AGENDA
MPE/Reconnect NIMBY
June 10 – 14, 2018
Muhlenberg College, Allentown PA

Not in My Backyard explores how mathematical tools can be used to consider social and environmental justice when making decisions like where to put a toxic waste dump. Often such facilities are located in economically depressed areas, based on priorities that further disadvantage those who are already disadvantaged.

Similar to issues of toxic waste are issues of destruction of views such as the building of dunes along the Atlantic Ocean and others. For example, some residents and businesses of Cape Cod, Martha's Vineyard have opposed the construction of Cape Wind, a proposed offshore Wind farm in Nantucket Sound. Proponents cite the environmental, economic, and energy security, the benefits of clean renewable energy, while opponents are against any obstruction to the views from oceanfront vacation homes and tourist destinations based in the region. Similar to the situation in Nantucket Sound, Mass., a minority of residents in St. Lucie County, Florida have vehemently opposed the construction of wind turbines in the county. The construction of the wind turbines is strongly supported by over 80% of county residents according to a 2008 Florida Power and Light poll. Additionally, the power company proposed building the turbines in a location on a beach near a prior existing nuclear power plant owned by the company

The workshop will provide the history of the problem, background in decision theory and discuss recent developments.

Sunday, June 10:   Arrive at Muhlenberg College in Allentown, PA

    7:00PM   Dinner at Muhlenberg as a group

Monday, June 11:

    8:30 AM   Light Breakfast in meeting room

    9:00 AM   Welcome and Introductions
                Gene Fiorini, Chaired Professor of Mathematics at Muhlenberg College
                Margaret (Midge) Cozzens, Distinguished Research Professor, DIMACS, Rutgers University

    9:45 AM   Overview of the Workshop

    10:30 AM   *Foundations for Quality Decisions.*
                Ralph Keeney, Professor Emeritus at Duke University's Fuqua School of Business; author of *Smart Choices* with J. Hammond and H. Raiffa
                A quality decision requires a clear statement of the decision to be addressed, a complete set of the objectives to be achieved, and a comprehensive list of potentially desirable alternatives. This presentation indicates the concepts and procedures to do this and illustrates their use.

    11:30 AM   Discussion Questions

    12:15 PM   Lunch

1:30 PM	*Decisions with Multiple Stakeholders*	

1:30 PM   *Decisions with Multiple Stakeholders*
Ralph Keeney
Different stakeholders often have different values for decisions that jointly affect them. One class of such decisions include NIMBY stakeholders. This presentation indicates and illustrates how to structure decisions with multiple stakeholders and create alternatives intended to benefit each of the stakeholders.

3:00 PM   Break

3:30 PM   Discussion

4:30 PM   *Introduction to Decision Theory Tools*

6:00 PM   Dinner

Tuesday, June 12:

8:30 AM   Breakfast

9:00 AM   *Decision Theory Tools*
Midge Cozzens
Transitive simple majorities problem of determining the maximum number of linear orders on n candidates that prevent the occurrence of cyclic majorities when voters' preferences are confined to those orders.

10:30 AM   Break

11:00 AM   Discussion

12:15PM   Lunch

1:30 PM   *History of the Grassroots Movement for Environmental Justice (NIMBY to NIABY) and the Government Response (federal, state)*
Michael Heiman, Professor Emeritus, Dickinson College

3:00 PM   Discussion

4:00 PM   Questions for tomorrow

6:00 PM   Dinner

Wednesday, June 13:

8:30 AM   Breakfast

9:00 AM   *Citizen Science on Carbon Pricing and Climate Change and more specific region-specific environmental battles such as Katrina and Cancer Alley*
Michael Heiman

10:30 AM   Break

11:00 AM	Discussion Questions: To what applied end mathematical modeling of community response to locally unwanted land uses is put?. What is the usefulness of academic involvement in local battles for local community activists where most have experienced the "experts" working for the other side.
12:15 PM	Lunch
1:30 PM	NIMBY module Jim Kupetz, Technical Mathematics Teacher, Luzern Community College
3:00 PM	Break
3:30 PM	Adaptability to College Classrooms of NIMBY module
6:00 PM	Dinner

Thursday, June 14:

8:30 AM	Breakfast
9:00 AM	*Decision Theory Tools II* Midge Cozzens Varieties of unique solutions to simple systems of $n-1$ linearly independent homogeneous linear equations in n variables of types that arise from qualitative equivalence comparisons in the measurement of subjective probabilities and utility differences.
10:00 AM	Discussion Questions: In Whose Interest?: Alternative Dispute Resolution and the Debate Over Scientific Expertise as Applied With Locally Unwanted Land Uses
11:00 AM	Wrap up
12:00 PM	Box Lunches – Shuttles to the airports