Joint Undergraduate and Graduate Academic Program Review School of Social Sciences AY 2009-10

DEPARTMENT/PROGRAM SELF-STUDY

SECTION 1: ANALYSIS OF PAST REVIEWS (copies available upon request)

- 1. Briefly characterize the last review of the Department's undergraduate program(s), conducted in 2002-03.
 - a. What were the key strengths and weaknesses of the program cited by the external review committee?
 - b. Describe the specific steps that have been taken to respond to the recommendations from the last review.
- 2. Briefly characterize the last review of the Department's graduate program(s), conducted in 2002-03.
 - a. What were the key strengths and weaknesses of the program cited by the external review committee?
 - b. Describe the specific steps that have been taken to respond to the recommendations from the last review.

The 2002-03 review said that we were doing a good job hiring faculty, but that we critically needed to build strength in core fields – especially macroeconomics. We successfully hired one senior (Rocheteau) and four junior (Branch, Milani, Ouyang, and Rodriguez-Lopes) macroeconomists, and we promoted a promising young scholar (Branch). We now have a viable and active macroeconomics group to complement our strengths in microeconomics, macroeconomics, and econometrics. Our senior macroeconomists are very active and they are publishing in the very best journals. We also hired very highly ranked and visible senior faculty in labor and urban economics (Neumark and Brueckner).

The review was also critical of the School's practice of tying new resources to the needs of ORU's. While this has largely stopped at the School level, it has been replaced by the Provost's "excellence FTE" program which has essentially the same impact. Nevertheless we are pleased with our hiring during this period, and these new hires have helped move our U.S. News and World Report ranking from the high 70s down to 42 (tied with UCSB and Texas A&M). Our ranking is above UCI's overall rank of 46 and the Merage Business School rank of 52, so we are helping UCI move towards its goal of becoming a top-25 ranked research university. Finally, the review said that we needed to address the very high proportion of assistant professors in our department since this resulted in too high a service burden on these assistant professors. Through a combination of senior hires and promotions of assistant professors we now have a much more reasonable distribution of senior and junior faculty, and this has allowed us to remove most internal service burdens on our assistant professors.

The 2002-03 review generally liked our undergraduate program, but commented that our small faculty size made it difficult to offer many upper division electives. While our faculty have grown from 22 to 27, we have been swamped by a huge increase in majors. This is partly due to the successful reorganization of our undergraduate program into three majors (Economics – 500 majors, Business Economics – 1700 majors, and Quantitative Economics – 100 majors), but also due to our inability to limit our enrollments and majors. Current budgetary restrictions on hiring lecturers and teaching assistants has led to a difficult situation with not enough classes (especially upper division electives) and far too large class and section sizes.

The graduate program has grown, as recommended by the 2002-03 review, but not enough to keep up with the demand for additional teaching assistants. Overall quality of the graduate students has increased, although our progress here is threatened by increasing fees and a flat (or decreasing) fellowship budget. The 2002-03 review noted that our lack of written qualifying exams could lead to weak students staying in the program and failing in their third and fourth years. We restructured our graduate program so that all students need to take the oral advancement to candidacy exam during their second year. This exam includes questions on the core materials, so it effectively serves the same purpose as written qualifying exams without the burden these exams impose on the faculty and the students. Although our small faculty still limits our ability to offer enough advanced graduate courses, we restructured our departmental seminar into 4 workshops (Applied Microeconomics, Macroeconomics, Econometrics, and Theory, History, and Development,). These workshops greatly expand the opportunities for graduate students to present their work and be exposed to cutting-edge research.

Finally, the 2002-03 review noted the critical need to pay market salaries to attract and retain high quality faculty, and noted that salaries for good economists are well above U.C. pay scales and UCI norms. The Dean and the Provost have strongly supported paying market salaries for new hires, and there was considerable progress on removing existing pay inequities during the 2003 – 2007 period. Unfortunately there seems to have been a change in policy during the last year or two leading to increased inequities for tenured professors and below-market salaries for newly-promoted associate professors. Unless this is quickly remedied, we will certainly lose some of our best faculty.

SECTION 2: ANALYSIS OF CURRENT PROGRAMS

1. Overview of Department

a. Provide a brief history of the Department and a description of its organization (e.g., degree programs, disciplinary specialties, etc.). Include a description of any formal interactions with other Departments and/or other units on campus.

The department has always been small relative to our undergraduate and graduate enrollments, and we historically were known for our specializations in transportation economics and public choice. During the last 10 years we have increased our faculty size to around 25, and built strength in core areas of applied microeconomics (especially labor), macroeconomics, and econometrics (especially Bayesian econometrics). Since

the last review we reorganized our undergraduate program into 3 majors. Judging by the increase enrollment in our majors this reorganization was extremely successful, and we now have more majors than any other department at UCI. Our graduate program grew until last year, when funding cuts forced us to cut back on admissions. We currently do not have enough graduate students to fill our teaching assistant positions.

We have strong links to the Political Science Department and the Center for the Study of Democracy (especially through our public choice Ph.D. concentration) and the Institute of Transportation Studies (through our concentration in transportation economics and the Transportation Science Ph.D. and master's programs). These specialized concentrations have remained small while our graduate program has grown, and this is consistent with the small markets for new Ph.D.s in these areas. We also have strong links to the Statistics Department – two of our faculty (Poirier and Jeliazkov) have joint appointments, and a significant number of our graduate students earn M.A. degrees in Statistics while working on their Ph.D.s in economics. Finally, many of our faculty are core members of the Institute for Mathematical Behavioral Sciences, and our faculty also are members of the Center for Research on Immigration, Population, and Public Policy and the Center for Global Peace and Conflict Studies.

- b. Provide a list of all current full-time faculty organized alphabetically within rank (include graduate degree institution and a brief set of research interests) (**Table 1**).
- c. Discuss the distribution of the faculty in terms of rank, gender, and ethnicity (*Table 2*). Provide information about faculty recruitment and retention, including efforts to diversify the faculty, since the Department's last review. Referring to data from the Office of Equal Opportunity and Diversity (*Table 3*), evaluate the Department's success in achieving diversity in terms of national availability. Does the Department have a plan, and is the plan being effectively implemented?

 We do not currently have access to OEOD data, but we have always worked hard to identify candidates from underrepresented groups. Our current distribution of faculty is consistent with the distribution of candidates in the profession.
- d. How many part-time and/or visiting instructors are in the Department and how are they deployed in the instructional program? How many individuals are in the research specialist and professional researcher series and how are they deployed in the program? We typically have 5-6 lecturers each quarter, and they teach across the entire undergraduate curriculum. In addition, Kent Johnson from Logic and Philosophy of Science regularly teaches Economics 15 (probability and statistics).
- e. Describe your system of Departmental governance, in particular the procedures for and effectiveness of faculty involvement in curricular development, instructional resource allocation, and service activities to the School and campus.

 The department is governed by the Chair, but with substantial assistance from the Director of Graduate Studies and the Director of Undergraduate Studies. All major decisions on curricular development are discussed and voted on in full faculty meetings. The only substantial resources we have are for hiring lecturers, and this is done by the Chair in consultation with the Director of Undergraduate Studies. The department

administrator is responsible for the staff as well as the departmental budget.

f. Describe the Department policy on teaching workload for formal graduate and undergraduate courses including information about course release policies for research and administrative service, and any changes in policy since the last review. Our policy is unchanged since the last review. Each faculty member is required to teach 6 quarter courses, although one course is excused for faculty with an active research program and another course is excused for faculty who advise graduate and undergraduate theses. One course is "service course," which is currently defined as a course the Chair needs taught. The chair receives a two course reduction, and the Directors of Undergraduate and Graduate Studies receive a one course reduction. Newly hired faculty typically receive a one course reduction for their first year.

The Chair (in consultation with the Directors of Undergraduate and Graduate Studies) tries to match the courses that faculty would like to teach with the programmatic needs of the department. We try to respect junior faculty preferences during this process, and we particularly try to limit the number of new preparations for junior faculty.

- g. What are the strengths of the Department's research program, and how does the overall research program compare with top national research programs in the discipline/field? We have built a strong group in the core areas of microeconomics, macroeconomics, and econometrics (especially Bayesian econometrics) in addition to our historic strengths in transportation/urban economics and public choice. Our faculty in labor economics, economic history, and the economics of conflict are also highly visible. Although we have fewer faculty, we are comparable to UCSB, as reflected by our identical 42 rankings in the 2009 U.S. News and World Reports. Our program is distinguished by our strengths in Bayesian econometrics, transportation/urban economics, and public choice. Overall we are considerably smaller than programs ranked above us, although we compare favorably with them on a per faculty basis.
- h. Describe the working relationship between the Department and the Dean's office. The department relies on the Dean's office for all of our budget, and typically the Dean has been responsive to our needs. The chair meets regularly with the Dean, and we have a good working relationship. The main point of contention is teaching assistant allocations. Currently the Dean's office assigns teaching assistants to specific courses with limited input from the department. The department has many times requested that we take over this responsibility due to the many complaints from faculty about late and poor assignments from the Dean's office.
- i. Comment on the adequacy of the Department's operating budget, staff support, and space/facilities/equipment (*Table 2*).

 The department's operating budget is totally inadequate. We cannot provide any research support to our faculty, nor can we even help junior faculty attend important conferences. Our individual offices are adequate, but the computer equipment is ageing and we have no budget for maintenance, replacement, or upgrades. Our seminar and graduate teaching space is inadequate and too small. Our core graduate course enrollments

frequently exceed the legal capacity of the rooms, and in spite of many requests we do not have powerpoint projectors installed in any of our teaching or seminar rooms.

Our staff support is adequate, but that is only because of the high quality of our current staff. We do not have the resources to keep track of alumni, grants, or even help faculty with the increasingly burdensome academic personnel process.

- j. Provide narrative explanation and a brief table of general budget categories and expenditures (no more than a single page) (**Table 4**)
- k. Comment on Development activities at the Department level and provide data on amount and sources of gift funding for the past 5 years (**Table 5**). Since the previous review we received a generous gift to endow a graduate fellowship (the Sheen Kassouf fellowship) and another generous gift to endow a prize for creative modeling (the Lave prize). We hosted an event for Conoco Phillips that resulted in a proposal for a large grant to endow some professorships, but so far nothing has come from that proposal. The chair and other senior faculty have met with potential donors, but so far this has not yielded any concrete results.

2. Evidence of Faculty Distinction

a. Discuss evidence for faculty/departmental distinction in research, teaching, and service (e.g., faculty research productivity in publications and extramural grant support, scholarly awards and honors, teaching awards, and distinguished service to the school, campus, university, and/or scholarly field).

All of our faculty regularly publish in top academic journals, including some in the very top general-interest journals (see the faculty biographical sketches in b) below. In addition, many of our faculty receive (and accept) invitations to give invited lectures and advanced courses at leading institutions around the world. Our faculty also serve on journal editorial boards, National Research Council committees, and external review committees for other economics programs and academic appointments and promotions.

b. Provide biographical sketches (limit to 3 pages each) for all current full-time Departmental faculty (organized alphabetically).

3. Evaluation of Undergraduate Program

- a. Admissions (refer to data in Table 6)
- (i) <u>Recruitment</u>. The department is under enormous enrollment pressure, with large numbers of students seeking to be economics majors. As a result, we don't take special steps to recruit students.
- (ii) <u>Demographics</u>. Our majors attract men and women about equally. As is true throughout UCI, we have a high proportion of Asian-Americans and a low but modestly growing proportion of African-American and Chicano/Latino students.

- (iii) Number of majors. With 2,300 majors, we have more majors than any other department at UCI. This number is too high given our faculty size, but we are reluctant to erect higher hurdles to entering the major on the belief that we should try to serve student demand. In addition, we expect that our high enrollments will eventually lead to the extra resources needed to improve the Department, while also enlarging it.
- (iv) <u>Criteria for entering the major</u>. We have no control over the criteria used for admission of freshmen or transfer students. We do, however, set criteria for admission to the major by continuing UCI students. The criteria for a transfer to the economics major have been relaxed since the last review this was required by the campus when they approved our new majors. The requirements are now (i) a cumulative GPA of at least 2.0 and (ii) no grade below a "C" in Math 2A-B and Econ 20A-B, with an average of 2.50 GPA or above.

3.b. Training

(i) Overview of the Department's Undergraduate Program

Since the last review, the department has reorganized its curriculum into 3 majors to better serve student needs: Economics, Quantitative Economics, and Business Economics. In addition, an economics minor has been added, along with a specialization in Economics and International Issues, and our honors program has been overhauled. The honors program used to be essentially the entire quantitative economics major; now, it involves two quarters of seminar study (190A-B) and the completion of an honors thesis. The requirements under these various programs are described as follows.

Departmental Requirements for the Major in Economics

This major is designed for students seeking a broad education applicable to occupations in business, law, and government or as preparation for graduate school in the social sciences. School requirements must be met and must include 17 courses as specified below.

- A. Economics 20A-B (Principles of Economic)
- B. Economics 15A-B (Probability and Statistics)
- C. Mathematics 2A-B and 4 (Calculus and Math for Economists)
- D. Economics 100A-B-C (Intermediate Economics)
- E. Economics 122A (Applied Econometrics).
- F. Six additional Economics courses, one of which may be lower-division.

Sample Program — Economics Majors

Freshman	Sophomore
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Economics 20A-B	Economics 100A-B-C					
2 Lower-division writing courses	Economics 15A-B					
Math. 2A-B, 4	Soc. Sci. computer requirement					
Lower-division Econ. electives	5 General Education					
2 Soc. Sci. intro. courses						
2 General Education						
Junior	Senior					
Economics 122A	3 Upper-division Econ. courses					
4 Upper-division Econ. courses	Electives					
2 General Education						
Electives						

Departmental Requirements for the Major in Quantitative Economics

School requirements must be met and must include 19 courses as specified below.

- A. Economics 20A-B.
- B. Mathematics 2A-B, 3A or 6G, and 4 (adds Linear Algebra)
- C. Economics 105A-B-C (quantitative version of Intermediate Economics)
- D. Statistics 120A-B-C (Probability and Statistics)
- E. Economics 123A-B (Econometrics)
- F. Five additional Economics courses, including at least four four-unit upper-division courses and one that satisfies the upper-division writing requirement. The upper-division electives must include two Quantitative Electives selected from Economics 107, 109 (when the topic is "Evolutionary Game Theory), 116, 123C, 131A, and 135.

Departmental Requirements for the Major in Business Economics

The Business Economics major is for students seeking a business orientation in their study of economics. School requirements must be met and must include 20 courses as specified below.

A. Economics 20A-B

- B. Economics 15A-B
- C. Economics 25 (Accounting)
- D. Mathematics 2A-B and 4
- E. Economics 100A-B-C
- F. Economics 122A-B (adds second quarter of Applied Econometrics)
- G. Seven additional Economics courses, including at least four four-unit upper-division courses. Two of the electives must be selected from the following Business Electives list: Economics 125, 131A, 132A, 134A, 135, 142A-B-C, 145L, and 161A-B-C; and two of the electives must be selected from the following Management Electives list: Economics 26A, 140, 147A-B, 149 (when the topic is Business Decisions), and 169 (when the topic is Economics of International Business). It is strongly recommended that students satisfy the upper-division writing requirement with one of the Economics electives.

Specialization in International Issues and Economics

Students in any of the three Economics majors may complete the specialization in International Issues and Economics. Admission to the specialization requires approval in advance by the Economics Department. The specialization requires the completion of the following:

- A. International Studies 11 and 12 and Economics 13.
- B. Three upper-division international Economics elective courses selected from Economics 148I-J-K, 161B-C, 162A, 163, 164A, and 169.
- C. Three additional international general education elective courses selected from International Studies 111A, 112A, 120, 121, 122, 123, 179; Political Science 141A, 141B, 141C, 141D, 143D, 143E; Environmental Analysis and Design E100 (when the topic is International Environmental Issues); History 21A, 21B, 21C, 101. At most, only one lower-division elective may be taken.

Honors Program in Economics

Undergraduates in any of the three Economics majors may complete the Honors Program in Economics. Entry into the program requires a 3.4 GPA or better in upper-division Economics courses and an overall GPA of 3.2 or better. Students in the Honors Program must complete an honors thesis and the two-quarter Economics Honors Colloquium (Economics H190A-B; satisfies the upper-division writing requirement).

Economics Minor Requirements

Requirements for the minor in Economics are met by taking nine courses (36 units) as specified below:

- A. Core courses (28 units): Economics 15A-B, 20A-B, and either 100A-B-C or 105A-B-C.
- B. Electives (8 units): two upper-division Economics electives (excluding 199).
- (ii) Class size issues. Undergraduate class sizes in economics are too large. The enrollments in both Principles of Economics (20A-B) and Intermediate Economics (100A-B-C) routinely exceed 400 students. The Department is especially concerned about the class sizes in the 100A-B-C courses, which are the core element of an undergraduate economics education. Ideally, these classes would be taught to groups of approximately 100 students, but this goal is unattainable given our enrollment pressure and our limited faculty size. A survey of other UC campuses showed similar enrollments to ours at the intermediate level, except at the smallest campuses (Santa Cruz and Riverside), where intermediate-economics classes sizes were closer to the 100 size. UCI should strive for such an outcome, but more resources are needed. The same class-size problem afflicts our upper division elective courses, which often have enrollments of around 150.
- (iii) <u>Time to degree</u>. Our current severe enrollment pressure threatens to lengthen time-to-degree for some of our students. In the current quarter, there are many instances of senior students unable to enroll in courses they need to graduate in June as a result of excess demand for these courses. As for counseling and guidance, the School of Social Sciences operates an excellent counseling center that provides expert help for students on various School and UCI requirements, while helping students to solve logistical problems involving schedules, etc.
- (iv) <u>Undergraduate survey</u>. We attempted to survey our graduating seniors by email, but the response rate was too low to reach any reliable conclusions.
- (v) Professional socialization. Although the Economics Club no longer exists, two new clubs have formed: the Undergraduate Finance Association of Economics, which is affiliated with both with our department and the Merage School of Business (http://clubs.uci.edu/ufauci/); the UCI (student) chapter of the **National** Association of Business **Economists** The Department routinely places some of its (http://sites.google.com/site/nabeuci/home). undergraduates in top economics Ph.D. programs. One student, for example, started Cal Tech's Ph.D. program this past fall.

4. Evaluation of Graduate Program

a. Admissions

- i) See Table 7.
- ii) We do not have Table 8. The Department offers are best applicants three quarters of fellowship support together with four years of teaching assistantships. Unfortunately, this is not competitive with private universities.
- iii) We do not have Tables 8 and 9. Every year we give serious consideration to diversity students. Often none meet our admission requirements. When they do we find our offers are not competitive. This is an area that requires constant attention.

b. Training

i) Requirements

Students must demonstrate (i) competence in the core areas of microeconomics, macroeconomics, and econometrics, and (ii) mastery of two subfields in economics. The student's dissertation research should demonstrate independent and creative thinking, intellectual synthesis, and skill in written communication. Students are expected to complete their dissertation by the end of their fifth year. The maximum time permitted is six years.

Core Course Work

All students must show competence in microeconomics, macroeconomics, and econometrics by earning a "B" grade or higher in Economics 210A-B-C, 210D-E-F, and 220A-B-C-D, and a grade point average across all core courses of at least 3.25. Students receiving a grade lower than "B" in any of these core courses will be given one opportunity to retake the course and earn a "B" grade or higher. Students must also satisfactorily pass the econometrics lab courses 221A-B-C. Students are also required to complete one research paper in connection with the last quarter of the Econometrics core sequence (221D). This research consists of replicating and extending an empirical paper published in a refereed economics journal.

Students pursuing a masters degree in statistics along with their Ph.D. Studies in Economics can substitute STAT 200A-B for Econ 220A-B and 221A-B. Advancement to Candidacy

Students having successfully completed (i) the ten core courses with no grade lower than a B and with a grade point average across all core courses of at least 3.25 and (ii) one research paper are eligible to take the oral candidacy exam. The research paper can be the replication paper noted above, a field paper, or an extended literature review in a subfield approved by the graduate committee. A well-prepared student should take this oral exam at the end of the fourth or fifth quarter, and in no case, later than the sixth quarter.

The exam is administered by five-person candidacy committee consisting of at least one member with expertise in each of the three main areas of economics (microeconomics, macroeconomics, and econometrics), and shall include a member outside of the department. The examiners shall determine whether or not the candidate has mastered the technical and expository skills necessary to complete a dissertation, so they may ask questions about any material covered in the core courses as well as the candidate's research paper. Questions about core material asked in the context of the research paper are to be expected. If the candidacy exam committee unanimously determines that the candidate has the necessary skills, then they will appoint a dissertation committee to guide the preparation of the dissertation. Students who fail a candidacy exam are given only one more opportunity to pass.

Fields of Specialization

Students must show mastery of two subfields in economics by taking a two-course sequence (possibly including independent reading courses) and writing a sole-authored research paper in each field. Each paper must be approved by a faculty supervisor chosen by the student who attests that the paper represents the student's independent ideas and research, and by a second reader assigned by the Director of Graduate Studies. In order to be judged as making normal progress in the Economics Ph.D. program, one field paper should be completed and approved by the end of the Summer Quarter of the

second year and the second paper completed and approved by the end of the Summer Quarter of the third year.

Oral Examination of the Dissertation Prospectus

Two or three quarters before the expected completion of the dissertation, the dissertation committee will organize an oral examination of the candidates dissertation prospectus. Ordinarily, the prospectus will describe in detail the dissertation, and will typically be accompanied by at least one completed chapter of the dissertation. The examination committee will include at least one member not on the candidate dissertation committee appointed by the Director of Graduate Studies. This committee will also certify that the candidate has successfully completed the departmental field requirements. Well-prepared students should complete this exam early in their fourth year, and definitely before the end of their fourth year.

The candidate must notify the Director of Graduate Studies of a planned examination at least two weeks ahead of time so that the outside member can be chosen. Examination materials (completed elements of the proposed thesis and the field papers) must be submitted to all committee members and the Director of Graduate Studies at least one week before the examination.

The result of the dissertation prospectus examination will be a letter to the candidate indicating what additional work needs to be done to complete the dissertation. This letter, which must be unanimously approved by the examination committee, will give deadlines for completing each major task, and a student who fails to meet these deadlines will no longer be making normal progress in the Economics Ph.D. program. Colloquium

Students are required to enroll in at least four quarters of the graduate colloquium (Economics 200A-B-C), in which they hear and discuss papers presented at a regular faculty colloquia series. The colloquium is designed to assist students, through class discussions and supplementary readings, in relating their knowledge to actual research practice by active professionals, including their own faculty. Students may take as many additional quarters of the colloquium for credit as they wish. Whether or not they are enrolled in the course, all students are strongly urged to attend colloquia on a regular basis as an important means of learning about current research.

Teaching Assistantships

Students who are planning an academic career are expected to serve as teaching assistants for at least three quarters.

Curriculum

Courses offered are described below. Economics 200A-B-C, 210A-B-C, 210D-E-F, and 220A-B-C-D are normally offered every year. Other courses are offered at times determined by student and faculty interest. Economics 100A-B-C, listed as a prerequisite to many graduate courses, is an undergraduate core course entitled Intermediate Economic Theory I, II, III. All students are urged to take Mathematics for Economists (203A), so-called "Math Camp," offered before the start of the Fall Quarter. A Sample PhD Program

Year 1

Fall Ouarter

Mathematics for Economists: 203A

Microeconomics I: 210A

Macroeconomics I: 210D

Econometrics & Statistics I: 220A/221A

Winter Quarter

Microeconomics II: 210B Macroeconomics II: 210E

Econometrics & Statistics II: 220B/221B

Spring Quarter

Microeconomics III: 210C Macroeconomics III: 210F

Econometrics & Statistics III: 220C/221C

Year 2

Fall Quarter

Statistics & Econometrics IV: 220D/221D

Field I

Colloquium 200

Winter Quarter

Field II

Field I

Colloquium 200

Spring Quarter

Field II

Research Writing 205A

Colloquium 200

During the second year, students advance to candidacy and complete one field paper. During the third year students complete a second field paper. During the fourth year students prepare and take the oral examination of their dissertation prospectus. Students are encouraged to take additional elective and colloquium courses in their third and fourth years. The fifth year is devoted to completing the dissertation.

Requirements for the Master's Degree

The Master's degree is awarded only to students admitted to the Ph.D. program who have completed the following requirements:

The ten core courses in microeconomics (210A-B-C), macroeconomics (210D-E-F), and econometrics (220A-B-C-D), with no grade lower than a B and with a grade point average across all graduate courses of at least 3.1.

A research paper that consists of an extended literature review in a subfield approved by the graduate committee or a replication and extension of an empirical paper published in a refereed economics journal.

An oral exam, administered by a three-person oral exam committee which will consist of at least one member with expertise in each of the three main areas of economics (microeconomics, macroeconomics, and econometrics). The examiners shall determine whether or not the candidate has mastered the technical and expository skills to deserve a master's degree.

ii) All graduate courses are taught by regular rank faculty.

- iii) The Department has worked hard to make sure graduate students are making satisfactory progress. This year we have only three sixth-year students. We are monitoring progress mainly by trying to enforce rules about completion of field papers before the end of the summer. Students not in compliance are not eligible for fellowships, summer teaching assistantships, and summer lecture positions. We do not have Table 8.
- iv) Virtually all students are admitted with five years of guaranteed support subject to maintaining good standing in the program. Our best students are offered three quarters of fellowship to be taken in the first three years. We also offer periodically last minute fellowships and summer fellowships. Summer teaching assistant positions and lecturer positions are also available. We cover out-of-state fees for domestic students for their first year. We cover out-of-state fees for international students for five quarters. We do not have Tables 9 and 10).
- v) We do not have the APRB survey. A recent survey conducted by the Graduate Student Council of the Department of Economics concluded: "A majority of the respondents were very or somewhat satisfied with the program. One of the most consistently mentioned beneficial aspects of the program is the approachability, knowledge, and helpfulness of the faculty. Staff are also mentioned as friendly and helpful. Another aspect that students see as adding to the program is the guaranteed funding. Students appreciate that the program design encourages diversity and friendliness among the cohorts and small class sizes. The number of seminars during a given week is seen as providing students with exposure to a wide range of research topics. However, students would like for interaction with outside speakers to be institutionalized such as requiring students to meet with the speakers after their presentations. Finally, the respondents also mentioned how they liked math camp and appreciate the availability of a variety of research opportunities."
- vi) We do not offer professional issues seminars. We do not have many Brown bags, but students present their research at a Poster Session in the Fall and at regular colloquia. The Graduate Director regularly passes along information on fellowships and grants. The Department tries to monitor faculty mentoring quality during faculty merit reviews.
- vii) Table 12 provides a list of publications and conference presentations of all current graduate students.

c. Placement

- i) See Table 13.
- ii) Placement of graduate students could be better, but it should be noted that all students got jobs, even in this year's dismal market.
- iii) We have not had any Postdoctoral researchers.

SECTION 3: STRATEGIC PLAN FOR THE FUTURE

- 1. Provide an overall evaluation of the current strengths and weaknesses of the Department and suggest a strategic plan for how the research and teaching programs can be improved without additional resources.
 - We have built a strong group in the core areas of microeconomics, macroeconomics, and econometrics (especially Bayesian econometrics) in addition to our historic strengths in transportation/urban economics and public choice. Our faculty in labor economics,

economic history, and the economics of conflict are also highly visible. Many of our senior faculty have international reputations and are among the most highly cited in their fields. Without considerable additional resources – at least removing the current "furlough" and restoring our departmental budget to last year's level – there is no feasible way to maintain our current strengths and programs. We cannot retain top faculty with our current salaries, and we cannot support even modest research workshops for our graduate students and faculty. We do not have enough graduate students to adequately staff our undergraduate courses, and we do not have enough faculty to offer even the minimum number of advanced undergraduate and graduate courses.

If the furlough is removed and our departmental budget is restored to 2008-2009 levels, then we could improve our undergraduate programs by better cooperation with the Merage Business School. Most of our majors are in Business Economics, and there are many Merage faculty who could teach excellent advanced courses. In particular Merage faculty could take over our accounting course (Econ 25) and offer additional courses in accounting and finance. If they slightly changed their Business major, then some of their majors could benefit from our econometrics and quantitative economics courses. Unfortunately there are currently strong incentives from the UCI administration that make it difficult for faculty to teach courses in other schools. Unless these are changed it is unlikely that these potential improvements can be achieved.

Modest funding increases could also improve our research program by supporting the recently-proposed Center for Economics and Public Policy. This center can help coordinate research across many of our faculty (as well as economists in the Merage Business School, Social Ecology, and Education), and can help facilitate research conferences and larger grant applications. This center will also be a focal point for external donors who are interested in supporting economics research. Most importantly, this center could house a branch of UCLA Census Research Data Center that would facilitate access to key data sources used by many of our faculty.

2. If the Department were given additional resources, suggest a strategic plan for how these resources would be used to improve the research and teaching programs. The Department needs an additional 8-10 faculty (evenly split across ranks) to make us a top-25 program. Based on current US News and World Reports graduate program rankings this would put us equal to or better than University of Maryland and University of Texas at Austin. Both of these programs have close to 40 faculty members, as do all of the programs ranked above them. These additional resources would allow us to strengthen our existing areas of excellence, improve our advanced course offerings for both graduate and undergraduate students, and build new strengths in environmental, behavioral and experimental economics. We have an excellent record of hiring faculty better than our current faculty over the past 20 years, so we have every reason to believe that our goal of becoming a top-25 program is achievable if provided with 8-10 additional positions (and funding to make competitive offers). During the last decade our hiring efforts have been hampered by field constraints imposed on us by the UCI administration. As noted in the 2002-03 review these constraints are very harmful and should be removed. Our recent senior macroeconomics recruitment has demonstrated that we have high standards and are willing to wait until we can identify and recruit top quality faculty.

Even if we are able to recruit an additional 8-10 faculty, we will not be able to retain our top faculty without changes to the way salaries are set at UCI. During the last two years the administration has cut back on granting salary increases based on aggregate and incremental productivity (as measured by refereed journal articles and citations). Faculty with essentially identical records are sometimes paid very differently. There are no longer any empirical regularities to the salary increases that are granted by the administration, and this makes the job of the department chair very difficult. It also makes it very difficult for current faculty to predict how their salaries will change over time while they are at UCI. It is therefore crucial that the UCI administration and the Dean reach a clear agreement with the department about the criteria for setting salary increases.

If we are allowed to recruit additional faculty, then we can greatly improve our undergraduate programs by reducing class sizes for upper division undergraduate courses and adding more upper division electives and writing courses. We can also expand the size of our Honor's Program when more faculty are available to advise senior theses. Additional faculty will also allow us to offer advanced graduate field courses annually for popular fields as well as expand our field course offerings.

3. Provide a copy of the most recent Strategic Plan that was transmitted to the Executive Vice Chancellor and Provost.

Economics Departmental Strategic Plan (May 26, 2006)

- I. Inputs to the Vision and Mission of the School
 - a) Provide a vision or mission statement for the Department and any possible inputs to the School vision and mission

The Economics Department will enhance its standing among the top Ph.D. granting departments worldwide. We will do this by carrying out world-class research in all major areas of economics and widely disseminating the results of this research to our students, the wider economics community through professional publications, and through outreach to the larger intellectual community. This research will enable us to attract top undergraduate and graduate students, and these students will enhance our ability to produce top-quality research through stimulating our faculty as well as directly contributing as research assistants.

We will continue to enhance our undergraduate and graduate teaching programs to make sure that our graduates are prepared to compete with graduates from other elite universities. We will also continue to expand our lower division course offerings so that all UCI students will have a chance to learn about economics and how economics can be used to propose and analyze solutions to critical public policy problems – including poverty, discrimination, macroeconomic policy, the impacts of globalization, and transportation and environmental concerns.

The Economics Department will continue to cooperate with other units on campus to make sure that our scarce faculty resources are used efficiently to deliver the highest quality of instruction at all levels of the curriculum. We will work closely with the development office to raise external funds so that we can attract the best faculty and students to our department. All of our recruiting efforts will be guided by the need to make our faculty and students reflect the rich diversity of California.

II. Departmental Development and Contributions

a) Faculty

Overview of publications, awards, and impact, and participation in curriculum, advising, etc.

Our faculty members have accelerated their rate of publications in top journals over the last 5 years, and we expect this acceleration to continue as our young junior faculty build their careers. Our faculty have, and will continue to, publish in major general interest journals as well as more specialized top field journals.

Lack of departmental staff support makes it impossible to compile detailed data on number of publications and grants (including award amounts). We will begin to collect this information annually beginning June 2006.

b) Students

Overview of undergraduate majors, graduate students, student credit hour contributions.

Our student credit hours for the last six years are:

Three Term average SCH for the Department of Economics - credited by Offering Department

	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	Fall 05
UNDERGRADUATE SCH	11,243	11,340	11,276	10,883	10,764	10,387	9,660
GRADUATE SCH	577	616	594	767	966	1,023	982
TOTAL SCH	11,820	11,956	11,870	11,650	11,730	11,409	10,642

The slight decline in undergraduate student credit hours from 2001-2004 was due primarily to restrictions placed on transfers into our major. We lifted these restrictions this year, but there was also a 10% nationwide drop in economics majors which clearly contributed to the decline in undergraduate student credit hours in Fall 05. We expect that undergraduate student credit hours will increase in 2006-2007 as we implement our new undergraduate business and quantitative economics majors.

The sharply increasing graduate student credit hours reflect the increasing enrollment in our Ph.D. program through 2004-2005. However, we have had to drop the size of our entering Ph.D. class in half (from a planned 15 to 8) due to a combination of reduced fellowship and TA funding and increasing competition for domestic students.

Although graduate student credit hours will therefore decline through 2006-2007, the real workload associated with our Ph.D. program will continue to increase as the large cohort of students admitted in 2003-2004 start writing their dissertations.

We are actively pursuing extramural funding for graduate student fellowships, and we will also intensify our recruiting efforts to increase the size and quality of our applicant pool. This should lead to increasing the size of our entering Ph.D. class up to the planned level of 15-20 by Fall 2007.

c) Programs and Curriculum Major degree programs and brief overview of the goals of curriculum development over the next 10 years.

The Economics Department currently has three undergraduate majors and a Ph.D. program with special concentrations in public choice and transportation economics. During the last year we have made major changes to both of these programs, and we do not expect additional major changes over the next ten years. If sufficient faculty resources are made available, we will cooperate with other units in developing new graduate programs as described in Section III b) below.

Our Economics major is currently the largest at UCI, and we expect that many of these majors will switch to our new Business Economics major. Our curriculum development for undergraduate programs will focus on developing new courses to serve our new majors. In particular we will add new business economics and international electives. We will also start an internship program that we expect will primarily serve Business Economics majors. As the size of our core courses grow, we will establish formal curriculum committees to make sure that students receive a consistent curriculum across quarters and instructors.

This year we moved the Ph.D. candidacy exam from the end of the third year forward to the middle of the second year of the program. This change will force Ph.D. students to begin independent research much earlier (hopefully during their third quarter) and therefore get engaged with individual faculty advisors at a much earlier stage. This important change to our Ph.D. program will require more and broader faculty time devoted to the Ph.D. program, but will also improve both time to degree and (most importantly) quality of Ph.D. dissertations.

d) Professional, University, School and Community Service
 Describe unusual contributions to administration or service
 Department members frequently serve on Academic Senate and administrative committees. Recently department faculty members have been chairs of CAP and Graduate Council, and this year one faculty member is serving on CAP. In addition, some senior department members have served on multiple search committees for Deans and other high-level administrators. Economics faculty members currently serve on the executive committees for the Institute of Transportation Studies, the

Institute for Mathematical Behavioral Sciences, and the Center for the Study of Democracy.

e) Participation in Centers

Describe any strong participation in Centers or research groups
Economics Department faculty members are important participants in the Center for the Study of Democracy, the Institute for Transportation Studies, the Institute for Mathematical Behavioral Sciences, and GPACS. Department faculty members also participate in the UC Energy Institute and the UC Economic History group.

f) Funding/External Relations

Describe your Department's extramural funding profile and/or contributions to external relations

Although detailed data are not available due to staffing shortages, faculty members have been increasingly successful at obtaining extramural research funding, including winning highly competitive NSF and NIH competitions. Unfortunately this funding does not allow us to offer multi-year packages required to recruit top graduate students. We have therefore begun a fundraising effort to establish endowed graduate fellowships. We will also establish an external advisory committee from the community.

Faculty member also participate in numerous events designed to improve relations with the outside community. The department also cooperates with various groups in the School, especially the Center for the Study of Democracy, to bring distinguished outside speakers to UCI to give public lectures.

III. Overview of Departmental Strategy

a) Departmental strategy, and areas of strength without new faculty resources over the next 10 years

The following table shows the distribution of current faculty across fields in economics as of July 1, 2006. The plurality of the faculty is working in areas which fall under the general heading of empirical microeconomics. Recent recruiting has built strength in macroeconomics (although only at the junior level), industrial organization, and labor economics, and we still have clusters of faculty working in more the more specialized areas of transportation and public choice. Since eleven of our current 26 faculty have been hired in the last 3 years, current rankings and reputation lag well behind the department's current strength.

					Economet								
	Theory		International + Macro		rics	Finance	Empirical Micro				Institutions and Development		
	Micro Theory	Decision Analysis	Macro	Internatio nal	Economet rics		Trans/Urb an	IO	Labor	Environm ent	Growth/de velopment		Econ History
Bacolod		,						-	1				
Bilotkach							0.5	0.5					
Bitler									1				
Bogart													
Branch			1										
Brownstone					0.5		0.5						
Brueckner						0.3							
Chen								1					
Cohen								0.5				0.5	
Garfinkel			0.5									0.5	
Glazer	0.4							0.3				0.3	
Ishii								1					
Jeliazkov					1								
Kopylov	0.5	0.5											
Mazzolari						0.3			0.7				
McBride	0.4										0.3	0.3	
Milani			0.7		0.3								
Neumark									1				
Ouyang			0.7					0.3					
Poirier					1								
Ragusa					1								
Ranjan	0.5			0.5									
Richardson													
Saari	0.4											0.3	
Skaperdas	0.5											0.5	
VanDender						0.2	0.6			0.2			
Existing Total	2.7	0.8	2.9	0.5	3.8	0.8	2	3.9	3.7	0.2	0.3	2.4	
Agg. Total		3.5		3.4						9.8			4

 Agg. Total
 3.5
 3.4
 9.8
 4.7

 Grand Total
 26

Our current faculty will allow for a small increase in the number of majors. We have long wanted to offer enough undergraduate upper division writing courses to serve all of our departmental majors, but this can only be done with increasing the use of temporary lecturers.

We have sufficient faculty resources to support our current Ph.D. program, but not to support any growth. Our current faculty is fully engaged in advising our current Ph.D. students, so we do not have the capacity to expand our graduate offerings. Without new faculty our department will not be able to contribute to the planned increase in graduate enrollment at UCI.

Our strategy will be to fully implement our new undergraduate program and to improve the quality of our Ph.D. students. We have started an external fundraising effort, and all of the proceeds will be used to increase graduate student fellowship support. This increased support combined with improved marketing of our Ph.D. program will yield higher quality Ph.D. students.

b) Departmental strategy, and areas of strength with new faculty resources over the next 10 years

Comparisons with peer institutions show that our current faculty size is too small. UCSB, UCD, and UCSD have similar enrollments and programs, and they currently have 30, 29, and 36 active faculty (excluding emeriti) respectively. These comparisons suggest that we will need at least 9 new positions to deal with projected enrollment growth. 20 out of 23 currently active faculty completed an exercise where they were asked to allocate 9 new positions across the fields given in the previous table. The highest ranked allocation is to macroeconomics, and this is consistent with our long-running effort to hire a senior macroeconomist. The next position was allocated to international economics, followed by micro theory, econometrics, public finance, and growth and development. Two positions were allocated to empirical microeconomics, with the remaining one split between decision analysis and public choice.

If this recruiting plan were followed, then we would achieve critical mass (defined as at least 5 regular faculty members with primary strength) in micro theory, macroeconomics, econometrics, IO, and labor economics. Given our long-standing policy of only hiring new faculty who are better than our current average, hiring 9 new positions over the next 10 years will certainly improve our rankings and reputation. This in turn will allow us to attract higher quality Ph.D. students, and our fundraising efforts should allow us to get these students to join our Ph.D. program.

Additional faculty will allow us to expand our graduate program. We will expand the size of our current Ph.D. program, and we will also participate in new initiatives to increase the scope of our graduate offerings. We will work with the Department of Statistics to establish a concentration in econometrics which would include a MA in

University of California, Irvine Academic Senate Joint Program Review School of Social Sciences, AY 2009-10 Self-Study, Department of XXX

Statistics, and we will explore the possibility of offering a masters degree in quantitative finance with the Department of Mathematics. This masters program would be structured so that good students could easily transfer to either the economics or mathematics Ph.D. programs. We will also cooperate with efforts to establish a new Ph.D. program in Philosophy, Politics, and Economics jointly with LPS and Political Science. We will also work with Prof. Judy Treas and other colleagues in Sociology to establish a Center for Population studies. This may lead to a proposal for either concentrations in population studies within the existing Sociology and Economics Ph.D. programs or a new Ph.D. program in population studies. Finally, we will also work with colleagues in ITS to re-invigorate the existing Ph.D. in Transportation Science.

Additional faculty will also allow us to both accommodate planned increases in undergraduate enrollment while finally implementing the policy of requiring all majors to take upper division writing courses in the economics department.

IV. Resources

a) Critical existing resources and needs for new resources or infrastructure over the next 10 years

Our existing physical plant is barely capable of sustaining our current needs. Our seminars are frequently dangerously overcrowded, our graduate teaching facilities are too small, and we do not have office space to accommodate sorely needed additional staff. Many of these problems will be alleviated when the new building is available, but in the interim we need to do something to accommodate our increasing seminar schedule (we are starting a second seminar series in applied microeconomics this Fall).

The department currently has 2.5 staff members, and they are hard-pressed to accommodate current demands. As we increase the size of our undergraduate and graduate programs we will need at least one additional full-time staff to handle student contacts and support our new fundraising and internship programs.

Finally, we face a critical shortage of larger classrooms. We currently teach 2 sections of basic economics with 350 students in each section, and our lower division statistics sequence is almost as big. It is very difficult to schedule these courses, much less accommodate planned enrollment growth. One possible interim solution would be to use the Barclay Theatre for at least the fall-winter basic economics sequence, but clearly UCI needs to quickly build more large classrooms.

4. What are the emerging trends in your field nationally in terms of research and teaching specialties? How do your strategic plans for future faculty recruitment, new graduate or undergraduate programs and curriculum revisions fit with those emerging trends?

During the last decade there has been an increased interest in behavioral economics. We have a few faculty interested in this area, and we have long been interested in building

University of California, Irvine Academic Senate Joint Program Review School of Social Sciences, AY 2009-10 Self-Study, Department of XXX

strength in experimental economics (one of the key tools used in behavioral economics research). Our new building has a space designed for economics experiments, but we need funding for furniture, computers, and staff support. We are also cooperating with a new group of experimental economists at Chapman University, and hopefully one or two additional faculty in this area will strengthen

Concerns about climate change have led to renewed interest in environmental economics, public choice, and transportation economics. We have existing strengths in the last two areas, and we would like to build strength in environmental economics. This would allow us to more closely cooperate with strong UCI campus programs related to climate change and policy. This may lead to some specialized undergraduate or masters programs for students interested in doing interdisciplinary work in environmental policy.

LIST OF TABLES

(Data provided by OIR and OEOD via APRB unless otherwise noted; Data supplied by Department is in bold font).

Table 1: Department Faculty (Supplied by Department)

Table 2: Faculty and Staff; Department Budget; Extramural Support

OEOD Data on Availability of Ph.D. Recipients

Table 4: Budget Expenditures (Provided by Department)

Table 5: Development Data for FY 2004-05 through 2009-10 (Provided by Department)

Undergraduate Admissions and Enrollment; Demographics; Departmental Minors;

Undergraduate Courses; and Undergraduate Time to Degree

Table 7: Current Graduate Students (Supplied by Department)

Table 8: Graduate Admissions and Enrollment; Demographics; Graduate Courses; Time to Degree

Table 9: OEOD Data on Bachelors Degrees by Gender and Ethnicity

Table 10: Graduate Financial Support for last year data available (Supplied by Department)

Table 11: Graduate Student Support (Supplied by Department)

Table 12: Graduate Student Publications and Conference Presentations (Supplied by Department)

Table 13: Placement of Graduate Students since last Graduate Review (Supplied by Department)

Table 14: Postdoctoral Researchers since last Graduate Review (Supplied by Department)