (CA), Noise Analysis, 1993-1994

**Noise Studies with Multi-Modal Components**

- Piedmont Triad International Airport FEIS, Greensboro (NC), 2000
- Miami Intermodal Center DEIS, Miami (FL), 1997
- Hampton Roads Crossing Study DEIS and FEIS (VA), 1996-1999

**Industrial, Construction and Community Noise Studies**

- Stellos Stadium Noise Assessment, Department of Public Works, Nashua (NH), 2001-2002
- Lincoln Wind Energy Project (WI), Noise Measurements and Evaluation, Wisconsin Public Service, 2000-2001
- Rosiere Wind Farm (WI), Noise Measurements and Evaluation, Madison Gas & Electric, 1999
- Puerto Rico Route PR-10 Noise and Vibration from Blast and Construction, Measurements and Analysis, 1996
- In-plant Noise Survey of the MATEP Facility, Noise Measurements and Assessment, Boston (MA), 1995

**Representative Presentations and Publications**

- "Noise and the Siting of Facilities," North American Windpower, Zackin Publications, Waterbury, CT, Volume 2, Number 3, April 2005.
- "Measurement Error Caused by Data Gaps," with G. S. Anderson, Summer Meeting of the Transportation Research Board Committee on Noise and Vibration (A1F04), Scottsdale, AZ, July 2003.
- "A Case Study to Evaluate the Effect of Rumble Strip Noise on a Community," Transportation Research Board 82<sup>nd</sup> Annual Meeting, Washington D.C., Session 624, Paper #03-3817, January 2003.
- "Vehicle-Noise Emissions and Pure Tone Characteristics of Different Pavements: A Case Study," presented at the Summer Meeting of the Transportation Research Board Committee on Noise and Vibration (A1F04), St. Petersburg, FL, July 1998.
- "FHWA Traffic Noise Model, Technical Manual," with C. W. Menge, G. S. Anderson, and C. F. Rossano, FHWA-PD-96-010, February 1998.
- "Acoustical Performance of Noise Barriers on Rail Transit Systems," with C. Hanson, Proceedings of the 1996 International Conference on Noise Control Engineering, Liverpool, UK.