MOVING TRANSPORTATION IN THE RIGHT DIRECTION

Kathi Vieser Bianco* (From: *Rivier Today*, Fall 2006)

MORE PUBLIC TRANSIT, FEWER CARS – THAT'S MARTIN MILKOVITS' VISION FOR THE FUTURE



Photo by Jodie Andruskevich

Are you frustrated by traffic tie-ups or concerned about the United States' over-reliance on fossil fuels? Martin Milkovits '05G is—but he, unlike most of us, is in an excellent position to do something about it. This fall, Milkovits will enter the master's degree program in civil and environmental engineering at MIT, focusing on transportation and specifically mass transit.

"I first got excited about public transit while on my semester abroad in London," he says. "In virtually all of New Hampshire, if not New England, public transportation is not really a viable option for most people. I am interested in understanding more about how America can reduce the dependence on cars, and not just in cities, but in smaller towns as well."

An important part of his work will involve the use of simulation modeling, which uses computer technology to create sophisticated representations of real situations in order to predict outcomes. "Say we want to understand the effects of replacing the main intersection on campus with a rotary," says Milkovits. "How can we know that it is definitely a good idea? The only sure thing is to actually build it—but that's terribly inefficient and expensive. So we use a computer to build a simulation or imitation model of how the rotary would work. Once we have the model, we can begin asking it some questions—like what happens if 10 cars hit the rotary at the same time, or 100, or it's a snowstorm and cars can't stop as well? The possibilities are endless and the only cost is computer time."

Milkovits worked with computer modeling as a software engineer with SeaChange International in Greenville, N.H., where he's been on staff for seven years, since earning his bachelor's degree at Colby College. While working at SeaChange, he enrolled at Rivier with plans to earn an M.B.A. "My sister attended Rivier for her master's," he says, "so I already knew of the school and its good reputation." An M.B.A. classmate recommended that Milkovits take a computer science course with Dr. Mihaela Sabin. "After that course, and others with professors like Dr. Rich Greene, Vladimir Riabov, and Alberto Moreira, I knew that I wanted to focus my career in computer science," he says. He switched to the graduate program in computer science and earned his master's degree in 2005.

Perhaps surprisingly, given his interest in mass transit, Milkovits describes himself as a car enthusiast. "But I also hate cars," he says. "I hate how much my insurance, maintenance and gas cost, but I am most uncomfortable with the environmental impact." Part of his decision to focus on mass transit stems from a personal commitment to making a positive societal contribution. "Our civilization cannot continue to consume nonrenewable resources at this rate for much longer," he says. "Transportation is responsible for a large amount of that consumption, so I feel that a contribution to that sector would translate to a big impact on the environment and society."

In addition to the environmental impact, Milkovits is convinced, based on his experiences in London, that stronger mass transit systems would improve U.S. citizens' overall quality of life. "People would get more exercise, meet their neighbors," he says. "I know it's a little utopian, but there need to be better transportation options, especially considering the aging baby-boomers, who will not be able to drive themselves everywhere in a couple of decades." After he completes his degree at MIT, Milkovits hopes to find work in a government agency rather than in the private sector. "In order to be effective, I believe transportation policy has to be done at that level," he says. Future plans may include returning to school for a doctorate, but only after he spends at least three years on specific transportation policy work.

With the demands of his MIT program looming, Milkovits will reluctantly put on hold one of his favorite pastimes, acting in community theater programs. "I've been doing theater since high school," he says. "I've worked the most with the Stratton Players in Fitchburg, Mass. They are a really great group and there are some phenomenal actors." His favorite roles include the lead in a short play based on the nursery rhyme Solomon Grundy, and as "The Boy" in Luigi Pirandello's Six Characters in Search of an Author.

With the support of his wife, Beth, Milkovits will spend the next two years at MIT in an intense, fast-paced degree program. From there, whatever awaits him, he will certainly have the enthusiasm, commitment and knowledge to make an important difference—perhaps one that will improve the way we live, work and travel around our towns and our country.

^{*} KATHI VIESER BIANCO is a freelance writer from Long Island, New York, specializing in higher education and consumer marketing. The winner of multiple awards for both nonfiction and fiction writing, she holds a bachelor's degree from Northwestern University and master's degrees from New York Institute of Technology and the City University of New York-Queens College.