Professor: Rob Wassmer, Ph.D.

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Home-Page: http://www.csus.edu/indiv/w/wassmerr/

Class Location: Thursday, 6:00 p.m. - 8:50 p.m., 1010 ARC (Studio D); class will also be recorded and available for viewing on WebCT. Everyone must attend the first night’s meeting.

Office: Room 3037 Tahoe Hall

Office Phone: (916) 278-6304

Office Hours: Thursday, 3:30 – 5:30 p.m.; and by appointment if necessary

Prerequisite: Grade of B- or higher in PPA 220A.

Required Texts:

(1) Cost-Benefit Analysis for Public Sector Decision Makers, Diana Fuguitt and Shanton J. Wilcox, Quorum Books; can be purchased at CSUS bookstore or at Amazon.com (click the previous link to purchase there);

(2) State and Local Public Finance, 3rd Edition, Ronald C. Fisher, Thompson SouthWestern; can be purchased at CSUS bookstore or at Amazon.com (click the previous link to purchase there);

(3) Cool It: The Skeptical Environmentalist’s Guide to Global Warming, Bjorn Lomberg, Knopf; can be purchased at CSUS bookstore or at Amazon.com (click the previous link to purchase there);

There are also supplemental readings assigned throughout the semester. These are in the schedule below. Copies of these readings are available directly from the Internet (an electronic link is provided below) or at the library’s reserve room. (I apologize for the need for you to copy documents from the reserve room, but I have done this in order to save you the expense of having to buy an entire book.)
WebCT:

This course requires that you have access to the World Wide Web and WebCT. If you do not have an account at home or work that allows this, you can get one through CSUS. On WebCT I will post an outline of material covered in each meeting. These will be available by the Monday afternoon before the class meets. Your grades will also be accessible through WebCT.

Course Objectives:

At the end of PPA 220B, a student that attends all meetings will:

1. Understand the basic process of how to conduct a benefit/cost assessment and have a working knowledge of some of the specific techniques necessary to do it.

2. Develop a basic understanding of key concepts used by economists in their study of state and local public economics and policy (structure of government, incidence of a tax, effect of a subsidy, etc.).

3. Be able to accurately summarize key institutional changes in California's intergovernmental climate (Serrano vs. Priest, Proposition 13, ERAF, etc.) and the policy impacts that they continue to have.

4. Use the tools of policy analysis to reach evaluative conclusions on key policy concerns affecting the state (this semester these will include immigration, public k-12 education, climate change, sprawl, etc.).

This course exposes you to the basic study and application of public economics and policy through the study of benefit/cost analysis, market failure, government organization, government finance, and state and local government applications specific to California. You will learn and apply some simple economic theory; however, keep in mind that the goal in doing so is to better understand, analyze, and critique existing and proposed public policies.

Method:

Like PPA 220A, this course is taught in a distance education format. However, there are important changes from the distance education format used in PPA 220A that need to be noted. First, the rebroadcast is only available to registered students through WebCT and not the general public through cable television. This should allow us to talk more freely in class and cause no concerns with microphones being on and students appearing on camera. It should also allow the operator to record the discussion that occurs in one group during a breakout period for viewing by others not in class without concern for the individual comments made while in a group discussion.
Second, I am now asking that all students complete 13 of the 15 weekly assignments given out. Like in PPA 220A, eight of these 13 required assignments can only be turned in at the time of attending a live classroom. A change to even this requirement is that I will only accept these assignments at the end of the class session from only the person who has completed it. If not in class, WebCT e-mail is the method to use to get the remaining five of these required assignments to me before 9 p.m. on the night of the class that they are due. I make these changes so I have a better check on people actually attending an entire night’s presentation and for those not attending, I offer a reward for doing the assigned reading even if absent from the live class. Therefore, you may miss two of the 15 assignments without punishment. These excused assignments are for the unforeseen circumstance that did not allow a completion. I will accept no excuses for the other 13 required assignments and missing one will result in a zero assigned to it. Like in PPA 220A, the possible evaluations I will give on these assignments are a plus, check, or minus. I will translate your accumulation of these scores into a grade at the end of the semester. As before, I ask that you submit a typed, double-spaced, two-page maximum answer to the discussion questions (that corresponds to the first letter of your last name) that are listed below.

Finally, this class is meant to be much more student discussion based than PPA 220A. To accomplish this, specific time will be set aside each night for my lecture, time you spend in small group discussion, and time that we reconvene for a whole class discussion. My lecture will usually take up the first 90 minutes (6:00 to 7:30 p.m.) and then we will break for 15 minutes (7:30 to 7:45 p.m.). Upon return from break, you will divide up into four to six different groups, of four to five students each, and spend about 30 minutes (7:45 to 8:15 p.m.) discussing the assigned questions for the night and other material still not clear from the readings or my lecture. I will join one of the groups as only a facilitator of discussion and this group’s discussion will be recorded for rebroadcast. We will then reconvene as an entire class and each group will be required to throw out to the entire class a question or concern that they still needs further clarification through group discussion. While in small group discussion, each group should appoint a spokesperson and agree upon the question or concern they will put out. In order that all groups have a chance to participate in this entire class discussion, each group’s discussion will be limited to five minutes. This total group discussion will occur in the last 35 minutes of class each night (8:15 to 8:50 p.m.).

If there are concepts or ideas covered in a Thursday night session that you did not understand, it is important to your overall success that you get these misunderstandings resolved before the next time we meet. You can do this by talking to your fellow classmates (I encourage you to form study groups or electronic study networks), visiting me in my Thursday office hours, sending an e-mail question to me at rwassme@csus.edu (please do not send by WebCT because I check less often), or phoning me at 278-6304. My promise to you is that if I am not in my office, I will respond to your Monday through Friday e-mail or phone call within 24 hours.

Questions, comments, and discussion about material assigned for a Thursday night class are always encouraged during that class. In office hours I am pleased to discuss a
suggestion on how the class is taught, economics and public policy in general, the MPPA or MULD programs, or your career plans. To insure an adequate participation grade, please plan on stopping by to visit me at least once during my office hours.

Students will need to come well prepared to class in the form of completing all reading assignments, looking over my notes, formulating answers to the discussion questions poised each week (you should think about all of the questions asked and not just the one assigned to you that week), and being prepared to actively participate in the class discussion. I will not hesitate to call on students who chose to not voluntarily participate.

**Grading:**

The grade you receive in this course comes from five different components. The first counts 35 percent and is the overall grade assigned the 13 weekly homework assignments discussed earlier. The second counts 15 percent and is a benefit-cost assignment described in part in the appendix to this syllabus. The third counts 20 percent and is an in-class midterm exam (as an example, last year’s midterm is in the appendix to this syllabus). This fourth counts 20 percent and is a policy position paper that you will write as a final exam on your choice of climate change, sprawl, CA K-12 public education, or immigration. The fifth counts 10 percent and is based upon the grade I assign for your class participation. You must complete all of the first four components of grading in order to receive a passing grade in this class.

**Schedule:**

This class will meet a total of 15 times throughout the semester. The readings for each meeting, and related discussion questions, are below. Remember, my expectation is that you are to read all entries in the schedule, not just the one you are assigned a question for.

**Meeting 1 (Jan 31)**

FugWil (Chapter 1) - A History of Application

FugWil (Chapter 2) - The Decision Maker, the Analyst, and Cost-Benefit Analysis

FugWil (Chapter 3) - Policy Advocates and Adversaries

*(Last Name A-F)* Pick one of the seven illustrative applications and describe in layperson terms the technical concept(s) needed to conduct the CB assessment described in this application.

FugWil (Chapter 4) - Economics and Cost-Benefit Analysis

(Last Name G-K) As described in this article, what is the cost of banning cell phone use while driving? Describe to a layperson how the authors of this study put a dollar value on this cost.

(Last Name L-R) As described in this article, what are the benefits of banning cell phone use while driving? Describe to a layperson how the authors of this study put a dollar value on these benefits.

Teske: “Cheap Talk? Taking Seriously the Market Benefits Expressed by Consumer Willingness to Pay” - http://download.interscience.wiley.com/cgi-bin/fulltext/95015504/PDFSTART (need to access from a CSUS computer)


(Last Name S-Z) If a CB analysis clearly shows that the costs of banning hand held cell phone use while driving is greater than the benefits, why did California enact a hand held cell phone law that goes into effect 7/01/08? Describe the possible reasons offered in this article. Are there others? If you agree with this ban, how do you dismiss the CB analysis?

Meeting 2 (Feb. 7)

FugWil (Chapter 5) - Economic Valuation of Individual Preferences

(Last Name A-E) Explain how to calculate the benefit of a government policy that would expand a commercial fishery such that the annual harvest rises from two to 10 thousand?

FugWil (Chapter 6) - Who is Society?

(Last Name F-J) Suppose levees throughout Sacramento County were strengthened using only funds provided by Sacramento City. Discuss the pros and cons of giving standing in a Cost-Benefit analysis of this action to only City residents as opposed to all County residents.

FugWil (Chapter 7) - With and Without Analysis

(Last Name K-O) In conducting a Cost-Benefit assessment of universal pre-school in California, discuss the difficulties and necessity of providing an appropriate “baseline” scenario.
FugWil (Chapter 8) - Aggregate Benefits and Costs

(Last Name P-T) Should distributional weights be used in a Cost-Benefit analysis? Offer both sides of the argument.

FugWil (Chapter 9) - Present Value of Benefits and Costs Over Time

(Last Name U-Z) Why should an actual Cost-Benefit analysis not just report the simple summation of benefits and costs over the time horizon?

If your knowledge of Excel spreadsheet techniques is weak, you should work through this learning module - http://www.usd.edu/trio/tut/excel.

In class I will show you how to use Excel to answer the following question. If you have a laptop with Excel on it, you should bring it to class to work along with me.

A government data processing center has been plagued in recent years by complaints from employees of back pain. Consultants have estimated that upgrading office furniture at a net cost of $450,000 would reduce the incidence the incidence and severity of back injuries, allowing the center to avoid medical care that currently costs $68,000 each year. They estimate that the new furniture would also provide yearly benefits of avoided losses in work time and employee comfort of $18,000. The furniture would have a useful life of five years, after which it would have a salvage value equal to 10 percent of its initial cost. The consultants made their estimates of avoided costs assuming that they occur at the beginning of each year. In its investment decisions, the center uses a nominal discount rate of 9.5 percent and an assumed general inflation rate of 4 percent. It expects the inflation rate for medical care to run between 4 and 6 percent, but is uncertain as to the exact rate. In other words, it is uncertain as to whether the costs of medical care will inflate at the same rate as other prices or rise 2 percent faster. Should the center purchase the new furniture?

Meeting 3 (Feb. 14)

FugWil (Chapter 10) - Decision Criteria

(Last Name A-G) Would you expect government to pursue every public policy intervention that yielded a positive net-present value in a Cost-Benefit analysis?

FugWil (Chapter 11) - Discount Rate

(Last Name H-L) Why should a sensitivity analysis regarding your choice of discount rate always be performed? Should negative values ever be used for a discount rate in this analysis?

FugWil (Chapter 12) - Inflation
(Last Name M-Q) What is the advantage of using real values for all costs and benefits included in your Cost-benefit assessment?

FugWil (Chapter 13) - Time Horizon

(Last Name R-Z) Explain the need for replication to compare the relative desirability of two policies when time horizons on each differ?

In class I will again show you how to use Excel to answer the following question. If you have a laptop with Excel on it, you should bring it to class to work along with me.

A town’s recreation department is trying to decide how to use a piece of land. One option is to put up basketball courts with an expected life of eight years. Another is to install a swimming pool with an expected life of 24 years. The basketball courts would cost $180,000 to construct and yield net benefits of $40,000 at the ends of each of the eight years. The swimming pool would cost $2.25 million to construct and yield net benefits of $170,000 at the end of each of the 24 years. Each project is has zero savage value at the end of its life. Using a real discount rate of 5 percent, which project offers larger net benefits?

Meeting 4 (Feb. 21)

FugWil (Chapter 14) - Uncertainty and Risk

(Last Name R-Z) How can the risk of an uncertain policy outcome be best handled in a cost-benefit assessment? Offer an example where it would be necessary to do this.

FugWil (Chapter 16) - Identifying Benefits and Costs

(Last Name M-Q) Why should “pecuniary” and “secondary” effects not count in a cost-benefit study? Describe a hypothetical cost-benefit application where the researcher might be tempted to count these effects.

FugWil (Chapter 17) - Market Valuation

(Last Name G-L) Sketch out the process of using regression analysis to estimate the consumer surplus generated from a government policy that increases the salmon harvest.

FugWil (Chapter 18) - Contingent Valuation

(Last Name A-F) Should WTP, WTS, or WTA be used when deriving a contingent valuation? Briefly describe a hypothetical cost-benefit study that requires the calculation of a contingent valuation, and then specifically lay out the research design and series of questions you would ask to derive this contingent valuation.
In class we will discuss how to answer the assignment from last year in the appendix to this syllabus on a **Hypothetical Benefit-Cost Assessment of the Construction of the Auburn Dam**.

**Meeting 5 (Feb. 28)**

**Benefit-Cost Assignment Given Out (Due March 7)**

**FugWil (Chapter 19) - Travel Cost Method**

*(Last Name G-L)* Lay out the research design to use the zip code of a family that is entering a national park to place a dollar value on what they value the park. Be sure to describe the necessary other demographic information that needs to be collected from them?

**FugWil (Chapter 20) - Hedonic Pricing Method**

*(Last Name A-F)* Describe how the hedonic price method calculates the dollar value of the benefit of a government intervention that raises standardized test scores at a neighborhood elementary school.

**FugWil (Chapter 21) - Valuation of Human Life**

*(Last Name R-Z)* Why does a value need to be placed on human life for cost-benefit analysis? Are you comfortable in the way that it is done by economists? Describe the pros and cons of alternative ways of valuing human life.

**FugWil (Chapter 22) - Cost-Effectiveness Analysis**

Sunstein: Book Review of Ackerman’s and Heinzerling’s *Priceless: On Knowing the Price of Everything and the Value of Nothing* - [http://ase.tufts.edu/gdae/about_us/ackerman_nr_march04.html](http://ase.tufts.edu/gdae/about_us/ackerman_nr_march04.html)

*(Last Name M-Q)* What criticism of cost-benefit analysis described in this article do you find most valid? Least valid?

In class we will finish up discussing how to answer the assignment from last year in the appendix to this syllabus on a **Hypothetical Benefit-Cost Assessment of the Construction of the Auburn Dam**.

**Meeting 6 (March 6)**

(Last Name A-E) Summarize the conclusions from the Stern Review. Why does this report indicate that action should be immediately taken to reduce greenhouse gas emissions?


(Last Name F-J) Listen to the video at the top of the above web page. Use the ideas inherent in Munger’s policy triangle (efficiency, equity, and institutional) to discuss California’s involvement in reducing greenhouse gases. Are you in support of this effort? What are the downsides?

CA Climate Action Team Report Executive Summary – http://www.climatechange.ca.gov/climate_action_team/reports/2006-04-03_FINAL_CAT_REPORT_EXECSUMMARY.PDF


(Last Name K-O) Discuss the market-based options suggested in these summaries for implementing Executive Order S-3-05. What are the pros and cons of using this approach as compared to regulation?


(Last Name P-T) Summarize the criticisms I have laid out of the Climate Action Team Report? Do you agree with all of them? Offer at least one critical assessment of what I thought was a concern in the report. Are there any critical concerns you could add?


(Last Name U-Z) Discuss the concerns raised in these two reports about pursuing a policy to reduce greenhouse gases. What role does discounting, uncertainty, and equity play?

Meeting 7 (March 13)
Chapter 1 – Polar Bears

(Last Name U-Z) How is the story of a decline in polar bears used by Lomborg to set the stage for the four arguments he put forth in the book?

Chapter 2 – It’s Getting Hotter

(Last Name P-T) Does Lomborg dispute the fact that temperatures are rising in the world due to man-made influences? What does he dispute about the popular policy analyses and suggested actions to deal with climate change?

Chapter 3 – Global Warming

(Last Name K-O) Pick two of the many concerns that can arise from global warming (melting glaciers, rising sea levels, extreme weather, flooding rivers, new ice age in Europe, malaria in Vermont, more starvation, or water shortages) and describe the arguments that Lomborg uses to show that it is perhaps not as bad as popularly portrayed.

Chapter 4 – The Politics of Global Warming

(Last Name F-J) How does Lomborg argue that economics should be used to moderate the politics of global warming?

Chapter 5 – Conclusion

(Last Name A-E) Write a memo for Governor Schwarzenegger that summarizes the conclusions reached by Lomborg in regard to global warming. Be sure to offer your advice on the implications of these conclusions for California’s own policies.

Meeting 8 (March 20)

Fisher (Chapter 1) – Why Study State and Local Government Finance?

(Last Name A-H) Make a list of five services provided by your city, five by your county, and five by the State of California. For each level of government, find the primary revenue instruments that are used to pay for them. From a purely personal perspective, do you feel that you get more or less than your money’s worth at each of these three levels of government?

LAO: 2006 Cal Facts (review sections on California’s Economy, State and Local Finances, and State Budget) -
(Last Name I-P) Browse through the “State-Local Finances” and “State Budget” facts contained in this publication and find one from each of these topics that are surprising to you. Describe what they are and why they surprised you.

Fisher (Chapter 3) – Public Choice Without Mobility: Voting

(Last Name Q-Z) Suppose that expenditures on parks and recreation in the cities of Sacramento and Davis are selected by majority vote. In which city do you expect a larger percentage of voters to be perfectly happy with the selected amount. Describe in layperson terms the economic theory that justifies your answer.

Meeting 9 (March 27)

Fisher (Chapter 5) – Public Choice through Mobility

(Last Name Q-Z) Some people have suggested that political voting and voting with one’s feet simultaneously apply in determining the amounts of local public services to provide. Discuss how this might happen. How might the limitations of the assumptions in the Tiebout theory contribute to a role for voting?

Fisher (Chapter 6) – Organization of Sub-National Government

(Last Name I-P) “Unless there are economies of scale in the production of government goods and services, they should always be provided by the smallest available government units (that is, the lowest-level government in a federal hierarchy).” Evaluate this position.


(Last Name A-H) Summarize the institutional reasons why California has less city governments per capita than other states.

Meeting 10 (April 10)

Fisher (Chapter 11) – The Budget Process

(Last Name A-H) Unlike the federal government, most state governments are limited in their capability to engage in deficit finance either by an explicit requirement that the state budget be balanced each fiscal period or by a tight limit on issuance of state debt. How might a budget be balanced at the start of a fiscal year and not at the end? What options does a state have to balance a budget during a fiscal period without reducing spending? How might a state
“borrow” to finance a deficit without actually issuing bonds or other financial instruments?


(Last Name I-P) Explain the reasons why the State of California went from a $4 billion anticipated reserve in August 2007 to a $10 billion deficit in November 2007?


(Last Name Q-Z) What are the reasons that I offer for the “roller coaster” nature of California’s State Budget? Are any of the reforms mentioned in this paper currently being discussed? Which of these reforms do you feel is the most theoretically sound? Which of these reforms is the most politically acceptable? Why have they yet to be adopted?

**Meeting 11 (April 17)**

Fisher (Chapter 12) – Principles of Tax Analysis

(Last Name Q-Z) In layperson terms, draft a memo to your legislator boss explaining why who ultimately pays a tax has nothing to do with what the tax statute says in regard to who pays it? What does drive who pays a tax?

Shrag – "The Spirit of 13" - Paradise Lost: CA’s Experience, America’s Future (on reserve at library).

(Last Name A-I) Is the property tax in California best considered a “local” or a “state” tax? There are both bad and good things that have come out of Prop 13 for California. Generate a list of these and conclude whether the bad outweighs the good.

Fisher (Chapter 14) – Property Tax: Economic Analysis and Effects

(Last Name J-P) If a state lowers its overall rate of property taxation (as California did after Proposition 13), then absolutely all of the benefits go to owners of land and other immobile capital at the time that the property tax was lowered?

**Meeting 12 (April 24)**

**In-Class Midterm Exam**
Fisher (Chapter 15) – Sales and Excise Taxes

(Last Name A-M) Should California expand the base of its sales taxation to include all services? Use the information provided in this chapter to make an argument for or against this.

PPIC: Just the Facts, California’s Tax Burden -
http://www.ppic.org/content/pubs/jtf/JTF_TaxBurdenJTF.pdf

CBP: 2007 Who Pays Taxes in California -

(Last Name N-Z) Provide an overall assessment of your opinion on both the equity and efficiency of California’s overall tax system.

Meeting 13 (May 1)

EdSource: The Basics of California’s School Finance System -
http://www.edsource.org/pub_qa_finance.cfm

From First to Worst (video to be shown in class), review website describing video at http://www.pbs.org/merrow/tv/ftw

(Last Name A-H) In your opinion has school finance reform in California been “good” for the State?

Fisher (Chapter 19) - Education

(Last Name I-P) Summarize the basic factors that economists feel cause differences in the average standardized test score observed across K-12 school sites. What factors can be influenced by public policy?

Reed: The Growing Importance of Education in California –
http://www.ppic.org/content/pubs/op/OP_703DROP.pdf

(Last Name Q-Z) Is the trend in education achievement in California troubling to you? Explain why or why not?

Meeting 14 (May 8)

Final Exam Questions Given Out (Due on May 22)

Watch the Video – “Growth Issues Facing Sacramento Region” -
http://www.sacregionblueprint.org/sacregionblueprint/home.cfm
From the efficiency side of Munger’s policy triangle, discuss the market failures that justify government intervention into directing future development in the Sacramento Region.


One of the problems with crafting policies to deal with sprawl is coming up with a definition of what it is so we can recognize it when it occurs. Compare and describe the approaches offered above. Which do think is the most appropriate?


Summarize this economist’s take on what sprawl is and the appropriate policy solutions. Do you agree?


What are the specific policy changes recommended in California to help curtail sprawl in the State? What are the political obstacles to overcome to get these suggestions in place?

**Meeting 15 (May 15)**

PPIC – “Immigrants in California” - http://www.ppic.org/content/pubs/jtf/JTF_ImmigrantsJTF.pdf

PPIC – “California’s Newest Immigrants” - http://www.ppic.org/content/pubs/caccounts/CC_1103LHCC.pdf

Write a briefing paper that describes recent trends in immigration in California? Are there any public policy concerns that arise from this?


Why does immigration play a tremendous role in the Mexican-white high school graduation gap observed in California?
(Last Name I-M) Describe the research finding of George Borjas in relation to the effect of current immigration on the U.S. economy. What does he feel are the appropriate policies the U.S. should adopt concerning immigration?

(Last Name N-S) Describe the research finding of David Card in relation to the effect of current immigration on the U.S. economy. What does he feel are the appropriate policies the U.S. should adopt concerning immigration?

Institute for International Economics – “Immigrant Demands on Public Benefits” (Concentrate on description of NRC study for California on pp. 38-40)
http://www.iie.com/publications/chapters_preview/4000/03iie4000.pdf (The entire study is here: http://books.google.com/books?id=WCt8BxN_fLMC&pg=PA80&lpg=PA80&dq=smith+edmonston+1997&source=web&ots=K-LdIObxOu&sig=9FA-Np9EQX1oniwaLOJlfAMbZzA#PPA80,M1)

(Last Name T-Z) What does the National Research Council study find in regard to the expected public finance impact of immigrants in California in the mid 1990s? Is the effect expected to go away in the long run? How many years is the long run?
Appendix One

A Hypothetical Benefit-Cost Assessment of the Construction of the Auburn Dam

To be used in classroom discussion as an example (this is not the actual assignment).

Background


You are to prepare a 10 page maximum double-spaced and typed write up of a rough benefit-cost assessment of this project for a Sacramento Area citizens group that is trying to decide whether or not to support the project. You may place technical figures, calculations, methods, and instruments in an appendix that will not count against your 10 page limit. Be sure to write in a manner appropriate to your client and follow the basic report techniques that I detailed in your CAM analysis assignment.

The background information you will need to do this assignment is below:

Construction will begin on January 31, 2010 with an initial outlay of $3,000 (all dollar figures are in millions and in 2010 real dollars). At the end of the year in 2011, 2012, and 2013 there will be additional construction expenditures of $1,000 each year. This brings the entire construction cost to $6,000. The cost to maintain the dam in 2014 and 2015 will be $100 at the end of both these years; from then onward, the yearly maintenance cost in perpetuity will be $75 a year.

Beginning in 2014, the dam will generate an additional 2 mkWh (million kilowatt hours in electricity). The expected demand for electricity in California, where the electricity will be sold, can be represented by the algebraic equation: Price = 100 – (5 x Quantity), where price is measured in millions of 2010 real dollars, and quantity is measured in MkWh. In 2014 (when the dam begins to produce electricity) the expected price and quantity of electricity is P =32 and Q = 13.6.

Without the dam, in every year there is a 1/100 chance that a flood will occur in the American River Basin that will cause 200 people to lose their lives and an estimated $10,000 in property damage. With the dam, the chance of this catastrophic flood falls to 1/1,000.

People currently use the anticipated flooded area of the dam to river raft, hike, river fish, river swim, and mountain bike. This goes away after the construction of the dam. In its place, after the construction of the dam people will be able to fish, swim, power boat, water ski, and sail in the created lakes.
Detailed Instructions

Your client believes that everyone in the United States should have standing in this analysis. The client also does not specify a discount rate to use, but leaves it up to you to chose an appropriate one. Though they also know, it is best to try different values to mitigate criticism of the ultimate finding. They also want you to conduct the analysis considering the possibility that all construction and maintenance costs could double and the chance of a catastrophic flood after the dam could only fall to 1/500.

You have at least three different ways of calculating the net recreation benefits from the construction of the dam (travel cost, hedonic, or contingent valuation). Chose only one these methods and describe in detail the method you would use to calculate this (this could include statistical techniques, questionnaires, data needed, and any other relevant methods for you choice).

Thus, you are to do a benefit-cost analysis using the specific data I have given above, describe how you would go about calculating the net recreation benefit of the dam, and make a specific recommendation if the dam should be constructed (absent the final figure on the net recreation benefit of dam).
Appendix Two

PUBLIC POLICY AND ADMINISTRATION 220B

APPLIED ECONOMIC ANALYSIS II

PROFESSOR ROB WASSMER -- CAL STATE UNIVERSITY, SACRAMENTO

SPRING 2007

MIDTERM EXAM

This is twice as long as the midterm I will give to you this year. I only include it as an example of the format and type of questions I could give you.

NAME: ______________________ KEY ________________________________

INSTRUCTIONS:

1. Type your name in the space provided. Save the completed exam with your last name in the saved name that you chose.

2. You will have 180 minutes to complete the exam, but it designed to take no more than 120 minutes. The suggested time to spend on each section is in parenthesis.

3. Read the instructions for each section and the questions carefully. Answer all questions by typing your answer in no more than the space provided. To receive the highest point total it is best to leave no answer blank.

4. Your answers should make use of the tools of economics and public policy, and the material presented in this course. You will also be graded on the grammar, organization, and style used in your answers.

5. The exam is worth a total of 100 points. Listed are the points in each section and the suggested time to allocate to it.

6. I will be pleased to answer any clarifying questions you may have on the content of this exam between 6 and 7 p.m. in either the common chat room or e-mail of WebCT, or by cell phone at (916) 752-2910.

7. Make sure you e-mail me your completed exam through WebCT before 9 p.m. on Thursday, April 5.

8. Good luck!
I. SHORT ANSWER - 40 POINTS; 10 POINTS EACH - (48 MINUTES)
INSTRUCTIONS:
For each statement, indicate whether it is "true," "false," or "uncertain," and explain why.

(A – 10 points). “If all the benefits and costs of a multi-year project that begins in 2008 are reported in 2008 dollars, then there is no need in the calculation of net-present-value to discount the value of benefits and costs that occur beyond 2008.”

False. Time discounting takes into account the factors of risk (stability), inflation (wear and tear) and opportunity cost (loss of putting funds to another use). Real dollars represent amounts without the effect of inflation. Real dollars remove the effect of inflation but there are still the elements from time discounting of risk and opportunity cost to account for. For any Benefit-Cost (BC) assessment that projects beyond 2008 the stream of those net-present values should still be discounted for risk and opportunity cost. All benefits and costs post 2008 still need to be discounted for the effects of risk on default on the source of the funds and for the effects of opportunity costs of not investing the funds for the project to a better purpose.

(B – 10 points). “A corporation or public agency that endangers us should be pardoned for its sins once it has spent $6.1 million per statistical life saved through risk reduction.”

Uncertain. If a corporation or public agency intentionally (e.g., maliciously, knowingly) endangers the public, there may be cause for a criminal or civil action. However, if the corporation or public agency takes an action that increases the statistical likelihood of harm or death, the benefits of that action should also be considered. An analyst could evaluate the benefits and costs of a proposed action to determine whether the net benefits are positive. Part of that analysis could take into account the increased risk associated with the action and calculate total costs associated with increased statistical lives lost. Risk reduction measures could also be evaluated in the benefit-cost analysis. The total costs of those measures may be less than or greater than the total value of the statistical lives projected to be lost with the increased risk. From a benefit-cost perspective, those measures should be pursued if the cost of risk reduction is less than the value of the statistical lives lost. Those risk reduction measures may be pursued even if the cost of risk reduction is greater than the value of the statistical lives lost – e.g., the economic benefits may still outweigh the costs, even with expensive risk reduction measures. In summary, a corporation or agency may not receive a blanket pardon, if a criminal or negligent act has been committed. However, planned actions should undergo a benefit-cost analysis and consider the value of a statistical life based on the increased risks associated with that action.
(C – 10 points). “Both the theoretical economic models of Oates and Tiebout fully support the drive by citizens of Arden Arcade to leave the unincorporated portion of Sacramento County and form their own independent incorporated city.”

Tiebout’s model supports the idea that having larger numbers of incorporated cities within a metropolitan area would provide choices to residents and allow for greater government competition. This would indicate that the local government would provide better quality services to meet the needs of their community and draw business into their community. Ideally, this would offer different “fiscal” packages, encouraging persons to live in areas with others wanting and needing the same services. This idea supports the ideas of greater local control, accountability, and efficiency. People also have a better choice and satisfaction of where they want to live depending on their needs and wants.

Oates, on the other hand, considers Tiebout’s model but expands on it, looking at the negative aspects of creating more local governments; these include the increase in jurisdictional boundaries, the greater the “spillover” effect, and the loss of economies of scale. Greater boundary restrictions can make it challenging to determine who provides what service and where. For example, there are currently situations in which cities have incorporated and there have been challenges and conflicts in communication amongst police jurisdictions. Knowing which organization or police force handles which region can become confusing for consumers and more costly than beneficial. Further, depending on the values of that particular community, services can be lacking or over abundant. This can create an imbalance among the region as a whole and can lead to more challenges.

Tiebout’s model makes several assumptions which looks more closely at efficiency. These include: consumers are mobile and knowledgeable, there are many communities to choose from, there are no spillovers (meaning every community obtains the quantity and quality of services it needs without causing prices to increase or creating a need for additional services), and the government can manage the region with more knowledge and efficiency.

Oates also addresses issues that are more equitable. Such as “spillover”, economies of scale, and boundary concerns. Oates considers larger governments to have more uniformity and provide services that benefits all of society, not just a small community. Based on this, Oates appears to favor larger governments, whereas Tiebout supports smaller subnational governments.

(D – 10 points). “If the State of California chooses to levy an additional $1.00 per gallon excise tax on gasoline, who ultimately pays this tax will depend on whether the enabling legislation says (1) that the refiner pays it after production or (2) the consumer pays it at the gas pump.”

False. Who ultimately pays the excise tax is unrelated to whether the tax levied on the refiner after production or at the gas pump. Who pays is ultimately determined by the inelasticity of the supply and demand curves. Consumer demand for gasoline is relatively inelastic over the short term (e.g., one or two years). People need to get to work or school and generally do so by driving. Some amount of reduced driving could occur in the short term (e.g., fewer road trips). However, changing the vehicle one would
drive, finding alternative transportation, or moving closer to work and school are options that are generally limited in the near term. Based on this inelastic demand, the price of any excise tax on gasoline would fall to the consumer in the near term. Over the longer term, as consumers switch to vehicles with alternative fuels and find other methods for reducing gasoline consumption, the demand for gasoline would become more elastic. If the demand becomes more elastic, the gasoline refiners would need to reduce their prices to maintain profits and would end up paying for a greater portion of the excise tax. In summary, the writing of the legislation may make an excise tax more politically “sellable,” but would not impact who ultimately absorbs the increased costs.

III. ESSAY - 60 POINTS - (72 MINUTES)

INSTRUCTIONS:
Read each question carefully. To receive full credit, be sure to answer all of the essays’ parts separately.

1. The California Senator you work for is not happy about previously passed legislation that requires Californians after July 1, 2008 to no longer talk on a handheld cell phone while driving. She wants to draft new legislation that would mandate that the State conduct a two-year benefit/cost assessment of this ban after it goes into effect. She asks you to draft the language that would specify some general guidelines on how to conduct this analysis. Answer the following questions to assist in your thought process toward doing this.

(a – 10 points). What are the benefits of cell phone use? How should these benefits be measured?

The benefits of cell phone use are wide in scope and most likely vary between users. Firstly, cell phones are convenient because they are mobile and able to go wherever people go. For instance, people can use cell phone in the car while driving. Since people spend so much of their day in their cars, it is a way for people to continue working, connect with spouses and children and pass the time, whereas they would otherwise be unavailable and/or alone if they did not have access to a cell phone. Another major benefit is that cell phones provide a safety feature. It allows parents to get in touch with children and vice versa, and it allows people to call for help if they are lost of in trouble. Further, cell phones provide up-to-date technological elements such as camera, video capabilities, and internet access on the go; things people truly value when they are on the go.

When identifying the benefits of cell phone use, the marketplace can be a source of information to reflect society’s preferences for this good, as well as their willingness to pay for having access the good; to cell phones. By determining how much people are willing to pay for cell phones, and their consumer surplus, we can assess a value to the benefit of having a cell phone. In this case, by determining the difference in cell phone consumption from before the law is in affect versus after the law is in affect, we would be able to apply a measurable benefit in consumer surplus to society by the changes in their willingness to pay for the good and their corresponding consumer surplus.
(b – 10 points). What are the costs of cell phone use? How should these costs be measured?

The focus of the costs of cell phone use would be on the accidents attributed to cell phone use in the car. The accidents could result in a combination of property damage, injury, and death. Repairing property damage, recovering from an injury, or death would have direct costs (cost of repair, medical costs, funeral costs), as well as costs from lost wages. Also there are out of pocket costs to use cell.

To calculate these costs, we would need to know the costs of all car accidents and the percentage of those accidents attributed to cell phone use. This would not be easy, since accidents can often have a number of contributing factors (e.g., weather, traffic conditions) and it may be a combination of factors that contributed to the accident. However, Hahn, et al (1999) provided estimates based on studies evaluated the increased risk associated with cell phone use and the total estimated economic losses from traffic accidents. Those estimates would need to be revised, since cell phone use is much greater now than in the late 1990’s.

The other factor that would need to be assessed is whether there is a difference in the increased risk of cell phone use when the cell phone is “hands-free” or “hand-held.” The increased risk evaluated would need to be the additional risk of using hand-held cell phones over hands-free cell phones, since the legislation is not a total ban on cell phone use in cars.

(c – 10 points). When performing a sensitivity analysis of the study, what are the key variables that should be allowed to take on a range of reasonable values?

Some of the key variables that could be considered in a sensitivity analysis include: 1) the value of a statistical life; 2) the increased risk associated with using hand-held versus hands-free devices; 3) the projected change in cell phone use due to a switch from hand-held to hands-free; and 4) the elasticity of demand for cell phone use.

The value of a statistical life could be adjusted based on different values that have been used by different government agencies or it could be adjusted to reflect the demographics of the people who use cell phones (if different from the general population). The increased risk of using handheld versus hands-free cell phones is not likely to be precise, but may vary depending on how the risk studies were performed. Both the value of a statistical life and the risk calculations would affect the calculated benefits of the ban on handheld cell phone use.

The projected change in cell phone use do to a change in a switch from handheld to hands free would also be sensitive to the assumptions made. If hands free devices are provided for free to consumers and are relatively easy to use, there may be little change in use. However, if the devices are expensive or difficult to use, there may be significant changes in use.

The elasticity of demand effects how the consumer surplus is calculated. A variation in the price elasticity of demand could result in calculating greater consumer surplus (for a less elastic demand curve) or less consume surplus (for a more elastic demand curve).
(d – 10 points). Some may dismiss the consumer’s willingness to pay for cell phone use as a “frivolous” measure that should not be valued as a benefit. What are some current thoughts on this?

The consumers’ willingness to pay for cell phone use reflects the decisions of consumers to invest their resources in a specific activity. This investment suggests that the value consumers place on cell phone use (for the price they pay) is greater than the value consumers place on other choices they could make with their resources. Consumers could choose to use the $50 or more a month for cell phone costs to purchase a good or service that would reduce their risk of death, injury, or illness. For example, consumers could choose to purchase a home alarm system, buy a slightly more expensive car with better safety features, or purchase a health club membership. Consumers could also use the $50 a month to make more “serious” choices, such as adding to their investments for retirement, college for their child, or life insurance.

However, since consumers have chosen cell phone use in lieu of the other more “serious” options, it suggests that consumers do not consider cell phone use to be frivolous. This consumer behavior suggests that consumers value cell phones, as either a necessity or want, over other options. The consumer behavior in the market place, therefore, represents the outcome of rationale choices made by individuals among many options, which can be viewed as “frivolous” or “serious.”

It should also be noted that some amount of cell phone use would likely not be viewed as “frivolous.” Use of cell phones by medical or emergency personnel or the use by regular citizens in an emergency would likely be considered necessary and appropriate, even by skeptics of the need for cell phones.

2. You have been asked by the Association of California Public School Administrators to give a keynote lunch address on K-12 California Public School Outcomes from 1976 to 2006. They want you to talk about both how and why they have changed over this 30 year period on average for all of California, and why how and why disparities still exist across California public high schools in 2006. Offer some important “talking points” that would need to be covered in your luncheon address to answer both of these questions:

(a – 10 points). Describe the important points to consider as explanations as to why public school outcomes on average in California have changed over the past 30 years.

Disparities between schools still exist, regardless of different measures put in place to address them. California is below the national average in school funding, high school graduation rate and attendance of college, performance on standardized test scores, and future income. There are vast differences even among California schools.

In the late 70’s schools were primarily financed through local property taxes, which resulted in disparities between the available funding a school district could have. Despite the efforts by the state to eliminate these disparities, wealthier neighborhoods were spending double the amount per student than those in low income neighborhoods.

The Serrano vs. Priest lawsuit, addressed this inequity, but the passage of Proposition 13 placed a limit on property taxes that the schools relied on for funding. As
a result, California was spending less than the average national spending per student. Proposition 98 would guarantee adequate funding through three tests.

Besides the points previously mentioned, there are other factors why outcomes still differ among California’s public high schools. Immigration, fertility, and aging demographics play an important role in California school outcomes. California has the highest demographic of uneducated adults due to immigration from Mexico and Central America. Fertility rate among uneducated adults is also affecting educational outcomes in California. Uneducated individuals tend to have more children, who have less of a chance of producing positive outcomes in education, than those children who come from educated families. Furthermore, the aging population can affect the education distribution of the work force. The population that is likely to retire in the near future is fairly similar to the younger population when it comes to low-education levels.

However, according to some economists the amount of spending is not directly correlated with outcomes, school financing still has an indirect effect on the test scores and graduation rate of CA students. The reason for this could be the inadequate fashion in which the funds are being used, the number of skilled teachers hired, more training in subjects that teachers will be teaching and changing curriculum in a way that will produce a different outcome. Only some inputs may be influenced to produce a different type of outputs, and the reasons listed above are some of them.

(b – 10 points). Describe the important points to consider as explanations as to why outcomes still differ dramatically among California’s public high schools in 2006.

Outcomes still differ dramatically among California’s public high schools due to a couple of key factors. While K-12 funding is often in limbo and districts are unsure of how to accommodate their growing populations, certain districts, primarily in high income areas have been able to create 501c3 non-taxable Public School Foundations. These foundations raise private monies from their community to supplement state funds and provide increased services to their students. Wealthy districts such as these are generally populated with an easier to serve student body, less minority, less ESL, parents with an increased educational attainment level and a higher household income can afford to spend more money on services to students that help them to acquire high test scores and successful outcomes. Schools in districts such as these are also better able to attract quality teachers that are able to spend more time teaching the students as opposed to disciplining them.

At the same time, there are many districts at the opposite end of the spectrum that are suffering from severe overcrowding of high numbers of minority, non-English speaking students from low socio-economic backgrounds with parents of generally lower educational attainment. These schools may spend more money per pupil than higher attaining districts because each pupil may require a higher investment to teach. It is also more challenging to attract quality teachers.

The performance of various schools within California is a direct product of school, social and student inputs. Schools with reasonable class sizes, a decent location, experienced/credentialed and skilled teachers with strong administration and capitol (computers, books, clean and maintained facilities, etc.) are in a much stronger starting position than schools that are overcrowded, in bad neighborhoods with unskilled
teachers and neglected facilities. Districts where residents are higher income, with books in the home and parents with higher educational attainment have been shown to have student results much higher than those where residents are more low income and parents have lower educational attainment are also in a better situation. Then there are the student’s inputs themselves. Effort and ability are paramount, yet many students in lower performing districts may be predominantly ESL, and while they have passed the grade levels to get into high school, they may not have learned to the level at which they are currently in.

There is much room for improvement in California schools. The No Child Left Behind Act passed in the early 2000s established a series of provisions and procedures that states are to follow in bringing each individual student (regardless of circumstances) to a certain level of performance. Schools that fail to make adequate yearly progress face sanctions including the withholding of federal government K-12 funds. While this act has raised test scores in many cases, the downside is being seen where students are now taught to the test. Teachers no longer have the freedom to teach to student interest, or to spend significant periods of time learning specific aspects of a topic. Instead, they are forced to drill test questions to the students. Unfortunately, this can have serious consequences in the long term. Some students may feel alienated by such a process and drop out rather than accepting the challenges and mandates.