



March 2007

California Postsecondary Education Commission

Review of a Proposal to Establish a School of Law at the University of California, Irvine

Pursuant to Education Code 66903, the California Postsecondary Education Commission is charged with reviewing and commenting on the need for new academic programs at California's public colleges and universities and with making recommendations to the Legislature and the Governor.

In September 2006, the Commission considered a proposal to establish a School of Law at the University of California, Irvine. Following a preliminary finding of non-concurrence, UC Irvine and the UC Office of the President submitted supplemental information in response to concerns raised by staff. This report contains a final analysis of all proposal information and supporting documents.

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The Commission advises the Governor and the Legislature on higher education policy and fiscal issues. Its primary focus is to ensure that the State's educational resources are used effectively to provide Californians with postsecondary education opportunities. More information about the Commission is available at www.cpec.ca.gov.

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Recommendation

Based on a review of proposal data, documents, and analyses provided by the University of California, Irvine (UCI) and the University of California Office of the President, including recently submitted supplemental information, the UC Irvine proposal does not satisfactorily meet:

1. The industry and occupational demand component of the Commission's *social need criteria*;
2. The program duplication component of the Commission criteria regarding the *number of existing and proposed programs in the field*;
3. The Commission's *total cost criteria*.

Although California could benefit from a higher proportion of law school graduates pursuing careers in public interest law, this issue is being addressed by the California Bar Association and by a number of existing public and independent law schools, most noticeably the UC Berkeley law school. These collective efforts, which appear quite promising, greatly lessen the need at the present time to establish a new public law school to increase the supply of public interest lawyers.

Given the above findings, the staff recommend that the Commission not concur with the proposal to establish a public law school at the University of California, Irvine.

Background

The University of California, Irvine proposes to establish a School of Law at the UC Irvine campus. The proposed law school would offer legal education programs leading to the Juris Doctor (J.D.) degree, the Masters of Law (LL.M.) degree, and the

Doctor of the Science of Law (J.S.D.) degree. The campus also would offer a select number of joint degree programs between the law school and other campus graduate and professional programs.

The proposal expresses a need by the University to expand access to public legal education programs on a regional and statewide basis in order to increase the number of legal professionals who are: (1) qualified to practice law in California; and (2) qualified to assume leadership roles in law, public service, government, and business. UC Irvine acknowledges the existence of quality independent law schools located throughout the State. However, officials assert that UC law schools, because they are situated on University of California campuses and because they retain highly-talented faculty, can offer an academic and social experience that is generally not available at many independent universities that do not have a comparable breadth of professional graduate programs.

The University notes that a public law school is needed especially in Southern California to meet emerging industry and business needs and to balance out the three public law schools located in Northern California. Presently, there is one public law school and ten American Bar Association (ABA)-approved private/independent law schools located in Southern California. These schools, collectively, accounted for over half of the graduates of ABA-approved schools who passed the Bar examination in July 2006.

The Irvine campus is considering leasing physical space in the near-term and building a new facility in the long-term that would consist of 92,000 assignable square feet to accommodate 600 students, of which 201 would be first-year students. UCI estimates that the proposed physical space is sufficient to support research-related functions, faculty offices, student support activities, and a law library. These instructional costs are projected to average about \$16 million annually beginning in 2014-15 and continuing through 2018-19. This figure excludes \$2.9 million in annual operational costs associated with maintaining a public law library. Capital costs for constructing a new facility would total roughly \$70 million.

The campus intends to fund at least half of the capital costs and a portion of the operational costs through private resources, with the remainder coming from the State's Capital Outlay Program, general fund FTES allocations, student fee revenue, and student professional fees. UC Irvine planners emphasize that legal education is an existing element of the UCI's current long-range growth plan, which has been approved by the UC Office of the President. Therefore, the State would not be asked to assume any capital or operational expenses beyond that which would likely be provided if the UCI enrollment growth plan is funded. This assertion is discussed in the campus supplemental report.

Following an assessment of the initial UC Irvine proposal by Commission staff in September 2006, it was found that the proposal met the Commission's criteria guidelines regarding *student demand, advancement of knowledge, maintenance and improvement of quality, and appropriateness to the institutional and system mission*. However, the Commission found that the proposal did not reasonably meet criteria related to *societal need, number of existing programs in the field, and program costs*. Given these findings, UCI officials requested that its proposal not be heard by the Commission in December 2006. Subsequently, after consulting with UC officials, the Commission's staff prepared a detailed letter to UCI officials requesting additional information and analyses that might strengthen the law school proposal. More specifically, UCI was asked to:

- Clarify the long-term capital costs that the State might be asked to incur.
- Identify the fund source for annual lease costs which are anticipated to total approximately \$1.76 million beginning in 2009.
- Update projections of supply and demand for California attorneys by incorporating recent historical data for the period 2000 to 2006 or provide alternate data.

- Work with Commission staff in analyzing UC applicant data to determine if a *place-bound* effect is in evidence, whereby law school graduates tend to practice in the same county in which they receive their legal education.
- Provide evidence that Southern California law applicants are disadvantaged in gaining acceptance to public law schools located in Northern California.
- Collaborate with Southern California public and private law schools to derive evidence of an inability of existing law schools to adequately meet regional business and industry needs.
- Identify and describe valid indicators of law school quality that differ from those used by Commission staff and by RAND Corporation researchers.
- Clarify the incentives that would be used to assist prospective law school students that have a keen desire to practice public interest and administrative law.

Statutory and Administrative Requirements

Assembly Resolution 770, Statutes of 1974, established the California Postsecondary Education Commission as the statewide planning and coordinating agency for higher education, with major responsibility for program review. *Education Codes 66902 thru 66904* express the intent of the Legislature that the Commission has the following specific academic and vocational program review responsibilities:

- Review and comment on the long-range plans developed by the public higher education governing boards and make recommendations to the Legislature and the Governor.
- Review and comment on the need for new academic, vocational, and certificate programs proposed by the public higher education systems and make recommendations to the Legislature and the Governor.
- Evaluate and comment on the program review process of the public higher education systems.
- Identify societal educational needs and encourage institutional adaptability to change.
- Review periodically the availability of continuing education programs for adults and make appropriate recommendations.

In consultation with the public higher education systems, the Commission developed a set of criteria to guide the program review process. The criteria are intended to: (a) safeguard the State against inefficiencies in the allocation of State resources; (b) help ensure that new programs will meet student and societal needs; and (c) ensure that programs are well-conceived and that they will have desired educational and social consequences. As defined in statute, the Commission's role in the review process is primarily advisory. However, in the case of Joint Doctoral Programs involving public and private institutions, the Commission has approval authority.

The guidelines used by Commission staff in reviewing new undergraduate, graduate, and professional programs, shown in Appendix A, include the following seven criteria:

- Societal Needs
- Student Demand
- Appropriateness to the Institutional and Segmental Mission
- Number of Existing and Proposed Programs in the Field
- Total Costs of the Program
- Maintenance and Improvement of Quality
- Advancement of Knowledge

Analysis of Program Review Criteria Met by the UCI Proposal

This section provides an analysis of the Commission's program review criteria met by the UCI proposal. These criteria are: *student demand, advancement of knowledge, maintenance and improvement of quality, and appropriateness to the institutional and segmental missions.*

Student Demand

Within reasonable limits, students should have the opportunity to enroll in programs of study in which they are interested and for which they are qualified. Therefore, student demand for programs, indicated primarily by current and projected enrollments, is an important consideration in determining the need for a new program.

DISPLAY 1 Projected UC Irvine Annual Enrollments Fall 2015 as a Percentage of Total UC Law School Enrollments

Campus	First-Year Students		All Students	
	Number	Percentage	Number	Percentage
UC Berkeley	264	27.0	826	28.1
UC Davis	194	19.8	576	19.6
UCLA	320	32.7	933	31.8
Hastings	419	30.0	1,286	30.5
UC Irvine (Projected)	200	20.4	600	20.4
Public Total	1,397	100.0	4,221	100.0

As of fall 2005, public law schools serve about 3,621 students annually, of which about 1,197 (33.1%) are first-year students. With the addition of the proposed UC Irvine law school, public annual enrollments would total about 4,221, of which 1,397 would be first-year students.

It seems reasonable, as revealed in Display 1, that the number of students currently served by the UC Davis campus would be slightly lower than the projected number of students who might be served by the proposed UC Irvine law school, given the large number of prospective students residing in Southern California who might wish to remain in the area after attending law school. Hastings, Berkeley, and UCLA campuses would continue to account for a larger proportion of UC legal education. The UC Irvine law school is not likely to experience difficulty in meeting its enrollment targets since UC law schools offer admission to less than 16% of their law school applicants. It should be noted that only 30% of admitted students elect to enroll at a UC law school. This suggests that 70% of admitted UC law applicants are either enrolling at independent, private law schools or their professional graduate plans have changed.

A discussion of student demand would not be complete without a meaningful discussion of affordability issues. In the letter sent to UCI requesting additional information, Commission analysts raised questions regarding the extent to which UC law school fees are more affordable than fees at most independent schools. Data show that registration and related fees at UC law schools averaged about \$25,000 per year, whereas fees averaged about \$33,000 per year among all Bar-certified independent law schools. The supplemental information provided by UCI revealed that when voluntary health insurance fees are subtracted from the average fees among the public law schools, the difference in affordability amounts to \$9,984, or a cost differential of \$29,952, over three years of legal education enrollment.

The Commission considers the cost differential to represent a substantial savings to students who are able to gain admission to public law schools. However, there is no assurance that lowering student costs would produce any broad public benefit; and, given recent discussions regarding student fee increases, the cost savings might not be realized. For example, a January 2007 proposal by the Dean of the UC Berkeley Law School to the UC Board of Regents would raise student fees by 13% for each of the next five years. This would bring them on a par with that of other leading law schools, such as the University of Michigan Law School, which currently charges its students about \$35,000 per year in tuition.

Appropriateness to Institutional Mission

Programs offered by a public institution within a given system must comply with the delineation of function for that system, as set forth in the California Master Plan for Higher Education. Proposed new programs must also be consistent with the institution's own statement of mission and must be approved by the system's statewide governing body.

The California Master Plan for Higher Education accords the University of California public responsibility for professional education in law, medicine, dentistry, and veterinary medicine. Thus, the establishment of UC law schools is clearly consistent with the Master Plan for Higher Education, given a demonstrated need. The proposal notes that a law school was designated in the original plan for the Irvine campus by former UC President, Clark Kerr. In 1965, founding Chancellor Dan Aldrich described a law school as part of the long-range vision for the Irvine campus. Presently, establishing a public law school is the top degree program priority for the UC Irvine campus, as identified in Appendix B, which shows the most recent long-range plan for new academic programs. The UC Irvine law school proposal was considered by the UC Board of Regents in January 2007. The Board will make a final recommendation after it has had the opportunity to review and discuss the Commission's findings contained in this report.

Maintenance and Improvement of Quality

Protecting the public interest and trust requires that educational programs at all levels be high quality. Although the primary responsibility for the quality of programs rests with the institution and its system, the Commission, for its part, considers pertinent information to verify that high standards have been established for the operation and evaluation of the program.

There are a number of dimensions of quality and student outcomes that distinguish UC law schools and numerous California private law schools. Quality features are characterized by high admission selectivity, a highly capable law school dean, exceptionally talented faculty, and contemporary instructional and teaching practices. In regards to this latter dimension of quality, it appears that considerable thought and effort have been devoted to the development of the proposed UCI law school curricula. Similar to the existing UC law schools, UCI intends to establish a number of interdisciplinary law programs, so its law students will have an opportunity to combine the study of law with the scholarly study of other substantive academic areas. An additional distinguishing feature is that UCI law school students would have an opportunity to pursue legal education at a public research university ranked within the top ten percent of public research universities by *U.S. News and World Report*. This ranking is tied in part to the campus faculty that includes three Nobel laureates, two members of the National Academy of Engineering, and 24 members of the National Academy of Sciences.

Outcome features of UC law schools, in general, include first-time California Bar pass rates that exceed the statewide July 2005 mean rate of 64% and overall job placement rates that generally exceed 90%. It is likely that the proposed UCI law school would achieve similar outcomes if established.

Advancement of Knowledge

The program review process encourages the growth and development of intellectual and creative scholarship. When the advancement of knowledge seems to require establishing programs in new disciplines or in new combinations of existing disciplines, such considerations as costs, student demand, or employment opportunities may become secondary.

The opportunity for prospective law students to study on a campus that includes Nobel laureates and members of the Academy of Sciences is likely to stimulate intellectual scholarship and curiosity. In addition, the proposed UC Irvine law school is intended to challenge students to think more deeply and critically about a number of complex social issues regarding: (a) equal opportunity; (b) racial and national identity; (c) minority rights; (d) civil and individual rights; and (e) social justice. With respect to the business community, the proposed law school would provide opportunities for students to develop an in-depth understanding of complex issues related to *patent law, intellectual property law, international law, and administrative law.*

Analysis of Program Review Criteria Not Met by the UCI Proposal

Societal Needs and Institutional Capacity

Postsecondary education institutions bear a responsibility for preparing students to meet the State's workforce and knowledge needs. Workforce demand projections serve as one indication of the need for a proposed program. Although achieving and maintaining a perfect balance between supply and demand in any given career field is impossible, it is important nevertheless that the number of persons trained in a field and the number of job openings in that field remain in reasonable balance.

To meet the above criterion, a public university proposing a new degree program must provide sufficient empirical information as part of its proposal that confirms a workforce and knowledge need. If need is clearly demonstrated, the Commission carefully reviews information contained in the proposal regarding the level of instructional and physical capacity deemed necessary to meet the need in the most cost-effective manner, so that California taxpayers are not unduly burdened. Specifically in regards to societal need, a principal evaluative question considered by the Commission was whether or not the current annual increases in *high-quality* law school degree production will be sufficient to meet California's workforce needs over the next ten years in the areas of private legal services, business services, government services, and public interest/advocacy law services.

The Commission recognizes that the nation's legal system permeates nearly every aspect of American society and that it is rooted in the concept of social justice. The promotion of social justice and equality of opportunity require not only an adequate supply of attorneys and judges, but also a supply of legal professionals to work in other occupational and industry categories where a legal background is desired and valued. Such persons include government officials and legislators, university professors in various disciplines, managers of private and non-profit corporations, research analysts, and legal aid advisors, to name a few. Although it is nearly impossible to derive reliable estimates of the number of legal professionals needed to support these latter occupations, projection methods do exist for deriving valid estimates of supply and demand for lawyers and judges. Supply issues are discussed in the next section, followed by demand considerations.

Analysis of Need Regarding the Supply of California Attorneys

In 1999, the University of California contracted with the RAND Corporation to develop statewide and regional estimates of supply and demand for California lawyers and to identify any significant mismatches between supply and demand. In 2003, RAND released its report indicating that the supply of active California attorneys would increase from approximately 133,972 in 1998 to 214,800 in 2015, an increase of 60.3% over the projection period. RAND used the number of California Bar-certified members on active status as a proxy for *supply*. When the projections of supply were compared with the projections of demand, RAND concluded that the number of Bar-certified lawyers would likely keep pace with or exceed the growth in demand between now and 2015, for the State as a whole and for each region in the State as well.

RAND cautioned that making projections about future supply and demand in any type of labor market is an inherently difficult task because it is not possible to observe supply and demand directly. That is, “the number of lawyers qualified to practice law and the number currently employed can be observed, but these observed quantities do not represent supply and demand, *per se*, but rather the choices of individuals and employers that result from the interaction of the forces governing supply and demand in the labor market” (RAND 2003). Commission analysts concluded in their initial review that if the observed historical linear relation between supply and demand for lawyers remained reasonably reliable over the projection period, then the RAND projections provided a reasonable indication of the direction in which supply and demand would likely move.

Because UCI disagreed with the conclusion derived by the RAND forecast, Commission analysts recommended that the university consider updating the forecast using the most recent eight years of historical data. An updated forecast was subsequently prepared by UCI and included in supplemental information submitted to the Commission. In reviewing the most recent eight years of actual data, as shown in Display 2, UCI observed that

Commission Review of RAND Projections

Commission staff contracted with a former U.S. Bureau of Labor Statistics mathematical statistician to assist it in analyzing and addressing supply/demand issues. In deriving its forecast, RAND used an exponential smoothing method that weights historical data differentially so as to minimize the residual variance between actual and projected data. When properly applied, exponential smoothing methods help reveal an underlying trend more clearly. For some applications, however, the method tends to work quite well in the near term, while becoming less reliable as one moves further out into the future.

Notice from Display 2 that this is what occurred in the RAND forecast. That is, for the first four projection years, 1998 to 2001, RAND never overstated the supply of active California attorneys by more than a single percentage point. Beginning in 2002, the fifth year, the residual difference gradually increases, however, and reaches 6.11% in 2006. This upward bias suggests, as concluded by UCI, that the RAND supply forecast might be off by as much as 35,000 in 2015.

Commission analysts conducted a regression analysis that used the number of active Bar members as the sole independent factor to test the linear strength of the most recent trend, which covered years 1998 to 2006. In a regression analysis, an *r* value (correlation) close to 1.0 indicates a near perfect linear trend and the slope of line, beta, indicates, in the present case, the average annual increase in active bar members predicted by the regression model.

The results of the regression analysis are:

<i>r</i> value	0.98	r^2	0.96
Intercept	129,898	Slope (beta)	2,716
<i>t</i> -value	14.44	Significance	.000

The *t* and significance value indicate that the regression parameters are statistically significant. These values are relevant when addressing probability issues involving random sampling.

The *r* value indicates a strong linear trend. The slope of the regression line estimates that the statewide supply of active Bar-certified lawyers is likely to increase 2,617 annually. This latter statistic is quite consistent with the projected number of job openings for lawyers and judges which will be discussed in the next section.

the RAND projections overestimated the supply of California attorneys in 2006 by more than 17,000, and that the difference might be as large as 35,000 by 2015. In extending a revised linear trend, UCI concluded that the supply of California lawyers in 2015 would more likely approximate 179,000 than the 214,800 figure projected by RAND. Commission review comparing the RAND projection with actual data from 1998 to 2006 showed that the current supply trend should hold quite well in the near term, and hold reasonably well in future years. Therefore, the Commission concurs with UCI that the supply of California attorneys and judges is more likely to approach 179,800 in 2015, which translates to approximately 35,000 fewer attorneys and judges maintaining active Bar status in 2015 than projected by RAND.

DISPLAY 2 RAND Projections of Active California Attorneys in Comparison to Actual Attorneys, 1998 to 2006

Year	RAND Projections of Active Attorneys	Actual Number of California Attorneys	Difference	Percent Difference
1998	129,800	133,927	-4,127	-3.18
1999	133,704	133,255	449	0.34
2000	137,724	138,751	-1,027	-0.75
2001	141,866	140,485	1,381	0.97
2002	146,133	142,913	3,220	2.20
2003	150,527	143,566	6,961	4.62
2004	155,054	149,440	5,614	3.62
2005	159,717	150,067	9,650	6.04
2006	164,521	154,463	10,058	6.11
Commission applied an annual average compounded change rate to the RAND forecast.				

Analysis of Issues Regarding Demand for California Attorneys

RAND used the employment of lawyers and judges as a proxy for *demand*. Based primarily on national data derived from the *Current Population Survey (CPS)*, RAND developed two alternative forecasts of demand. The CPS is a monthly survey of about 50,000 households conducted by the U.S. Bureau of Census for the Bureau of Labor Statistics. It is one of the major sources of information about the nation's labor force. Included in this scientifically-drawn national sample are approximately 6,000 randomly selected California households, representing 6 percent of the national sample.

Demand forecasts developed by RAND included factors related to: (1) *population trends*; (2) *changes in local economies*; (3) *employment level of attorneys within industries*; and (4) *current distribution of attorneys throughout California*. This forecast method is based on the assumption that the employment of attorneys would be determined entirely by population. The method involved applying the national average rate of lawyers per capita in 1998 to State and regional population projections through 2015 that were prepared by the Demographic Research Unit of the California Department of Finance. This method resulted in a demand estimate of 156,500 California attorneys in 2015.

RAND also used a second forecast method that assumes that the employment of attorneys is shaped by changes in both population and economic activity across major industries. This latter method resulted in a different demand estimate of 177,400 California attorneys in 2015. The projection was derived by applying 1998 national rates of attorneys per industry to California industry projections developed by the

Labor Market Information Division (LMID) of the California Employment Development Department. In other words, the national data were controlled to California's industry mix.

UCI has raised several concerns regarding the RAND demand projections. First, UCI argued that RAND did not attempt to calibrate its per capita ratio with other states or with the nation as a whole. In fact, the *per capita ratio* used by RAND is based on national CPS data, which, by definition, is calibrated as the average of *all* states.

The second concern expressed by UCI is that RAND should not have held the ratio constant at the 1998 level because of evidence indicating that per capita rates tend to change over time. This assertion is a valid one.

Third, UCI asserts that California should be compared with a subset of nine other populous states, consisting of Florida, Georgia, Illinois, Michigan, New Jersey, New York, Ohio, Pennsylvania, and Texas. According to UCI, these states have more in common with California than do other states. UCI states that these commonalities include large and complex economies, diverse populations, similar social and political needs, and large metropolitan areas with national and international centers of commerce.

With respect to the nine comparison states, UCI observed that California ranks near the bottom in terms of the number of attorneys per 1,000 residents. The University concluded that if California's growth in attorneys kept pace with the mean growth rate of these nine states, there would have been 2,500 more attorneys employed in California in 2004 than recorded. The Commission notes a number of concerns with this line of reasoning.

First, UCI provided no evidence that California is not well-served by its current attorney-population ratio, even though it is lower than that of the comparison states.

Second, the 2004 base figure reported by UCI is inaccurate. In the supplemental report sent to the Commission, UCI states that there were 137,496 attorneys employed in California in 2004. By adding 2,500 to this figure, UCI inferred incorrectly that there would have been 140,000 attorneys employed in California during 2004 if California's growth rate had kept pace with the nine comparison states. The problem with this reasoning is that UCI used the *County Business Patterns (CBP)* of the U.S. Census Bureau as its data source. The CBP data reflect all persons employed in a particular business establishment or office firm including attorneys, clerical staff, paid student assistants, and legal trainees. Because the CBP excludes government employees, the number of public defenders and prosecutors serving California is not captured. Therefore, CBP is not an accurate data set to assess attorney need.

What is appropriate in assuring need is a California data source that entails valid occupational projections by industry. Under the guidance of the Bureau of Labor Statistics, every state administers an *Occupation Employment Survey Program (OES)*. California's OES Program, administered by the Labor Market Information Division of the California Employment Development Department, uses four survey panels involving over 113,000 employers to provide quarterly and annual employment projections for approximately 800 occupations. Together with its *Current Employment Survey Program (CES)*, LMID is able to derive occupational projections by industry. Shown below are some of the legal occupations for which projection data are available:

- Lawyers
- Law Teachers, Postsecondary
- Judges, Magistrate Judges, and Magistrates
- Administrative Law Judges, Adjudicators, and Hearing Officers

LMID employment projections for the legal occupations are shown in Display 3 for the period 2007 to 2014. The UCI/CPEC updated RAND supply projections are also included. Planning analysts involved

in workforce issues consider the LMID employment projections to offer the most valid measures of California's labor market and industry needs than that offered by other sources. The LMID projections are preferred over other data sources because its survey programs: (a) involve large samples drawn scientifically; (b) generate data that are adjusted to reflect self-employed persons; (c) include over 800 occupations in all major industries; and (d) are informed by the survey work of the Bureau of Labor Statistics. The technical notes to the *Occupation Employment Survey Program and the Current Employment Survey Program* are included as Appendices C and D, respectively.

The numerical difference between the employment demand projections and the projections of labor supply shown in the display suggests that the anticipated supply of Bar-certified members who are eligible to practice in California will be sufficient for meeting State needs in the legal occupations shown in Display 3. The data also show that there will be excess supply available to support occupations for which a legal background is valued. As noted previously, these occupations include elected government officials and legislators, social science professors in selected disciplines, managers of private and non-profit corporations, research analysts, and legal aid advisors.

DISPLAY 3 Projections of Supply and Demand for Selected California Legal Occupations

	<i>Employment Projections (Labor Demand)</i>						<i>Projections of Active Calif. Bar Members Eligible to Practice (Supply)</i>	
	Lawyers							
Year	In-State Office	Out-of-State Office	Law Professors	Judges & Magistrates	Admin. Judges	Subtotal Legal Demand	Labor Legal Supply	Difference
2007	85,000	14,020	2,800	1,600	1,500	104,920	156,071	51,151
2008	86,283	14,232	2,914	1,614	1,514	106,556	158,689	52,133
2009	87,586	14,447	3,032	1,628	1,528	108,220	161,306	53,086
2010	88,908	14,665	3,155	1,642	1,542	109,912	163,923	54,011
2011	90,250	14,886	3,283	1,656	1,556	111,633	166,541	54,908
2012	91,613	15,111	3,417	1,671	1,571	113,382	169,158	55,776
2013	92,996	15,339	3,556	1,685	1,585	115,161	171,775	56,614
2014	94,400	15,570	3,700	1,700	1,600	116,970	174,392	57,422
<p>Employment Projections for 2007 and 2014 were obtained from the California Labor Market Information Division. CPEC staff computed compounded change rates for intervening projection years.</p> <p>Employment of out-of-state lawyers estimated by CPEC staff based on the proportion of California Bar Members who listed an out-of-state office as their business location, as reported by the California Bar Association.</p> <p>Supply projections derived by CPEC staff based on a regression model using the actual number of <i>active California Bar Members</i> as the dependent variable and <i>year</i> (1998 to 2006) as the independent factor. The model is the same as that used by UC Irvine.</p>								

Display 4 shows projections of job growth and new hires for in-state attorneys, judges, and law professors for the period 2007 to 2014. The data exclude out-of-state attorneys who provide legal services in California. The projections of in-state employment and annual job openings (demand), when compared with projections of new law school graduates who pass the Bar, and the number of Bar members on active status who are not employed as legal professionals, suggest that supply will likely outpace demand,

consistent with the analysis presented earlier in Display 3 and mirroring the national labor outlook. This means that competition for job openings will be strong throughout the projection period. Anticipated job openings that would likely be filled by legal professions who reside outside California are not shown in the display.

DISPLAY 4 Projections of Job Growth and New Hires for In-State Attorneys, Judges, and Law Professors, 2007 to 2014 (Data Exclude Out-of-State Attorneys Who Provide Legal Services in California)

<i>Estimate of In-State Employment and Job Openings (Demand)</i>				<i>Estimate of Supply Available for New Hires</i>	
Year (1)	In-State Employment of Lawyers, Judges, and Law Teachers (2)	In-State Job Openings		New Law School Graduates with Active Bar Membership Status (5)	Estimate of Bar Members on Active Status who are not Employed as Lawyers, Judges, or Law Teachers (6)
		Annual Openings Due to Separations (3)	Total Annual Job Openings (4)		
2007	90,900	1,150	2,540	3,500	51,151
2008	92,325	1,150	2,540	3,675	52,133
2009	93,774	1,150	2,540	3,859	53,086
2010	95,248	1,150	2,540	4,052	54,011
2011	96,747	1,150	2,540	4,254	54,908
2012	98,271	1,150	2,540	4,467	55,776
2013	99,822	1,150	2,540	4,690	56,614
2014	101,400	1,150	2,540	4,925	57,422

Projections of in-state employment and job openings derived by the Labor Market Information Division (LMID) of the California Employment Development Department.

Column 5 provides an estimate of new law school graduates of ABA-approved schools who are likely to pass the Bar and maintain active California Bar membership status. The information was obtained from the California Bar Association by UC Irvine and sent to the Commission.

Column 6 is the difference between the estimated labor supply of legal professionals who maintain active status and the estimated number of legal professionals on active status who are employed in the occupational categories shown above. These numbers are the same as those shown in the last column of Display 1.

One might argue that active members of the California Bar who are not projected to be employed as an attorney, judge, or law professor are quite likely to be employed in other occupational categories for which a legal background is desirable; therefore, their numbers should not be reflected in the labor pool for the legal occupations referenced in Displays 3 and 4. Even if many of these individuals seek employment in other occupational categories, they are still eligible to compete for legal contracts and job openings as they occur, so long as their Bar status remains active. Labor supply would be understated if those numbers were excluded from the supply side of Display 4. Further, the data indicate that the current production of law school graduates alone would be reasonably sufficient for meeting entry-level legal demand on a statewide basis. What is not captured here, however, is demand disaggregated by specialty field of law practice, such as *intellectual property law*, *venture capital and corporate law*,

international law, and environmental law, to name a few. Clearly, employment estimates for some of the fastest-growing specialty fields would enrich the discussion. Even so, the data presented in this section are sufficiently comprehensive to support the conclusion that the supply of attorneys and judges will likely be adequate for meeting demand over the projection period.

Analysis of Statewide Knowledge Need Regarding the Quality of Law School Degree Production

The proposal asserts that, because UC law schools are operating at maximum capacity in terms of physical space and the number of instructional faculty, a new public law school is needed so that as California's population and economy expand, the current ratio of private to public law schools will remain reasonably balanced. Although the University acknowledges the existence of quality independent law schools located throughout the State, officials assert that UC law schools, because they are situated on comprehensive campuses and because they retain highly talented faculty, can offer an academic and social experience that is generally not available at many independent universities that do not have a comparable breadth of professional graduate programs.

In reviewing the attributes of the 15 ABA-accredited independent law schools, the Commission found that at least seven law schools, in addition to Stanford and the USC Gould School of Law, appear to be providing California residents with an exceptionally high level of legal instruction and public service. Each of these law schools compares favorably with respect to the dimensions of quality and student outcomes. These schools are Loyola Law School, McGeorge School of Law, Pepperdine University School of Law, Santa Clara University School of Law, University of San Francisco School of Law, Southwestern School of Law, and the University of San Diego School of Law. Two of these independent schools posted Bar-passage rates that exceeded the 2005 pass rate for one of the UC law schools. It also should be noted that most of these schools offer their students an opportunity to combine the scholarly study of law with coursework in other disciplines, though perhaps not quite to the extent that UC schools are able to offer.

Analysis of Regional Knowledge Need for a New Public Law School in Southern California

The UC Irvine proposal expresses a need to establish an additional public law school in Southern California so that promising prospective law students in the region will have greater access to public legal training and instruction at a more affordable cost than that offered by many independent law schools located in the area. The proposal claims that a UC Irvine law school would be positioned to meet emerging regional industry needs in the area of *patent law, intellectual property law, international law, environmental law, and public interest law*.

An argument for an additional public law school in Southern California would have more merit under four principal circumstances. *First, if UC law schools drew from a regional pool more so than from a national and statewide applicant pool.*

Second, if evidence indicates that Southern California applicants are disadvantaged in the selection pool of Northern California public law schools. Such evidence would need to demonstrate that the probability or odds of an exceptionally-qualified resident of Southern California admitting to a California public law school is statistically lower than an equally-qualified Northern California resident. No such evidence has been presented.

Third, if labor market data tended to indicate an under-supply of attorneys serving various Southern California counties. Display 5 reveals that, with the exception of Riverside County, the number of attorneys projected to be employed in counties in the UCI area will likely be less than a third of the number of attorneys on active status who reside within a particular county in Southern California.

DISPLAY 5 Projected Employment and Job Openings for Lawyers in Selected Southern California Counties for which Data are Available

County	Estimated Population 2007	Supply	Projected Employment of Lawyers (Demand)			
		Calif. Bar Members on Active Status who reside within the County 2007	2002	2012	Annual Change Rate	Projected Annual Job Openings
Orange	3,083,894	14,005	4,090	5,010	1.96	145
San Diego	3,084,634	13,415	4,090	4,870	1.76	131
Riverside	2,004,608	2,771	2,230	2,850	2.48	91
Los Angeles	10,292,723	47,267	18,720	22,240	1.74	593
County population projections prepared by the Demographic Research Unit of the Department of Finance.						
County employment projection data derived by the Labor Market Information Division (LMID) of the Employment Development Department.						
County Bar membership data obtained from the California Bar Association.						

Display 5 shows that the Labor Market Information Division projects that approximately 5,010 individuals would be employed as attorneys in Orange County in 2012; yet, in 2006, there were more than 14,000 attorneys on active status who resided within that county. Similar statistics are shown for Los Angeles County and San Diego County. The display also indicates that the annual growth in job openings for attorneys will be less than 2 percentage points for those counties. Consequently, there does not appear to be a demand-supply imbalance.

Fourth, an assertion of need for an additional public law school in Southern California would have more merit if UC Irvine provided information indicating that the combination of public and private law school degree production in the region could not be leveraged effectively to meet emerging business and industry needs in key fields of law practice. Such information might be obtained by UCI consulting with independent law schools located in the area. Because U.S. Census data demonstrates that Orange County and Los Angeles County share a common industrial and business labor market environment, it probably would be beneficial for UC Irvine to discuss regional supply-demand issues with the UCLA Law School, Pepperdine Law School, Southwestern Law School, Loyola Law School, and Chapman University School of Law.

At this time, there is no evidence to conclude that the UC Irvine law school proposal meets key regional needs not currently addressed by the combination of public and private law schools located in the region. An assertion of regional need would be stronger if UCI provided evidence that the Orange County area is unable to attract talented legal professionals. In this regard, the proposal states that the absence of a public law school in Orange County equates to insignificant intellectual capital in the region at a detriment to local industries. Based on an examination of Orange County law firm websites, the proposal notes that approximately 40% of attorneys employed at the largest firms attended out-of-state law schools. This should not be viewed necessarily as detrimental to the intellectual well-being of the region when considering the law schools from which out-of-state attorneys graduated. For example, in examin-

ing the rosters of the three largest Orange County-based firms (Rutan and Tucker, Stradling Yocca Carlson & Rauth, and Knobbe Martens Olson & Bear), the majority of lawyers who attended law school out-of-state graduated from a U.S. News and World Report nationally-ranked top 20 law school, including Harvard University, Georgetown University, University of Texas, George Washington University, Duke University, and University of Minnesota (only the public law schools UC Berkeley and UCLA are in the top 20). This suggests that Orange county law firms have the resources and the prestige to recruit excellent legal minds from across the nation.

Issues Regarding Public Interest Lawyers. The UC Irvine proposal expresses a critical need to expand the number of law school graduates interested in pursuing careers in public interest law. Presently, less than 15% of law graduates pursue careers in government legal services or public interest advocacy. The proposed UC Irvine law school would emphasize public service and social justice law and would provide financial incentives for needy students selecting those areas of concentration.

Commission staff conducted a content analysis of the brochures of every UC law school and found that each UC law school has a comprehensive public interest law option, complete with internships for second and third-year students. All nine of the independent law schools previously noted also offer public interest law programs. Thus, the small percentage of law graduates entering public service does not appear to be the result of limited access to public interest law programs. Rather, information suggests that the cost of pursuing a law degree at private and public schools, coupled with low average starting salaries for public interest positions, discourage many interested students from selecting public interest law as a viable career option that would yield an adequate return on investment. As an example, the UC Davis Law School notes that its law students should expect to incur an average cost of attendance—including student fees, books, room and board—in excess of \$100,000 over a three-year period. The average starting salary for the UC Davis 2004 graduating law class that elected public interest careers was \$43,100, compared with a starting salary of \$88,800 for its 2004 law graduates who opted for private practice.

UC Irvine submitted additional information indicating that the proportion of public law school graduates who elect careers in public interest law is about 50 percent higher than that of private law school graduates. While this may be true, the *January 2007 edition of the California Bar Journal* reported that the “American Bar Association and the Association of American Law Schools are pushing for federal legislation that would give a variety of tax breaks, loan forgiveness and alternative repayment programs for law school graduates who choose the public interest route.” The Journal also noted that California law school administrators are initiating their own efforts to promote the practice of public interest law.

Given that UCI would graduate approximately 200 students annually, of which less than 20 might select public interest careers, it is not likely that a new public law school in Southern California would increase substantially the number of public interest lawyers in California above the number that might result from the federal and State public interest initiatives that are underway. The Commission continues to recommend that public and private law school administrators consider encouraging their local legislators to actively support State funding of the *Public Interest Loan Repayment Program*, which was established by Assembly Bill 935 in 2001. That legislation provides for a loan repayment program for licensed attorneys who practice or agree to practice public interest law. The program, to be administered by the Student Aid Commission, has never been funded. UC Irvine expressed some reservation about this particular loan repayment program. Their concern is that the program would subsidize costly private legal education because it would be available to all law graduates. The Commission agrees that some legislative thought should be directed toward this issue.

Number of Existing and Proposed Programs in the Field

An inventory of existing and proposed programs provides an initial indication of the extent to which apparent duplication or undue proliferation of programs exists, both within and among the higher education systems. However, the number of programs alone cannot be regarded as an indication of unnecessary duplication. This is because: (a) programs with similar titles may have varying course objectives or content; (b) there may be a demonstrated need for the program in a particular region of the State; or (c) the program might be needed for an institution to achieve academic comparability within a given system.

Concerns Regarding Program Duplication

The impetus for the program review criterion related to program duplication is to encourage institutional collaboration in program planning to avoid unnecessary program duplication. UC Irvine submitted a letter of support co-signed by each of the public law school deans, but it provided no evidence that meaningful discussions have taken place with these law administrators regarding the need for an additional public law school. The exception being the Dean of the UC Berkeley Law School, who assisted UCI in preparing its proposal. Neither the initial proposal nor the supplemental submission contained information indicating that the proposed UC Irvine law school curriculum in the area of *patent law, intellectual property law, international law, and environmental law* is not adequately covered by existing public and private law schools, including those located in Southern California. It is likely, then, that a new public law school would duplicate many of the program offerings and services of existing law schools while not adding any additional public value.

Concerns Regarding the Need for Program Comparability

A UC Irvine law school has been part of the campus academic plan since it was established in 1964. UCI executives believe that a law school, along with the existing medical school, is necessary in order for the Irvine campus to reach a level of national prominence, consistent with other nationally recognized universities that have both a law school and a medical school. The University's proposed new degree programs for 2006-11 are presented in Appendix B. Within the UC system, the concept of *comparability* has always been more of a concern at the undergraduate level than at the graduate level. That is, as UC campuses have developed over the past century, there has been a strategic effort to develop and expand undergraduate academic programs so that prospective California public high school graduates who place within the top 12.5% of their respective class would receive a comparable level of undergraduate instruction, regardless of the specific UC campus they might elect to attend. The California Postsecondary Education Commission has supported such efforts through its program review process and its statewide planning and coordinating responsibilities.

The development of UC graduate programs has followed a somewhat different path. During the early years of development, UC Berkeley graduate programs emerged to meet State and national needs in agriculture and mining prior to the turn of the century. The UCLA campus was established in 1919 principally as an undergraduate institution, with no immediate goals to offer graduate instruction. It was only after the emergence of clear, demonstrated State and national needs that graduate programs began to emerge at UC campuses.

The graduate plans of the University of California continue to be informed by the research and development needs of the State and nation and by the labor market and industry needs of the State. There is no evidence that UC systemwide officials or the UC Board of Regents would ever conclude that every UC campus should establish a law school and a medical school in order to achieve comparability in graduate program offerings, especially in the absence of clearly-identified State needs. It also seems that at the graduate level, *program comparability* should be considered when there is a perceived need to expand an existing program. For example, several years ago the Commission concurred with the plans

of UC Davis to expand and reconstitute its Division of Education as a School of Education to meet emerging regional educational needs and to achieve program comparability with other UC education schools. Given these observations, and the analysis contain in this section, the UC Irvine proposal does not fully meet the program review criteria regarding *institutional collaboration, program redundancy, and unnecessary duplication*.

Total Costs of the Program

The relative costs of a program, when compared with the costs of other programs in the same area, constitute another criterion in the Commission's program review process. Included in the consideration of costs are the number of new faculty required based on desired student-faculty ratios, as well as costs associated with equipment, library resources, and facilities necessary to deliver the program. For a new program, it is necessary to know the source of the funds required for program delivery, both initially and in the long run.

The essence of this criterion is that proposals should be compelling in justifying the appropriate public moneys. The criterion requires that a program proposal clearly identify all immediate and long-term costs. The Irvine campus is considering leasing physical space in the near-term and building a new facility in the long-term that would consist of 92,000 assignable square feet to accommodate 600 students, of which 201 would be first-year students. The space is considered sufficient to support research-related functions, faculty offices, student support activities, and a law library. Instructional costs are projected to average about \$16 million annually beginning in 2014-15 and continuing through 2018-19. This figure excludes \$2.9 million in annual operational costs associated with maintaining a public law library. Capital costs for constructing a new facility would total roughly \$70 million.

The campus proposes to fund at least half of the capital costs and a portion of the operational costs through private resources, with the remainder coming from the State's Capital Outlay Program, general fund FTES allocations, student fee revenue, and student professional fees. In its initial review, Commission analysts found that while the proposal contained sufficient information describing many of the fund sources required for operating a school of law, it was somewhat unclear as to what the anticipated State obligation might be regarding capital costs.

UC Irvine indicated in its supplemental report that one alternative under consideration by the campus is to request that the State fund at least half of the capital costs. There is no substantive evidence that State capital funds would be forthcoming because its long-range enrollment plans have been approved by the UC Office of the President. It is possible that the Legislature and the Governor might not support expending scarce State operational and capital funds for growth in a doctoral professional program that lacks a public need.

The Administration, the Legislative Analyst, and the Department of Finance recognize that each new public program offering generates operating and capital costs that must be met from existing and projected State resources. Because dollars spent in one program area translate to fewer dollars available in other program areas, public colleges and universities must exercise diligence in prioritizing their program offerings. Although the Commission's role is not to micromanage this process, it is statutorily responsible for commenting on State resources that institutions wish to have directed toward new programs. The Commission does not recommend at the present time directing any public funds to the development of a new public law school.

Conclusion

The California Postsecondary Education Commission values and supports the efforts of California public colleges and universities to develop new degree and certificate programs when emerging workforce and knowledge needs of the State are clearly identified and supported by empirical information and data. Consistent with *Education Code 66903*, the Commission conducts program reviews in a manner that will ensure that all proposals receive a fair, valid, and impartial assessment. The Commission is unable at the present time to support the proposal to establish a new law school at the University of California, Irvine for three principal reasons:

1. The occupational and industry projections of the California Labor Market Information Division indicate that the current growth in the number of Bar-certified lawyers will keep pace with or exceed legal demand between now and 2014.
2. The State's knowledge needs in the domain of legal education can be met by existing public and independent law schools.
3. The projected public costs are questionable because the need for a new public law school has not been demonstrated by the evidence contained in the proposal.

The Commission would be pleased to reconsider a proposal for a new public law school when labor market and knowledge needs warrant such consideration and when a more compelling case can be established that meets the Commission's program review criteria.

Appendix A



June 2006

California Postsecondary Education Commission

Summary of the Commission's Program Review Principles and Guidelines

Although each public higher education system in California has a unique mission and social purpose, the systems are united in a most common and fundamental way: each aims to enhance the intellectual, technical, and creative capacity of its student learners. Because advanced knowledge—scientific, technical, and procedural—tends to be organized by fields of study, and delivered to students through specific programs, the ultimate success and benefit of the State's higher education enterprise rests with the quality and breadth of institutional degree and certificate programs.

Legislative Mandate

Assembly Resolution 770, Statutes of 1974, established the California Postsecondary Education Commission (CPEC) as the statewide planning and coordinating agency for higher education, with specific mandated planning functions and responsibilities. Primary among the responsibilities given to CPEC is academic and vocational program review. In addition, the Commission is charged with reviewing and commenting on the need for new campuses and off-campus centers.

The Commission's program review responsibilities include the following:

- Review and comment on the long-range plans developed by the public higher education governing boards and make recommendations to the Legislature and Governor.
- Review and comment on the need for new academic, vocational, and certificate programs proposed by the public higher education systems and make recommendations to the Legislature and Governor.
- Evaluate and comment on the program review process of the public higher education systems.
- Identify societal educational needs and encourage institutional adaptability to change.
- Review periodically the availability of continuing education programs for adults and make appropriate recommendations.

The Commission developed a set of principles to guide the program review process. The principles are intended to: (a) safeguard the State against inefficiencies in the allocation of program resources; (b) help ensure that new programs will meet student and societal needs; and (c) ensure that programs are well conceived and that they will have desired educational and social consequences. As defined in statute, the Commission's role in the review process is primarily advisory. However, in the case of Joint Doctoral Programs involving public and private institutions, the Commission has approval authority.

Recent enhancements to the Commission's review process include greater emphasis placed on the long-range plans of the systems so that staff can consider prospective programs five years in advance of implementation. This has enabled the Commission to alert the systems of potential planning concerns early in the review process before formal proposals are submitted.

Definitions

Academic and Vocational Programs: A series of courses arranged in a sequence leading to a degree or certificate.

Program Plan: A program plan contains, at a minimum, an inventory of the programs offered or projected to be offered by the campuses comprising a higher education system. Also included are proposed timetables for implementation and narrative descriptions of problem areas, program trends, and future needs. In general, plans are prepared for a five-year period and revised and updated annually.

Program Proposal: A document prepared by a campus that describes and justifies the need for a new degree or certificate program. The proposal must address each of the Commission's program review elements.

Program Review Council: An advisory body established to assist Commission staff in matters related to program review and academic planning. The Council consists of representatives from the three public higher education systems, the State Department of Education, and the Association of Independent California Colleges and Universities.

Commission's Program Review Principles and Guidelines

1. Student Demand

Within reasonable limits, students should have the opportunity to enroll in programs of study in which they are interested and for which they are qualified. Therefore, student demand for programs, indicated primarily by current and projected enrollments, is an important consideration in determining the need for a program.

2. Societal Needs

Postsecondary education institutions bear a responsibility for preparing students to meet the State's workforce and knowledge needs. Workforce demand projections serve as one indication of the need for a proposed program. Although achieving and maintaining a perfect balance between supply and demand in any given career field is nearly impossible, it is important nevertheless that the number of persons trained in a field and the number of job openings in that field remain in reasonable balance.

3. Appropriateness to Institutional and Segmental Mission

Programs offered by public institution within a given system must comply with the delineation of function for that system, as set forth in the California Master Plan for Higher Education. Proposed new programs must also be consistent with the institution's own statement of mission and must be approved by the system's statewide governing body.

4. The Number of Existing and Proposed Programs in the Field

An inventory of existing and proposed programs, compiled by the Commission staff from the plans of all systems of postsecondary education, provides the initial indication of apparent duplication or undue proliferation of programs, both within and among the systems. However, the number of programs alone cannot be regarded as an indication of unnecessary duplication. This is because (a) programs with similar titles may have varying course objectives or content, (b) there may be a demonstrated need for the program in a particular region of the State, or (c) the program may be needed for an institution to achieve academic comparability within a given system.

5. Total Costs of the Program

The relative costs of a program, when compared with other programs in the same or different program areas, constitute another criterion in the program review process. Included in the consideration of costs are the number of new faculty required and the student/faculty ratios, as well as costs associated with equipment, library resources, and facilities necessary to deliver the program. For a new program, it is necessary to know the source of the funds required for its support, both initially and in the long run.

6. The Maintenance and Improvement of Quality

Protecting the public interest and trust requires that educational programs at all levels be high quality. Although the primary responsibility for the quality of programs rests with the institution and its system, the Commission, for its part, considers pertinent information to verify that high standards have been established for the operation and evaluation of the program.

7. The Advancement of Knowledge

The program review process encourages the growth and development of intellectual and creative scholarship. When the advancement of knowledge seems to require the continuation of existing programs or the establishment of programs in new disciplines or in new combinations of existing disciplines, such considerations as costs, student demand, or employment opportunities may become secondary.

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Appendix B University of California

UNIVERSITY OF CALIFORNIA
Proposed Degree Programs
2006 - 2011
IRVINE

Proposed Programs	Degree	Status
UNDERGRADUATE PROGRAMS		
Proposals added for 2006 update are shown in BOLD		
Biotechnology	B.S.	1
Chinese Studies	B.A.	2
Engineering Design Software	B.S.	2
Environmental Health	B.A.	2
Environmental Health Science	B.S.	2
Human Biology	B.S.	1
Information & Computer Science	B.A.	1
Japanese Studies	B.A.	2
Latin	B.A.	2
Nursing Science	B.S.	2
GRADUATE PROGRAMS		
Proposals added for 2006 update are shown in BOLD		
African American Studies	M.A.	2
Clinical Sciences	M.S./Ph.D.	2
Cognitive Neuroscience	Ph.D.	2
Computer Science	M.S./Ph.D.	1
Computer Science and Engineering	M.S./Ph.D.	1
Criminology, Law & Society	Ph.D.	2
Engineering Design Software	M.S./Ph.D.	2
Environmental Engineering	M.S./Ph.D.	1
Informatics	M.S./Ph.D.	2
Information & Computer Science & Business Administration	M.B.A./M.S.	2
International Studies	M.A.	2
Latino Community Health	M.A.	2
Molecular Medicine & Therapeutics	Ph.D.	2
Music	M.M.	2
Music	M.F.A.	discontinuance planned
Neuroscience	Ph.D.	2
Nursing Practice, Doctor of	D.N.P.	2
Nursing Science	M.S./Ph.D.	2
Pharmaceutical Sciences	M.S./Ph.D.	2
Political Science	M.A.	2
Psychology	M.A.	2
Public Health	M.S.P.H., Ph.D.	1
Public Policy	M.P.P.	1
Stem Cell Biology Concentration	M.S.	2
SCHOOLS & COLLEGES		
School of Design		3
School of Law		4

Status of proposal: 1 suggested for 5-year list; 2 undergoing department review; 3 undergoing campus review; 4 undergoing CCGA/CPEC review

Appendix C

Employment Development Department

Labor Market Information

(Text from <http://www.calmis.ca.gov/file/occproj/0amethoctx.htm>)

Occupational Projections - Introduction and Methods

Projections by Occupation estimate the changes in occupational employment over time resulting from industry growth, technological change, and other factors. Industry growth occurs when the demand for goods and services increases and as a result the demand for workers to produce these goods and services increases. Technological changes can raise the demand for some skills while eliminating the demand for others. At the same time, labor demand in the industry as a whole may be rising or falling. New ways of doing business, such as self-service, out-sourcing or 24-hour operations can also affect demand for workers.

Occupational employment estimates are **based on survey data collected from approximately 113,000 California employers** through the Occupational Employment Statistics (OES) program. The survey covers nearly 800 occupations. Employers report how many individuals they employ in each occupation. The results generate an occupational distribution or staffing pattern for each industry. Occupational projections are then prepared by applying occupational staffing patterns to industry totals. Another component in developing occupational projections is US Bureau of Labor Statistics change factors.

Usually, if an industry's employment is projected to increase or decrease, occupations within that industry will follow the same trend. However, individual occupational employment may not increase or decrease at the same rate as that of the entire industry. In fact, there may be a significant number of occupations whose employment moves in an opposite direction to that of the entire industry. The occupational movements within an industry are controlled by industry-occupational change factors, which are based on US Bureau of Labor Statistics Research.

The **base year** is defined as the beginning year of the forecast cycle. The **target year** is the ending year of the forecast cycle. In order to produce target-year occupational projections, a change factor developed by the Bureau of Labor Statistics is applied to each occupation. The resulting new occupational staffing patterns are then applied to the projected industry totals to give the target-year occupational projections.

Using Projections Data

The projections contained in these tables are the best available source of information for estimating job opportunities, developing training programs, and gaining an insight into future employment trends. However, before reaching any final conclusions **the user should consider the following:**

Remember that these data are estimates. They were developed based on the assumption that historical trends will continue into the future. However, events may occur during the projection period that are impossible to predict. Events such as base closures, major business closures or openings and natural disasters can all have a major impact on employment levels.

Do not use these projections as your sole source of information. Use other, more recent sources of local economic data to corroborate the projection data. This information may be found in other documents such as those published by EDD's Labor Market Information Division (LMID), local chambers of commerce, or local economic development agencies.

Projections employment data are annual averages. These averages may not accurately portray seasonal occupations or industries such as those found in agriculture, retail sales, recreation, and construction industries.

Employment levels stated reflect workers who are covered by the Unemployment Insurance program. As a result, industries that are made up largely of individuals who are self-employed will be understated. Examples include industries such as real estate, hair salons, and bookkeeping. Occupations such as dental hygienists and consultants will also show an understated level of employment.

In addition, most agricultural employment is excluded. However, some farm related occupations are found outside agricultural industries and are included in projections data. For example, agricultural-related occupations are found in significant numbers in Animal Services (075), Preserved Fruits and Vegetables (203), Beverages (208), Logging (241), Groceries and Related Products (514), Grocery Stores (541), Colleges and Universities (822) and State and Local Governments (902 & 903).

Suggestions for Users

The projections were prepared for employment and training planners, vocational educators, and others who need information on future employment by occupation. The outlook information can be used in making occupational training decisions and career choices. Employers considering expansion or relocation may find the report helpful in understanding the occupational composition and trends in the county or geographic region. However, it is important to **keep in mind that projections are just one planning tool** and that the estimates are based on information available at the time the forecast was made.

- **Changes in occupations are given in two categories, "Change" and "Percent Change."** Change means the number of jobs that are anticipated to be added or subtracted during the forecast period. Percent Change is calculated by dividing the growth or decline in employment for that occupation by the base year employment for the same occupation. "Percent Change" can be deceptive. A large percentage change does not necessarily mean a large number of jobs. For instance, if the base year for an occupation is 20 and the forecast year shows an increase of 10, it is a 50 percent increase. In reality, it is only 10 jobs.
- There are two tables for quick and easy reference: "Occupations with the Greatest Job Growth", which lists the jobs by numerical change; and "Occupations with the Fastest Job Growth", which lists the jobs by percent change.
- **"Separations"** is an estimate of the number of people expected to leave the occupation permanently. Individuals may leave for another occupation or leave the occupation due to retirement or for personal reasons. However, these jobs need to be replaced by workers new to the occupation. If an occupation is in decline, some will not be replaced.

- These projections are estimates of the expected demand for individual occupations. However, **the supply of individuals qualified for these occupations will affect the amount of competition that exists for these openings.**
- General changes in the workplace affect some occupations. Jobs may be created, eliminated or consolidated because of restructuring or regulations affecting the requirements for the job. For example, personal computers and word processing programs eliminated many typist jobs, but created a need for word processors.
- **An occupational title does not give details about the occupation.** Use the [CodeFinder](#) to search for a particular code or occupation title. An individual starting a career search may want to look at the various occupations, choose any that are of interest and then do further Research on the occupation or occupations of choice. There are many sources of information, such as the [California Occupational Guides](#) that will include skills and educational requirements, hourly earnings, benefits, working conditions and advancement opportunities.
- Occupational projections data indicate the major local occupations and which occupations are likely to offer the greatest number of job opportunities. **When possible, the user should focus on larger occupational groups rather than specific occupations.** Some occupations may not appear in published tables because of the very small number of people employed in that occupation in that area or because of confidentiality concerns.
- **Occupational staffing patterns** used for the projections process **are developed from the annual Occupational Employment Statistics (OES) Survey of employers.** This survey is conducted utilizing a sample of the entire universe of Unemployment Insurance (UI) covered employers. Because it is a survey, it is important that the following points be considered:

There is inherent statistical error as a result of both the sampling process and the level of employer response to the survey mailings.

The **OES staffing patterns may contain errors because of the problems employers may have in completing the survey.** These errors typically include misunderstanding of survey instructions, misinterpretation of occupational definitions and/or titles contained on the forms, and clerical errors in filling out the forms.

The **employer's response to the survey may reflect conditions that are atypical.** The employer may be experiencing a temporary shutdown, seasonal high or low employment or a temporary increase in demand for his/her product or service.

- **Occupational separations data are based on national separation rates** and may not be representative of a local area when that area differs demographically from national norms.

For additional information on economic conditions in a particular county, you may contact the Labor Market Information Division (LMID) [area consultants](#) who are located in the community and are knowledgeable about the economic activities within the counties that they serve, the local **Employment Development Department (EDD)** [field offices](#) that provide job services, or **EDD's One Stop locations** where you can obtain additional publications on labor market information.

The Methods

Changes in occupational employment over time result from two principal sources: industry growth, and technological change. In developing occupational employment projections, both of these components must be addressed. The following is a discussion of how occupational projections are developed, beginning with a **description of data sources** and followed by a description of the steps involved.

Principal Data Sources

Employment Projections by Industry:

The Labor Market Information Division of the Employment Development Department produces **employment projections for use in industry-occupation projections**. A description of the industry projection process can be found in the "[Industry Employment Projections - Introduction and Methods.](#)"

Occupational Staffing Patterns:

Occupation employment estimates are based on survey data collected through the Occupational Employment Statistics (OES) program. The OES survey is a periodic mail survey of non-farm employers conducted by EDD in cooperation with the U.S. Bureau of Labor Statistics. The survey is based on a sample designed to represent the universe of employers in each state. In California, data are collected for nearly 800 occupations at the three-digit SIC level of detail.

The OES data used were collected over a three-year period. The survey samples 2 panels annually, with each panel having approximately 18,000 establishments per panel, taking 3 years to collect the sample of 113,000 in California. In addition, the OES survey data used in the California projections was collected using the Standard Occupational Coding (SOC) system, which replaced the old OES codes.

The Process

The distribution of industry employment by occupation is performed in three steps. First, **OES survey responses are summarized by industry** and matched with each North American Industry Classification System (NAICS) code in the local area. In cases where local OES responses are not available, either statewide responses or another area's responses are substituted. The survey data are then expanded to the annual average employment level for each industry. This results in **estimates of employment by occupation within the NAICS industries for the base year**.

Next, **base year staffing patterns are adjusted to account for projected shifts in the occupational distributions due to technological changes.** These projected changes are derived from special studies conducted by the U.S. Bureau of Labor Statistics. Applying these changes to the base year staffing patterns results in staffing patterns by NAICS sectors for the target year. **Target year staffing patterns are applied to the industry employment projections to produce occupational employment projections within NAICS sectors.** Data by occupation are then summed to get the base year and target year occupational estimates. The difference between the base year occupational estimates and the target year projections represents the job openings resulting from industry growth and from technological change.

In addition to occupational employment growth, another aspect of the demand for workers is the openings that result when workers leave their jobs to enter other occupations, retire, or leave the labor force for other reasons. **Job openings due to separations** for an occupation are calculated by multiplying the base year employment for that occupation by a separation rate, developed specifically for that occupation by the US Bureau of Labor Statistics. **These openings, termed separations, are important because in most occupations they exceed job openings resulting from employment growth. Even occupations that are projected to decline usually provide job openings due to separations.**

Economic Assumptions

The occupational projections are based on the following assumptions:

- a. The institutional framework of the U.S. economy will not change radically.
- b. Recent technological and scientific trends will continue.
- c. The long-term employment patterns will continue in most industries.
- d. Federal, state, and local government agencies will continue to operate under budgetary constraints.
- e. No major events, such as war, will occur that will significantly alter the industrial structure of the economy, the occupational staffing patterns, or the rate of long-term growth.
- f. Population growth rates and age distributions will not differ significantly from Department of Finance projections presently available.
- g. Attitudes toward work, education, income, and leisure will not change significantly.

November 24, 2004

Appendix D

Employment Development Department

Labor Market Information

(Text from <http://www.calmis.ca.gov/file/INDPROJ/0amethintx.htm>)

Industry Projections - Introduction and Methods

Projections by Industry forecast the anticipated changes within an industry over time. The local forecasts are based on the county's past employment trends within each industry and are refined by a review of current economic developments within the local community that affect employment within each industry. The effect of State level economic trends are also considered. Preliminary employment forecasts are initially produced using a mathematical model. Base year data, the date for the beginning year of the forecast cycle, are a "snap-shot" of employment at the time. Analysts then review preliminary industry employment forecasts and make adjustments based on local and State developments that may occur over the forecast period.

The State's forecast is generally made for a 10-year period and local forecasts are made for a seven year period. The projections are revised every two years to incorporate economic changes that occur in the county and the State.

Using Projections Data

The projections contained in these tables are the best available source of information for estimating job opportunities, developing training programs, and gaining an insight into future employment trends. However, before reaching any final conclusions the user should consider the following:

Remember that these data are estimates. They were developed based on the assumption that historical trends will continue into the future. However, events may occur during the seven-year projection period that are impossible to predict. Events such as base closures, major business closures or openings and natural disasters can all have a major impact on employment levels.

Do not use these projections as your sole source of information. Use other, more recent sources of local economic data to corroborate the projection data. This information may be found in other documents such as those published by EDD's Labor Market Information Division (LMID), local chambers of commerce, or local economic development agencies.

Projections employment data are annual averages. These averages may not accurately portray seasonal occupations or industries such as those found in agriculture, retail sales, recreation, and construction industries.

Employment levels stated reflect workers who are covered by the Unemployment Insurance program. As a result, industries that are made up largely of individuals who are self-employed will be understated. Examples include industries such as real estate, hair salons, and bookkeeping. Occupations such as dental hygienists and consultants will also show an understated level of employment.

Suggestions for Users

This section is for all interested users of industry projections. Knowing future industry trends helps economic development professionals foster compatible growth and promote the county's strengths. Future trends can help local government agencies, non-profit agencies, Researchers and other interested parties to formulate plans and proposals. People looking for work and those doing counseling and/or job placement may use the industry projections to learn about employment opportunities in various industries. But, it is important to keep in mind that projections are just one planning tool and that the estimates are based on information available at the time the forecast was made.

- If an industry shows a decrease in future employment, it may be that only one or two industry components are experiencing the decline and other components are still expected to hire new workers. It is best to investigate all sectors of the industry. For example, under the Standard Industrial Classification (SIC) system, retail trade has several components: building materials and garden supplies; general merchandise stores; food stores, automotive dealers and service stations; and apparel and accessory stores, to name a few.
- Although an industry may be stable and is not expected to grow, it does not mean that there are no opportunities for employment. All industries have turnover opportunities. Individuals change or leave their jobs permanently for varying reasons. High turnover, especially in industries that require lower-skill levels, would mean that there are frequent openings even though there is little or no growth.
- Industries have varying levels of growth. Not all industry sectors, such as in retail trade or in services industries, grow at the same rate, nor are all sectors located in every county. An individual interested in working in a particular industry may have limited opportunities in a small rural county, for example.
- Geographical differences also account for differing employment opportunities. If an individual is considering relocating from one area of the State to another, the size of the industry and its expected growth level needs to be kept in mind. Small rural counties will not have the same employment possibilities as do the larger metropolitan areas.
- The Industry Trends and Outlook section of this module will give an overview of the economy of the county and some of the reasons for growth or decline in employment.
- Industry employment projections utilize industry employment data from both the Current Employment Statistics (CES) program, and the payroll employment (ES-202) program. There is a certain amount of error built into both systems. These errors may result in:

Employers classified in the wrong industry.

Incorrect employment levels reported by the employer.

Employment reported in the wrong county.

For additional information on economic conditions in a particular county, you may contact the Labor Market Information Division (LMID) [area consultants](#) who are located in the community and are knowledgeable about the economic activities within the counties that they serve, the local Employment Development Department (EDD) [field offices](#) that provide job services, or EDD's One Stop locations where you can obtain additional publications on labor market information.

The Methods

Projections for employment by industry are made as the first phase in the employment projection process. Using historical data and current information about the economy, a forecast of employment levels by industry is made. These projections become a primary data source used to project changes in occupational employment. A description of the occupational projections process can be found in the Methods and Economic Assumptions file for [Occupational Projections](#). Following is a discussion of how industry projections are developed, beginning with a description of data sources followed by a description of the steps involved.

Principal Data Sources

Employment by Industry:

The Employment Development Department (EDD) collects payroll data from all private employers and government entities covered under the unemployment insurance, disability insurance, and personal income tax programs. Excluded from these data are the self-employed, unpaid family workers, and private household workers. Each reporting unit is classified by EDD according to the Standard Industrial Classification (SIC) System. The SIC system consists of three levels of detail: the two-digit major industry division, the three-digit sub-industry division, and the four-digit specific industry division. All data are identified by the county in which reported jobs are located, and are collected for each month of the year.

Current Employment Statistics (CES):

The CES is the official series of California employment by industry for the State, its counties and metropolitan areas. Employment is estimated using a sampling of private employers and government entities who are surveyed each month. The series is monitored on an ongoing basis, benchmarked and inspected for accuracy of reported employment and classification each year. The series includes a combination of two- and three-digit SIC Code aggregations.

The Process

The industry projections included in this report were developed in two steps. First, projections were developed at a summary industry level based on two-digit or three-digit SIC classifications. The second step was to disaggregate these projections to the four-digit industry level.

In the first step, industry projections are created by a mathematical model for each summary level industry sector (e.g. construction) in an area that considers:

- Historical employment for each summary level industry sector in an area.
- Projected total industry employment for the area.
- The historical and projected relationship between area employment in a given industry sector and the same or related sector for the State as a whole.

In the second step, the summary level industry projections are disaggregated into their four-digit industry components for the base and target years. The four digit industry projections for each area are then reviewed and adjusted based on the expertise of local analysts familiar with specific economic trends and developments in the area.

Economic Assumptions

The industry projections in this report are based on the following assumptions:

- a. The institutional framework of the U.S. economy will not change radically.
- b. Recent technological and scientific trends will continue.
- c. The long-term employment patterns will continue in most industries.
- d. Federal, state, and local government agencies will continue to operate under budgetary constraints.
- e. No major events, such as war, will occur that will significantly alter the industrial structure of the economy, the occupational staffing patterns, or the rate of long-term growth.
- f. Population growth rates and age distributions will not differ significantly from Department of Finance projections presently available.
- g. Attitudes toward work, education, income, and leisure will not change significantly.

January 22, 2004

