The Great San Diego Airport Debate

Richard Carson

Last year I became heavily involved in the debate over a ballot proposition put to the voters regarding a new airport for San Diego, and my analysis was featured in most of the main media outlets. The ballot proposition asked San Diego County voters whether San Diego should close its downtown airport, Lindbergh Field, and build a new civilian airport at Miramar which it would share with the Marine Corp. The proposition was voted down by almost a two to one margin.

My involvement in the San Diego airport issue was almost accidental. I had been working for several years on a large project to forecast air passenger demand and the factors influencing it at all of the major U.S. airports. At a luncheon sponsored by the Dean of Social Sciences, various faculty members briefly talked about the projects they were working on. When I talked about the air passenger demand forecasting project, someone asked how my forecast compared that the San Diego County Regional Airport Authority’s (SDCRA). I did not know.

When I compared my estimates and theirs, it was clear that the SDCRA had grossly overestimated the likely future number of commercial air passengers. They had done this by incorrectly assuming that rapid increases in the per capita number of trips from the 1980’s would continue into the distant future and by presuming that average ticket prices would continue to drop each year. The way the 9/11 shock to air travel was modeled also made it appear that SDCRA’s forecast was actually too low (relative to then current passenger counts) when in reality air travel was returning back to normal levels, as would have been expected from previous shocks like the Gulf War.

My analysis also showed that the SDCRA had largely focused on the wrong variable. The scarce resource at a modern commercial airport is the number of takeoff and landing slots. The number of takeoff and landings had not appreciably changed over the last decade and indeed are currently lower than during the mid-1990’s even though there are considerably more passengers. The reason is simple. Larger planes are generally more cost effective on a per passenger basis to fly, and airlines naturally shift to them as the number of passengers on a route increase.

The natural recommendation from an economist is to charge for the use of these takeoff and landing slots and to charge more at peak hours. However, this has not been the customary practice in the United States. In the early days of aviation, heavy planes did more damage to runways and were charged landing fees. These weight-based fees persist today and, in fact, there is a heavy lobbying effort to maintain them by small cities and the users of corporate jets. In Europe, there are substantial slots fees at the major airports and as a result there are almost no small planes being used. Gatwick Airport in London, like Lindbergh Field, is a single runway airport but it accommodates almost twice as many passengers as Lindbergh simply through the use of larger planes. My estimate showed that all of the future passengers forecasted by SDCRA could be handled at Lindbergh if the average passenger load was that of the typical Southwest 737.

New airports are extraordinarily expensive to build (and the one proposed for Miramar, in addition to requiring new runways and terminals, would have had to reroute parts of I-15 and Highways 52 and 163) and these costs are ultimately passed on to passengers in the form of higher ticket prices. My analysis suggested that moving San Diego’s main airport from Lindbergh to Miramar would have had adverse consequences for San Diego’s tourism industry because of the likely increase in ticket prices and longer travel times to downtown and Mission Valley hotels. This was somewhat ironic because the tourism industry had initially been one of the biggest supporters of a new airport, but my analysis helped to drive home the “no free lunch” principle.

The SDCRA also claimed that the San Diego economy would lose tens of billions of dollars because a lack of air cargo capacity would cripple the economy. It was, however, straightforward to show that this argument did not make economic sense. The number of FEDEX and UPS planes that carry high valued air cargo is small and there is also substantial air cargo capacity in the bellies of passenger planes. Much of San Diego’s heavier air cargo currently goes to LAX and Ontario airports for cost and consolidation reasons (it is better to bring heavier cargo together from multiple locations to put it on a single plane bound for a specific location and San Diego does not generate this sort of cargo load by itself.) There is virtually unlimited air cargo capacity at March Field in southern Riverside County, where DHL is now

Airport Debate continued on page 6

By Barry Jagoda, UCSD Communications

By the time he was 13, Nageeb Ali had lived in Warsaw, New York City, New Delhi, Jeddah, and Thimphu, the capital of Bhutan. He loved them all and, with characteristic optimism, now says, “It was truly a wonderful way to see so much of the world.”

Nageeb’s father was a diplomat for the Bangladesh government, a career that afforded his family the opportunity to feel like global citizens. As a teenager, Nageeb and his family moved back home to Dhaka, Bangladesh where he attended high school. “I initially had a sense of being a stranger in my home country, partly because I spoke Bengali, my native tongue, with a foreign accent. Gradually, though, Bangladesh felt very much like home, and I became very close to my cousins and my extended family.”

Nageeb really enjoyed his high school classes, especially those in math and physics. He knew he wanted to go to a liberal arts college, partially to get broader exposure to the sciences and humanities. He began his undergraduate studies at Brandeis University in the fall of 1995. “The professors at Brandeis were really fantastic, and interested in training students to think critically about the world around them. I also formed great and long-lasting friendships there, including with Navin Kartik and Andres Santos who are now colleagues at UCSD.”

Though Nageeb initially intended to major in math and physics, he found himself drawn to understanding social and political issues. He chose to major in mathematics and economics and took plenty of sociology and political science courses. In the summer after his sophomore year he worked in Tehran for the UN High Commission for Refugees, and then traveled to Cambridge University to take courses in political science and economics. The following summer, as a Brandeis Coexistence Fellow, he worked in the villages of Kashmir evaluating the efficacy of a village-level microfinance program.

These experiences helped Nageeb decide what he wanted to do in the future. “I realized that I wanted to specialize in economic theory so that I could rigorously study all those really fascinating questions about social institutions and political processes.”

“I was sure I wanted to get a Ph.D. in economics. Before those arduous years, I wanted to enjoy life a bit and to see the world outside of academia.” With this in mind, Nageeb worked for two years for Charles River Associates, a firm that primarily deals with litigation consulting from an economics perspective.

Two years later, Nageeb moved to the West Coast to start graduate school at Stanford. “Stanford worked out great. It had a phenomenal group of researchers interested in economic theory, including my two excellent advisors, Susan Athey and Doug Bernheim, with whom I really enjoyed interacting.” Nageeb earned his Ph.D. in 2007, and his dissertation focused on applying economic theory to questions of political economy and behavioral economics.

“My wife, Shamim, and I looked for places where both of our academic dreams could be realized. She has an M.D. but decided to switch a few years ago to a science research career and was looking to begin a Ph.D. in neurobiology. So we were really ecstatic to have the opportunity to come here given its strengths in both our fields.”

Nageeb will be teaching intermediate microeconomics and a second year graduate course in game theory in the spring quarter and he is obviously happy at UCSD: “Our Department is excellent and everyone here is extremely collegial and friendly.”

Now 30, Nageeb seems comfortable in a discipline that seeks to understand complex economic and social phenomena. His father and many others from the paternal side of his family have been civil servants in various governments, and Nageeb’s older brother, Nausher, has followed in that tradition as a member of the U.S. Foreign Service. His maternal side has had many teachers, professors, and engineers, and his mother now works as a school teacher in the inner city of Oakland.

“Growing up, we always discussed politics and world events, and this inspired me to think about the rich interplay between social institutions and individual choice. It’s really a privilege to be able to devote my working life to exploring these fascinating issues, and I’m excited about starting my academic career here at UCSD.”

Mark Jacobsen: For One Environmental Economist There To Here Was Not Necessarily A Straight Line

By Barry Jagoda, UCSD Communications

Maybe it was growing up in the small college town of Lewisburg, Pennsylvania, home of Bucknell University. Or perhaps it was the influence of his father, a physics instructor at Bucknell who also taught the subject at Lewisburg High School, and his mother, who worked in a hospital laboratory. Something turned Mark Jacobsen into a scholar with broad intellectual interests and an ability to go deeply enough to receive his Ph.D. in economics, specializing in environmental economics, public finance and industrial organization.

But paths of curiosity and academic accomplishment have not been along a simple, straight line. At first Mark thought he would go to engineering school, but then chose Wesleyan University, in Connecticut, a fine liberal arts institution, for undergraduate work. Starting off there with interests in the arts and literature, he gravitated to an economics course where he came under the influence of a teacher named Gary Yohe, an environmental economist. As Mark
learned about the ways economics can help in thinking about how people make decisions in the face of uncertainty, he was pushed toward a major.

But all was interrupted for an unconventional junior year abroad in the poor, mountainous country of Nepal, sandwiched between China and India and with a largely Buddhist and Hindu population. In the capital city of Katmandu Mark and 11 other students convened in the building of Pitzer College, the program sponsor, about a two-mile daily commute, by foot, from their village lodgings in the hills outside of town. They studied the Nepali language, heard lectures from a variety of local speakers, lived with Nepali families and worked on independent projects. For Mark that involved documenting the lives of a low-caste group called the Badi, who lived a few hundred miles from Katmandu, reached only after a two-day drive on the mountain roads. “This was a very good year. I wanted the immersion aspects of a smaller study abroad program.”

Coming back to Wesleyan was a shock: “I still remember seeing my first supermarket on return and, of course, we had no computers in Nepal.” The digression didn’t hurt Mark’s studies as he received his B.A. with high honors in economics. Applying to a number of graduate schools he was accepted into the Department of Economics at Stanford, but also reached agreement to defer matriculation for a year to work on integrated assessment models of climate change (studying feedback between scientific and economic systems) in Washington, DC.

“The first year at Stanford was tough, particularly for those of us who came from liberal arts colleges—you know some math but need to learn a lot more in grad school too,” said Mark. By the end of the first year Mark was moving away from environmental economics and into the fields of industrial organization and public finance. As he explained, “I liked game theory, incentives, and regulation and had discovered that I was at a graduate school with strengths in those areas.”

But he knew he was going to want a break in the graduate school years. It was back to Washington and more work on integrated assessment models, this time with more chance to help design the studies. “I was learning that you have more freedom as you go deeper into the discipline and as your training takes you closer to a degree.”

As the time came for choosing dissertation topics Mark was tugged back to environmental economics. “I thought these were the most interesting research areas and I wanted my work to have policy relevance,” he explained. One of his papers, estimating effects of an increase in automobile fuel economy standards and comparing them with increased gas taxes, became the basis for the job talk which led to an offer from UCSD. While he works to get this and other research published, Mark’s initial teaching is in intermediate microeconomics and he’ll teach the graduate course in environmental economics later in the year.

Mark, now 30, is delighted to be at UCSD where he appreciates the collegiality of the department and the diverse group of researchers around the university interested in environmental topics. Mark and his wife, who works as a consultant to international development agencies, live in La Jolla Del Sol.
Rondina continued from page 3

Back to Rome Giacomo fell under the influence of a part-time economics faculty member who was not only teaching at LUISS but was an economist at the Bank of Italy. “He had done three years of graduate work at Stanford before he had to return home for personal reasons, so he knew that U.S. top economics departments were the most effective in preparing for research and he encouraged me to get out of Italy and to go to graduate school.”

About this same time Giacomo’s long-time girl friend, also from Marche, had made friends with a graduate student from the University of Wisconsin at Madison. In the rush to apply to graduate schools this unlikely word of mouth propelled an application to Madison, to an acceptance and, as they say, the rest is history. Giacomo and Lodovica married while they were both in graduate school (she is now finishing her doctorate in Italian literature) and they loved the University of Wisconsin and the college town of Madison.

“The Department there is in the top ten. The program is hard, their system retains only about 40 per cent of the graduate students they admit, with the rest testing out. This was a tremendous incentive to work as much as I could.”

Giacomo studied with economists Steven Durlauf and William Brock and gravitated toward issues surrounding how information affects behavior, and how this, in turn affects the design of macroeconomic policies. Eventually this became one of his dissertation papers, on information and business cycles. “I was interested in how information, particularly that which is not immediately obvious—such as changes in productivity—affects prices and how prices, in turn, affect the diffusion of information and thereby employment and output. In my work I apply a set of mathematical tools that are relatively new to economics and that bear the promise of granting some much needed advances in studying models of incomplete information.”

When it came to the job market, “UCSD was definitely my best offer, with a promise for a lot of time for my research agenda. Also there was a commitment to grow the macro field, which is already exceptional. As it turns out I’ve found a great group of people, with doors open and lots of room for growth.” Now 30, having taught intermediate macroeconomics this past winter, Giacomo is devoting the spring quarter to research and will teach part of the core program for graduate students next year.

Department Teaching Awards

This year, the Department created annual prizes for the best graduate teaching in core and advanced elective courses. The first recipients of these awards for the 2006-07 academic year were Professors Vince Crawford, James Hamilton, Mark Machina and Yixiao Sun.

In addition, awards for the best graduate student third-year paper went to both Scott Borger and Benjamin Gillen. Andrea Ghent, Marya Gottlieb, Philip Neary and Oana Tocoian all won the Graduate Student Teaching Assistance Excellence Award for the 2006-07 academic year. Finally, Chris Wignall was selected to be the Senior TA for the 2007-08 academic for his excellence as a teaching assistant and for his ability to train new and continuing TA’s.

Santos continued on page 5

Andres Santos: Finding An Econometric Home at UC San Diego

By Barry Jagoda, UCSD Communications

“T

here is always an economic crisis taking place in my home country of Argentina” says Andres Santos, who, when he was 15, moved 1500 miles north with his parents from Buenos Aires to Asuncion, Paraguay. There it was a lot easier for his father, an engineer, and his mother a chemist/pharmacist, to get jobs. “I seem to have always been interested in economics and wanted to understand why the economies of my countries were always in trouble.”

“Culturally I’m still an Argentine, but I have strong memories of Paraguay, where I finished high school and where my parents still live.” In Asuncion Andres attended the American high school and had a counselor who encouraged him to apply to American universities. “She was from Massachusetts and suggested that I consider Brandeis, which had a good undergraduate program in economics. I had no real idea of what I was doing, didn’t know the East coast from the West coast, or small towns from big cities … they were all the same to me.”

He accepted an offer from Brandeis and, in late summer of 1996, flew to Boston with two suitcases. It was his first trip to the US, and he managed to get pretty lost on the way to the University. Of course, eventually everything worked out: “The teachers were great. I enjoyed my classes and made some close friends—including two colleagues, Navin Kartik and Nageeb Ali, who are now in the Economics Department here at UCSD.”

His economics advisor at Brandeis, Rachel McCulloch, became an important mentor and was instrumental in preparing Andres for grad school. “She encouraged me to become a math major, which has proven immensely helpful with my research in econometrics. I wasn’t sure of what I wanted to do though, so I applied for some jobs in finance.”

Andres ended up going to work at an investment firm in Boston for two years after college. “I worked with a group making global asset allocations and I enjoyed it. But I wanted a new challenge so I decided to go to graduate school.” Andres got into a number of schools, but he really wanted a change from the East Coast. Awarded a first year fellowship at Stanford Andres says, “I knew it was a great school, in a terrific climate, and I had two friends from Brandeis already there so it seemed like a natural choice.”

By his second year at Stanford Andres had become very interested in econometrics. “Sometimes econometrics may seem like a long way from solving everyday problems, but we are actually developing tools that will hopefully help economists in doing applied work.”

Out on the job market last year Andres had offers from numerous schools, but for him the choice was not difficult, “For econometrics
Santos continued from page 4

there is no question about the strength of the department at UCSD. And I love California. I was on the job market in the winter, so it’s hard to beat San Diego after an East Coast blizzard. Most important this is a friendly, exciting department and I’m really enjoying myself.”

Asked if econometrics might not seem a little dry, Andres said, “It’s in the eye of the beholder. Here there are a ton of people interested in the field and there are many colleagues to talk to.” And how does he assess UCSD’s program in comparison? “Well, it’s pretty objective. Graduates from here have gone to the top departments around the country and we have a superb program.”

Now 29, and in his first year as an assistant professor, Andres is teaching Introduction to Econometrics and using the very same textbook he learned from back in the 1990’s at Brandeis. He is focused on his research on nonparametric cross-sectional econometrics and looking forward to publishing his work. “Eventually I would like to do some applied work, but for the time being I’ve got plenty of problems to solve in my own field.”

Adele Barsh: Economics Library

By Barry Jagoda, UCSD Communications

Do you find yourself wondering how to get your students to think more critically? Or, if you are a student, do you frequently ask yourself are there better or quicker ways to find the information you need? These topics are a central focus for Adele Barsh, the new Economics and Business Librarian, who started at UCSD in September, 2006.

“Yes,” she admits, “phrases like ‘critical thinking skills’ and ‘information literacy’ are fads, especially in undergraduate education these days, but the reality is that most students need to be shown how to approach a problem, how to gather information beyond Google, and what are benchmarks to help them think critically about their data sources.” Adele works at selecting high-quality materials for the UCSD collections, and she teaches both in-classroom and via one-on-one consultations about gathering data and doing academic research. She implements ways to make it easier for people doing Economics research to find the best information available.

Prior to arriving at UCSD, Adele was the librarian for nine years at Carnegie Mellon University in Pittsburgh, for the Economics Department and the Tepper School of Business. “My job always is interesting. One minute, I may be helping a faculty member locate a data set, then later that day I might meet for an in-depth collaboration with a Ph.D. student who’s trying to track down a missing piece of information. Undergraduate students doing honors theses drop by during my office hours, as well, with some really creative inquiries. I like that I never know when I wake up in the morning what kinds of interesting research topics I’ll tackle at work that day.”

Adele reports that she quickly is becoming familiar with the Economics materials in the UCSD Libraries’ collections, and looks forward to meeting with faculty, staff and students here. She credits Harold Colson, her colleague and the former Economics Department library liaison, with helping her get on her feet in serving the information needs of the Department and its curriculum. Harold now is heading the public services department at the International Relations and Pacific Studies Library and continues as the bibliographer for Latin American Studies. “I’m sure he misses his connections with the Economics Department. I bet he’d like to hear a ‘hello’ from any of those who worked with him in the past who find themselves near the IR/PS Library.”

She has been active nationally in training information professionals about how to find local and regional economic information for their patrons. Most recently Adele edited a guide and created a typology for a program geared toward public and academic librarians. Her typology for the sources can be seen via http://tinyurl.com/2cgrvg, where the goal was to offer others a conceptual framework for locating sources that answer frequently asked questions on public finance. She is also an expert on the resources for researching business ethics and performing competitive intelligence. She currently teaches a distance education class at the master’s level for library school students, and mentors new professionals as well as those exploring a career in the information professions.

Adele is available to Economics Department faculty, staff and students for consultation via abarsh@ucsd.edu and 858-534-1249. She looks forward to meeting you, and invites your input on resources, workshops, other ideas for outreach and collaboration.

UCSD Management Science:
Better Prepared Than Ever For Careers In Business And Advanced Degrees

By Melissa Famulari, Vice Chair of Undergraduate Studies

The faculty in UCSD’s Department of Economics, ranked by the most recent US News and World Report as the 10th best Economics Department in the United States, has recently revised and updated its undergraduate program in Management Science. The changes will strengthen the focus of the Management Science major in training students in the economic and mathematical tools used in business and government.

The new required Finance Sequence will cover financial theory and its applications to corporate finance. Financial Markets (Econ 173A) considers how to make optimal portfolio decisions, the tradeoff between risk and return, and the nature of financial assets such as corporate stocks, bonds, cash instruments, and options. Corporate Finance (Econ 173B) shows how to use financial accounting data to analyze the effects of corporate taxes, the costs and benefits of financial and real investments, and the firm’s choice of capital structure and dividend policy.

The required Operations Research (172A-B) sequence has been reduced from three quarters to two quarters. The shorter sequence retains the intuitive and analytical material of the longer sequence, but

Better Prepared continued on page 6
Airport Debate continued from page 1

setting up its distribution network for all of Southern California. Again, this is the case of sound economic reasoning working through a claim that initially frightened the business community.

San Diego does have an airport problem, but there is a better solution than building one enormously expensive airport: a multi-airport regional configuration. The first thing that needs to happen is for Lindbergh Field to be built out to its maximum capacity. The second part of this configuration is a smaller North County airport. Carlsbad’s McCelland-Palomar Airport already has service to LAX and Phoenix. This airport’s runway could be lengthened a bit to support standard medium range passenger jets and its terminal capacity expanded. The last part of the configuration is a third smaller commercial airport that will be needed in the more distant future in the southern/eastern part of the region. If this configuration eventually is attained, San Diego will look very similar to Boston and the San Francisco Bay Area. Hopefully, it will. In my most recent work, I have shown that a regional airport configuration of this type supports more passengers for a given area population due to lower ticket prices (from competition between airports) and shorter commute times.

Better Prepared continued from page 5

de-emphasizes the types of computational algorithms that are now available in many computer packages.

The Intermediate Microeconomics sequence has been expanded to a full year (Econ 100A-B-C). This will make UCSD’s Management Science graduates among the few in the nation to graduate with both a full year of econometrics (statistical analysis of economic and financial data) and a full year of microeconomic analysis, which will give them an edge in the competition for graduate school, business school, and corporate jobs. US News and World Report has ranked UCSD’s econometrics faculty as second in the country, and its microeconomics faculty as 12th.

The Economics Department is working with UCSD’s new business school, the Rady School of Management, to identify enhancements to the undergraduate curriculum and to involve Rady faculty in the Management Science program.