Purpose: This course is intended to introduce students to the major Federal, State and local sources of funding of public works projects. Specific topics covered include:

1. Sources of Federal, State, local and private funding for public works projects.
2. Traditional and “innovative” mechanisms for financing such projects.
3. The use of “public-private partnerships” to manage and finance such projects.
4. Legal and practical limitations on public-private cooperation in the financing and operation of public works projects.
5. Civil and criminal sanctions for misuse of public funds.

The course will discuss such requirements primarily as they apply to transportation infrastructure projects (highways, bridges, subways, airports, etc.). As appropriate, however, I may discuss laws or cite examples relating to other types of public works projects (for instance, the use of lease revenue bonds to finance the construction of prisons).

Assigned Reading: Most of the reading materials are in March, Jeremy G., California Transportation Law, Solano Press Books, 2000. This book will not be available through the university bookstore; it will however, be available through the instructor, who will bring copies to class during the early lectures.

Other readings, for the very end of the course, are in March, Jeremy G., California Public Contract Law, Solano Press Books, 2007. This book will be available through the instructor around the middle of the semester (in plenty of time to do the readings at the end of the course). It will not be available through the university bookstore.

Additionally, as indicated in the syllabus, from time to time I will assigning portions of certain guides to transportation infrastructure funding and financing published online by the U.S. Federal Highway Administration (FHWA) and other public agencies. I am not certain that I can (rightly) print out and distribute hard copies of these manuals to you (it is not completely clear to me who owns the copyrights to these guides and whose permission would thus be needed) but they can be accessed online (and printed individually) by each of you.

These guides are:
   This guide provides a good overview of major Federal-aid grants for highways and other surface transportation projects. It is an excellent reference work but a bit “dry” to read (kind of like reading the telephone book). It describes the purpose, and terms and conditions, of the grants and funding programs in minute detail. It is a standard reference for many grant administrators within the U.S. Department of Transportation, who use it to determine what activities can or cannot be funded under the various grants and programs.

   This guide provides a basic, readable introduction to so-called “innovative finance” techniques (a term that generally refers to efforts to “leverage public infrastructure investment with private capital” – in other words, to induce private investors to put up money (and goods and services) to construct and operate transportation infrastructure projects so that taxpayers don’t have to assume 100% of the cost and the risk.

   This guide provides a good overview of certain innovative finance techniques authorized by Federal law. It is less comprehensive than the Innovative Finance Primer discussed above, but it provides simpler, more readable descriptions of some of the finance techniques.

   This website provides a good introduction to so-called “public-private partnerships” (or “P3’s” for short). Public-private partnerships are contractual agreements formed between a government agency and a private sector entity (such as a construction firm) that allow for greater private sector participation in the delivery and financing of transportation projects. P3’s have been in “vogue” (that is, private agencies have spent a great deal of time, effort, and money trying to form them with private businesses) since the mid-1990’s, when the Federal government (and most state governments) began trying to attract private investment in transportation infrastructure projects as a means of reducing the cost of such projects to taxpayers.

5. The California Debt Issuance Primer published online by the California State Treasurer at http://www.treasurer.ca.gov/cdiac/debtpubs/handbook.pdf
   This provides a good overview of municipal bonds and other public debt instruments that can be used to raise revenue for transportation infrastructure projects.

Other individual articles and materials may be assigned to students for reading over the course of the semester, in which case I will make copies of all such materials available to you beforehand, either via E-mail or hard copy (if, however, a particular document is available on the Internet and is reasonably short, I may simply provide you with the Web address).
Prerequisites: I assume that each student has (1) a working knowledge of the Internet, specifically with respect to finding materials on the World Wide Web; and (2) E-mail address; and (3) a computer with the ability to download and print Microsoft Word attachments.

Topics: The following general topics will be covered over the semester, according to roughly the following schedule:

I. Introduction
   A. Funding for public works projects in today’s society: Available funds and political and economic constraints
   B. The “players”: Overview of Federal, State, regional and local government agencies, and types of private entities, involved in raising, allocating and spending funds for public works projects
   C. Basic legal background for course:
      1. Definitions and types of laws
      2. Conducting legal research on the Internet (in-class demonstration)

II. Transportation infrastructure planning and programming (selection of projects for funding and financing): Overview of essential Federal and State laws
   A. Federal laws: ISTEA, TEA-21, SAFETEA-LU: The “3-C” process
      1. Important decisions made at regional level
         a. Long-Range (Regional) Transportation Plan (RTP)
         b. (Regional) Transportation Improvement Program (RTIP)
      2. Statewide planning and programming
         a. Statewide Transportation Plan
         b. State Transportation Improvement Program (STIP)
   B. California laws: Require planning/programming process much the same as process required under Federal law

III. Transportation infrastructure funding: Traditional and innovative revenue sources
   A. Introduction: Meaning of “funding”; differences from “financing”
   B. Traditional transportation infrastructure funding at Federal, State and local levels
      1. Collection of tax revenues and fees
      2. Allocation into specific accounts and grant programs
         a. Major Federal, California, and local grant programs
   C. “Innovative” funding sources

IV. Transportation infrastructure financing: Traditional and innovative methods
   A. Introduction: Meaning of “financing”; differences from “funding”
   B. Traditional transportation infrastructure finance techniques
      1. Municipal bonds and other debt instruments
      2. Federal loans and credit assistance

V. Public-Private Partnerships (P3s)
A. Introduction: History, purpose, key definitions
B. Enabling legislation
C. Types of P3s
D. Legal and practical limitations

VI. How to stay out of jail: Civil and criminal sanctions for misuse of public funds
A. Misrepresentations and false claims
B. Self-dealing
C. Whistleblower retaliation

Course grade: The student's grade will be based on the following three factors:

1. Class participation. Students must attend all lectures, and will be expected to engage in class discussions of lecture topics. Additionally, I reserve the right to call on any student during any lecture. Students providing especially insightful answers or observations will receive extra credit. Students correcting me when I make a mistake will receive a lump of coal. (10 percent)

2. Homework assignments, due every two or three weeks. In some of these assignments, students will be given a set of brief questions or fact patterns regarding public finance or contracting issues. They will be required to use the Internet and the Internet legal research techniques taught them in the class to find the relevant statutes or regulations and to summarize them in brief answers. Other assignments will ask students to draft grant proposals or other legal documents or correspondence for hypothetical public-works projects (4 assignments altogether, counting for 10 percent each, for a total of 40 percent).

3. A take-home final examination, consisting of questions the same length and complexity of the ones in the homework assignments (50 percent).

Grading policy. Students will receive one of the following grades, based on the following levels of effort and initiative:

A: 95-100% of total points available in the class are attained. In addition to providing correct or defensibly correct answers to the assigned questions and projects, all or almost all completed assignments must show intellectual and practical initiative (i.e., additional legal research to buttress your own arguments, analysis and refutation of counter-arguments, advancement and defense of "novel" arguments. Comments made in class should reflect similar preparation.

A−: 90-94.9% of total points available in the class are attained. The intellectual and practical initiative described in the above paragraph is present in most of the student’s work and comments.
B: 85-89.9% of total points available in the class are attained. The required intellectual and practical initiative described above is present in some, but not most, of the student’s work and comments.

B-: 80-84.9% of total points available in the class are attained. The intellectual and practical initiative described above is present in only a small portion of the student’s work and comments. The student’s work appears to have been hastily done or is otherwise poor. Several assignments are turned in late.

C: 75-79.9% of total points available in the class are attained. Work completed by the student does not show any special intellectual or practical effort. Work is turned in late, hastily done, or is otherwise poor. On several occasions, student has failed to attend class or, while in class, failed to participate constructively in the class discussions.

C-: 70-74.9% of total points available in the class are attained. Intellectual and practical effort by the student appears to be minimal. In addition to turning in late or sloppily-done assignments, student has failed to turn in a number of assignments altogether. Student usually does not participate constructively in class discussions.

D: 65-69.9% of total points available in class are attained. Students’ work and class participation bespeaks no intellectual or practical effort. Several assignments have not been turned in. Student is non-responsive, or actually disruptive, during class discussions.

F: Less than 65% of total points in class are attained, or student has violated the academic integrity provisions described below.

Assignments are due at the point in the class period where I ask to collect them. An assignment turned in after this point, but before midnight of that day, is considered one day late. An assignment turned in after midnight of that day is considered two days late, and so forth. Your assignment will lose five points for every day that it is turned in late (for example, if you had written a paper meriting a score of 90, and it is turned in two days late, it will be downgraded to 80).

Academic integrity. Integrity and honesty are fundamental to the pursuit of truth and knowledge at any academic institution. These core values are essential to the function of the academic community at a research institution such as USC. Only by maintaining the highest standards of integrity are the conducting of research, the evaluation of students’ academic performance, and the ultimate awarding of degrees meaningful and representative of reality. All students are expected to abide by the principles of academic honesty set forth in Section 11 and Appendix A of the Student Conduct Code. The text of these sections is available in the Scampus student handbook.

Engaging in any of the following activities will result in the student receiving an "F" in my course and being reported to the Office for Student Conduct:
1. Plagiarism, which is defined in Section 11.11 as:
   a. The submission of material authored by another person but represented as
      the student’s own work, whether that material is paraphrased or copied in
      verbatim or near-verbatim form;
   b. The submission of material subjected to editorial revision by another person
      that results in substantive changes in content or major alteration of writing
      style, and as
   c. Improper acknowledgment of sources in essays or papers.

2. Unauthorized collaboration on assignments. Unless you are given express direction or
   permission by me to work collaboratively on assignments, I expect that you will have
   accomplished your work entirely independent of assistance from (or to) fellow students or
   other persons.

   Please do not jeopardize your grade and academic career by engaging in these activities.

   Please do not put me in a position where I must fail or report one of my own students.
SCHEDULE OF TOPICS AND ASSIGNED READINGS

NOTE: Readings and assignments are due on the day under which they are listed. Unless otherwise specified, all reading materials can be found either on the Internet or in the course reader, as specified)

NOTE: A disproportionate number of University holidays fall on Mondays, the day that our course meets: Monday January 16 is Martin Luther King Day; Monday February 20 is Presidents’ Day; and Monday March 12 is part of Spring Break. I am concerned that if we lose 20% of our lecture sessions, we would be put under a great deal of time pressure or we would have to cut essential material out of the syllabus. To avoid either of these problems, I will be recording “make-up” lectures that I will post on the Web during the weeks of February 20 and March 15 (you can review the March 15 lecture after you return from Spring Break; I have not assigned very much reading in connection with this lecture). If for any reason we need to miss any other lectures, I will likewise record make-up lectures.

I. Lecture 1: January 9 : Introduction

(Readings for January 9: March, J., Conducting Legal Research on the Internet
(NOTE: This is a handout that I will distribute in class setting forth detailed, step-by-step instructions for conducting your own legal research on the Internet. You are not expected to have read it beforehand. Instead, I will “walk” you through it during an in-class demonstration.)

a. Introductory remarks and course summary

b. Importance of funding and contracting for public works projects to public administrators, engineers, consultants, citizens and taxpayers.
   1) Effect of the recession and “stimulus” policies

c. Where does the money come from?
   1) Federal, state, and local budget and taxation processes
   2) Private sources of funding

d. Types of government and private entities involved in infrastructure funding and finance
   1) Federal
   2) State
   3) Municipal (cities and counties)
   4) Regional planning agencies
   5) Special districts
   6) Public-private partnerships

e. Sources of Federal, State and municipal law : A (very) brief overview
   1) Federal law
a) Constitution
b) Statutes – United States Code
c) Regulations
d) Court cases
   (1) Structure of Federal court system
e) Administrative agency decisions
2) State law
   a) State Constitution
   b) Statutes – California Codes
   c) Code of California Regulations
d) Court cases
   (1) Structure of California court system
e) Initiative measures
3) Municipal (City and County) law
   a) Ordinances
   b) Ballot measures

f. Using the Internet to find relevant grants, other funding sources, and applicable laws (in-class demonstration; please bring a laptop or other device with Internet access)
   1) Searching for grants on the Internet: The Catalog of Federal Domestic Assistance (http://www.cfda.gov); the Federal Register (http://www.gpoaccess.gov/fr/) and other useful websites
   2) Searching for laws (Federal and California Constitutional provisions, statutes, regulations, bills and proposed regulations)
      a) http://thomas.loc.gov (U.S. Constitution; Federal bills)
      b) http://law.cornell.edu/uscode (Federal statutes)
      c) http://www.leginfo.ca.gov/calaw.html (California Constitution and statutes)
      d) http://www.leginfo.ca.gov/bilinfo.html (California bills)
      e) http://www.calregs.com (California regulations)

(Week of January 16: No lecture due to Martin Luther King holiday)

II. Lecture 2: January 23: Transportation infrastructure planning and programming

(Assigned readings for Lecture 2: California Transportation Law, pp. 57-70; 71-149; 161-183; 185-201; I know this is quite a bit of reading, so you may skim)

How public policy re transportation infrastructure is set; and how specific infrastructure projects are selected for funding and financing: The process under Federal and State law

a. Federal law requirements
   1) Based on principle of “subsidiarity”: Most major decisions made at regional level by “Metropolitan Planning Organization” (MPO) as part of
“continuing, cooperative and comprehensive” (“3-C”) transportation planning and programming process

a) Two key documents prepared by MPO in consultation with Federal, State, and local agencies and interested private parties:
   (1) Long-Range (Regional) Transportation Plan (RTP): Sets transportation infrastructure policy over 20-year horizon
   (2) Regional Transportation Improvement Program (RTIP) – master list of all transportation projects in the region that are proposed for Federal funding or financing - in consultation with Federal, State and local transportation agencies

2) RTP and RTIP must, however, be consistent with statewide policies and programming decisions
   a) RTP must be consistent with State Transportation Plan
   b) RTIPs are submitted to California Transportation Commission, edited, and combined with other RTIPs into State Transportation Improvement Program (STIP) – master list of all transportation projects within the state that are proposed for Federal funding or financing
   c) RTP, RTIP and all specific projects therein must “conform” to State Implementation Plan (for air quality)

b. State law requirements: Much the same as Federal requirements – but concern projects proposed for State funding / financing
   1) Require preparation of RTP and RTIP by “Regional Transportation Planning Agency” (RTPA) that is usually the same as the MPO; require consistency of RTP and RTIP with State Transportation Plan and STIP; etc.
   2) MPO/RTPA usually prepares one “big” RTP and one “big” RTIP covering all projects proposed for Federal or State funding or financing
   3) Additional state law requirements (in Southern California) for preparation of RTIP: Counties submit County Transportation Improvement Programs (CTIPs) to RTPA; RTPA edits CTIPs and combines them into RTIP.

III. Lecture 3 : January 30: Transportation infrastructure funding: Traditional and innovative revenue sources (I)

[Assigned reading for Lecture 3: California Transportation Law, pp. 151-153; Guide to Federal-Aid Programs and Projects : Current Programs and Projects, sections concerning the following types of grants: Congestion Mitigation Air Quality (CMAQ), High Priority Projects Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), Interstate Maintenance Discretionary, Metropolitan Planning Funds, National Highway System (NHS), and Surface Transportation Program (STP)]

[Homework Assignment #1 due at beginning of Lecture 3.]

A. Definitions: Funding versus financing
   B. Federal funding
      1. Federal taxes collected
2. Tax revenues are deposited in...
3. Major Federal grant programs and accounts used to fund transportation infrastructure projects:
   a. National Highway System (NHS) account
   b. Surface Transportation Program (STP) account
   c. Interstate Maintenance (IM) account
   d. Highway Bridge Replacement and Rehabilitation program (HBRRP)
   e. Transportation Enhancements (TE) program
   f. Congestion Mitigation and Air Quality (CMAQ) program
   g. Other major Federal grant programs

IV. Lecture 4 : February 6: Transportation infrastructure funding : Traditional and innovative revenue sources (II)

[Readings for Lecture 4: California Transportation Law, 153-160.]

C. State funding
   1. Types of taxes and fees collected
      a. Constitutional limits on State’s taxing power: Propositions 13, 62 and 218
   2. Where the money goes: Allocation of tax and fee revenues into State accounts for transportation infrastructure planning, construction, etc.:
      2) Motor Vehicle Fuel Account, State Highway Account, Public Transportation Account and other major accounts

V. Lecture 5: February 13: Transportation infrastructure funding : Traditional and innovative revenue sources (III)

[Readings for Lecture 5: California Transportation Law, p. 160; other readings to be provided.]

D. Local funding sources
   1. Local option motor fuel taxes
   2. Local motor vehicle registration fees
   3. Local option sales taxes
   4. Local income, payroll, and employer taxes
   5. Local severance taxes (extraction of natural resources)
   6. Value capture taxes
      a. Special assessment districts
      b. Tax increment financing (Mello-Roos)
      c. Development exactions
         1) Constitutional (Takings) limitations
         d. Joint Development Agreements (to increase property value)
   7. Tolls (discussed above)
   8. Fares

E. Some “innovative” funding sources currently in use
a. Sale of advertising space  
b. Sale of retail concession rights  
c. Sale of naming rights  
d. Shared Resource Agreements

F. Some proposed funding sources
   a. Annual highway user vehicle fee  
b. Vehicle Miles Traveled (VMT) fees  
c. Cordon pricing
   a) Case studies: London and Manhattan (proposed)  
b) Privacy and fairness issues  
d. Carbon tax  
e. Cap and trade  
f. Freight-related charges
   a) Container tax  
b) Weight and distances taxes  
c) Freight waybill tax  
d) Customs duties

VI: Lecture 6: Week of February 20 (no lecture on February 20 due to Presidents’ Day holiday but I will record a lecture and post it on the Internet one day this week)

[Readings for Lecture 6: Innovative Finance Primer 2004, Chapters 1 (Introduction) and 3 (Debt Financing; read up to, but not including the material on GARVEEs); Project Finance Primer 2010, Chapters 1 (Introduction) and 2 (Bonds and Debt Financing; you need only read up to, but not including, the section on GARVEEs)]

[Homework Assignment #2 due at beginning of Lecture 6.]

Transportation infrastructure financing: Traditional and innovative methods (I)
A. Introduction: Meaning of “financing” (=means used to expand on existing funding sources and to leverage – that is, obtain and use borrowed money for – investments in transportation infrastructure projects)
   1. Differs from transportation infrastructure “funding” = Revenue sources generated and used for transportation infrastructure needs

B. Bonds and other debt instruments

1. Overview
   a. Purposes: Meet capital financing, short-term, and emergency needs without having to raise taxes

   b. History

   c. Definitions: Bond; maturity; tax-exempt municipal bonds; primary market; secondary market; bond issue; issuer; underwriter; coupon;
yield; call provisions; general-obligation bonds (bonds backed by full faith and credit of public agency); lease-revenue bonds (bonds backed by revenue generated by infrastructure project); default

d. Some key laws and legal limitations
1) Full Faith and Credit Clause (U.S. Constitution)
2) Propositions 13, 62 and 218 (California)

VII: Lecture 7: February 27: Transportation infrastructure funding: Traditional and innovative revenue sources (II)

[Reading for Lecture 7: California Debt Issuance Primer, pp. 1-40]

2. Municipal bonds: Often used to finance capital improvements
   a. Main types of municipal bonds
      1) Tax-exempt municipal bonds
      2) Taxable municipal bonds
      3) 501(c)(3) bonds
      4) Industrial Revenue Bonds (IRBs)
         a) Small issue IRBs
         b) Exempt facility IRBs
      5) General Obligation Bonds versus Revenue Bonds

b. The “players” – who is involved in the issuance and sale of municipal bonds?
   1) Issuers (public agencies that borrow money for public use by selling bonds): Local and state governments; local and state authorities (=public agencies created specifically to issue bonds); special districts

   2) Investors (bondholders): Households, mutual funds, insurance companies, commercial banks, trusts, retirement funds

   3) Underwriters (financial intermediaries that help issuers bring bonds to market; purchase bonds for resale to individual investors)

   4) Financial advisors

   5) Municipal bond dealers (traders buying and selling municipal bonds in secondary market)
      (1) Municipal bond brokers

   6) Bond counsel
7) Underwriter’s counsel

8) Trustees

9) Rating agencies: Standard and Poor’s, Moody’s, Fitch

10) Bond insurers

11) Regulatory agencies
   a) Municipal Securities Rulemaking Board (MSRB)
   b) Securities and Exchange Commission
   c) Internal Revenue Service

c. Key legal requirements; role of regulatory agencies
   1) History
      a) Little regulation of municipal bonds before mid-1970’s
         (1) Municipal bonds were exempt from Securities Act of 1933 (15 U.S.C. Sec. 77a)
      b) Near-default by New York City led to calls for regulation

   2) Some current regulatory bodies and protections
      a) Municipal Services Rulemaking Board (MSRB): Regulates underwriting and trading of municipal bonds; requires brokers and dealers of municipal bonds to register with Securities and Exchange Commission (SEC)
         (1) MSRB Board consists of representatives of investment banking firms, of commercial banks that trade municipal bonds, and of the general public
         (2) “Tower Amendment” – MSRB mainly regulates brokers and dealers, not issuers
         (3) MSRB regulations are enforced by (SEC)
      b) Some key regulations
         (1) MSRB Rule G-2: Brokers and dealers must meet MSRB’s standards of professional qualification
(2) Rule G-8: Recordkeeping requirements for brokers/dealers

(3) Rule G-12: Rules governing execution of transactions

(4) Rule G-17: Prohibits deceptive, dishonest, or unfair practices by brokers/dealers

(5) Rule G-36: Underwriters must obtain “Official Statements” from public issuers with $1 million or more in outstanding securities and to disseminate these statements to potential purchasers

(a) Statements must be filed with Nationally Recognized Municipal Securities Information Repositories (NRMSIRs) and send copies to MSRB.

(6) SEC Rule 15c2-12: Underwriters cannot handle securities from issuers that do not agree to provide annual reports with updated financial information and timely reports of “material” events.

(a) Annual reports sent to NRMSIRs and state information depositories.

(b) “Material event” reports sent either to NRMSIRs or to MSRB and state depositories

(7) MSRB Rule G-37: No “pay to play”: Prohibits underwriters from doing business with public agency for two years after a firm or one of its employees gave campaign contribution to public official connected with that agency.

(8) MSRB Rule G-38 (solicitation of municipal securities business):

(a) Firms must disclose:
   i) names of consultants (including lobbyists) they used to solicit business from government entities
ii) amounts paid to those consultants

(b) Consultants must disclose any campaign contributions made personally, or by his or her firm, to a political action committee associated with the firm.

(9) MSRB Rule G-41: Municipal bond brokers and dealers must establish anti-money laundering compliance programs

c. Information about particular municipal bond issues
   1) Committee on Uniform Security Identification Procedures (CUSIP) number
   2) Official Statement (prospectus)
      (a) Describes bond issue and financial condition of issuing agency
      (b) Available on Nationally Recognized Municipal Securities Information Repositories (NRMSIRs)
         (a) DPC Data (www.dpcdata.com)
         (b) Thomson Financial’s Munistatements (www.munistatements.com)
      (c) Annual financial disclosures (by issuers with more than $10 million in outstanding bonds)

d. The underwriting process
   1) General roles of the underwriter
   2) Underwriter’s specific role varies with type of bond sale
      a) Competitive bidding / competitive sales
      b) Negotiated sales
      c) Private placements
      d) Ethical problems: Pay-to-play, conflicts of interest, etc.

   (1) MSRB Rule G-37
   3) The top underwriters: B of A Merrill Lynch, Citi, JP Morgan, etc.

e. The rating process
   1) Top ratings agencies – the Nationally Recognized Statistical Rating Organizations (NRSROs)
      a) Standard & Poor’s
      b) Moody’s
      c) Fitch

   1) Bonds rated based on relative investment merit
a) Investment grade versus non-investment grade ratings

b) Meaning of symbols: Aaa, BB, Caa, Con, N/R, etc.

2) Consequences of rating
   a) Affects interest rate (function of risk)
   b) Affects bond price (do people want to buy it)?

3) Process for rating municipal bonds
   a) Rating agency identifies specific revenue streams (taxes, tolls, etc.) that can be used for debt service (i.e., to pay back money borrowed)

   b) Total expected revenue stream calculated over life of project

   c) Total costs of debt service are compared to total expected revenues

      (1) To get high rating, total debt service costs must be less than total expected revenue.

4) Criticisms and controversies re ratings agencies:
   a) Too much influence?
   b) Are ratings always correct?
      (1) Example: Enron
   c) Anti-competitive practices?
   d) Potential conflicts of interest?
   e) Unclear how ratings determined
   f) Constitutional limits on SEC regulation?
      (1) First Amendment protection of opinions

G. Role of bond counsel: Represents interests of bondholders/investors

1) Top bond counsel firms: Orrick Herrington & Sutcliffe, Hawkins Delafield & Wood, etc.

2) Primary functions
   a) Reviews proposed bond issue
   b) Issues opinion letter authorizing debt and specifying:
      (1) Bonds are legal, valid and bonding obligations of issuer
      (2) Interest on bonds is exempt from Federal income taxes
   c) Purpose of opinion letter: To assure issuers and investors that issue meets all legal requirements

3) Other functions
   a) Writes key financing documents
b) Gets required approvals from SEC, etc.
c) Advises issuing agency re applicable law
d) Discloses relevant legal proceedings that may affect validity of bond issue
e) Ensures that bond issue meets all applicable legal requirements
f) Creates/compiles “transcript of proceedings” detailing all steps in bond issuance and terms and conditions of payment and security arrangements

4) Potential liability for malpractice (failing to disclose legal problems with issue, etc.)

h. Role of underwriter’s counsel
1) Represents underwriters’ interests in negotiated issue
2) Performs “due diligence” review of issuer: Examines issuer’s financial condition and looks for matters of material interest to investors (potential problems with revenue stream, etc.)
3) Issues 10-b-5 certificate to underwriter (certifies that everything material to making investment decision has been disclosed)
4) Prepares bond purchase agreement

i. Role of bond insurers
1) Top bond insurers: MBIA Corporation; Ambac Financial Group; etc.
   a) American Capital Access (ACA) specializes in insuring high-risk bond issues (with low or non-investment-grade ratings)

2) Insures bond issues (timely paying interest and principal if issuer is unable to do so)

3) Impact of bond insurance: Lowers risk – and can thus lower interest rate, raise credit ratings, and make bonds more saleable

4) High-risk issues

j. Role of bond trustees
1) Generally: Acts as fiduciary for bondholders (acts as “prudent person” would in caring for bondholders’ financial interests)
2) Specific functions: Carries out administrative functions required for bond issue
   a) Establishing accounts

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b) Invoicing issuer for debt service payments

c) Holding funds until dispersed

d) Maintaining list of bondholders

e) Making interest and principal payments to bondholders

f) Representing bondholders’ interests in case of default

3) Receive small fee

VIII: Lecture 8: March 5: Transportation infrastructure funding: Traditional and innovative revenue sources (III)

[Readings for Lecture 8: Project Finance Primer 2010, Chapter 2 (Bonds and Debt Financing; start with section on GARVEEs and read through to the end of the chapter); Innovative Finance Primer 2004, Chapter 3 (Debt Financing; start with discussion of GARVEEs and read through to the end of the chapter)

3. Some specialized types of municipal bonds

a. Revenue Bonds: Bonds backed by revenue from infrastructure project

1) Toll-backed revenue bonds

2) Fare box revenue bonds

3) Lease revenue bonds

b. General Obligation Bonds: Backed by “full faith and credit” of issuer


c. Limited and special tax bonds: Payable from a pledge of the proceeds from a specific tax (gas tax, sales tax, etc.)

1) Measure R (Los Angeles County, 2008): 30-year ½ percent sales tax to finance city transportation improvement projects and countywide transit and highway projects. Los Angeles County Metropolitan Transportation Authority (Metro) is authorized to sell limited tax bonds secured by the sales tax revenue.

d. Hybrid bonds: Have characteristics of both Revenue Bonds and General Obligation Bonds

1) Double-Barrel Bonds: Backed by both project revenues and by issuer’s full faith and credit

2) Moral Obligation Bonds: Backed by project revenues and by issuer’s non-binding pledge to make up deficiencies
e. Anticipation notes: Bonds backed by expectation of future monies from a specific source (say, from anticipated Federal grants)

1) Grant Anticipation Notes (GANs): Notes issued by transit agencies to borrow against anticipated future Federal formula or grant funding

2) Grant Anticipation Revenue Vehicles (GARVEEs): Notes backed by future Federal-aid disbursements; used to fund major capital investments.

f. Private Activity Bonds (PABs): Authorized by 26 U.S.C. Sec. 142. Bonds are issued by public agency (“conduit issuer”) on behalf of private entity. Used to finance private activity on the development, design, finance, construction, operation and maintenance of Title 23 projects, while maintaining tax-exempt status of the bonds.

1) $15 billion limit on PABs.

g. Tax Credit Bonds: Bonds that give investors Federal tax credits of up to 100% of interest amount instead of or in addition to partial interest payment over life of bond and full repayment of principal upon maturity.

1) Build American Bonds (BABs): Bond issued before 1/1/11 by state or local government for non-private activity purposes. Generally used to finance surface transportation projects. Issuer chooses to have the interest on the bond be taxable in return for Federal interest subsidy.

a) Tax Credit BABs: Bonds used to finance new construction, current refunding (or one advance refunding) and working capital for infrastructure projects. Investor receives tax credit equal to 35% of interest paid by state or local government issuer, net of the tax credit. Federal interest subsidy is about 26% of total interest expense.

b) Direct Payment (“Qualified”) BABs: Provide Federal subsidy, in the form of a refundable tax credit, payable directly to state or local government issuers. Credit is equal to 35% of gross interest payable to investors. Issuer gets “refund” by presenting credit to the Treasury in return for a cash payment. Proceeds are limited to new construction projects.

4. Nonprofit 63-20 Financing: Nonprofit (“63-20”) corporation is used to finance transportation infrastructure projects undertaken by public-private
partnerships. Both public entities and private parties are represented on the nonprofit’s board. Nonprofit issues debt backed by project revenue.

1) Use of nonprofit allows project to be financed with tax-exempt bonds

2) Use of nonprofit makes it easier for project to qualify for public funds since project revenues would not inure to benefit of private party.

3) Limited to projects with secured revenue sources.

4) IRS Revenue Ruling 63-20 and Revenue Proclamation 82-26: Nonprofit’s debt will be tax-exempt if following requirements met:

   a) Corporation engages in activities that are essentially public in nature

   b) Corporation not organized for profit

   c) State or political subdivision has “beneficial interest” in corporation while indebtedness is outstanding. Specifically:

      (1) Governmental unit has exclusive beneficial possession and use of at least 95% of fair market value of the facilities; or

      (2) If nonprofit corporation has exclusive beneficial use and possession of 95 percent of the fair market value of the facilities, the governmental unit appoints 80 percent of the members of the board of the corporation and has the power to remove and replace members of the board; or

      (3) Governmental unit has the right at any time to obtain unencumbered title and exclusive possession of the financed facility by paying off or providing for payment of bonds.

   d) The corporation, and the specific obligations it issues, are approved by the state or political subdivision

   e) Unencumbered legal title in the financed facilities rests with the state or political subdivision until after the bonds are paid.

5. Private bond issues

   a. Can be used to finance construction of facility, purchasing of equipment, etc.
b. Major disadvantage: Interest payments received by investors are taxable.

6. Certificates of Participation (COPs): Tax-exempt bonds issued by state entities usually secured with revenue from an equipment or facility lease.

   a. Avoids issuance of long-term debt (and may thus avoid voter-approval requirements)

   b. The COP process:

      1) Special-purpose agency (like California Transit Finance Corporation) issues tax exempt-bonds with maturities that match the lease term of assets that are purchased by the state entity with the proceeds from the bond issue.

      2) Agency then leases the equipment to one or more transit agencies.

      3) Underlying lease or installation sale agreement furnishes the revenue stream necessary to secure the bond.

      4) Lease payments – usually funded with Federal formula grant funds and local matching share - are then used to pay back the bondholders.

IX: Lecture 9: Week of March 12 (no lecture on March 12 due to Spring Break; however, I will record a make-up lecture one day this week and post it on the Web. You can review the lecture when you return from Spring Break) : Transportation infrastructure funding : Traditional and innovative revenue sources (IV)

[Readings for Lecture 9: Innovative Finance Primer 2004, Chapter 4 (Credit Assistance); Project Finance Primer 2010, Chapter 3 (Loans and Credit Assistance)]

[Homework Assignment #3 due at beginning of Lecture 9.]

C. Federal loans and credit assistance


      a. Types of assistance

         a. Secured (direct) loan. Can cover up to 33% of eligible project costs. Maximum term of 35 years; repayments must start 5 years after substantial completion of project.
b. Loan guarantee: Loan repayments to lender must begin no later than 5 years after substantial completion

c. Standby line of credit: Available up to 10 years after substantial completion of project

b. Benefits of TIFIA assistance

c. Conditions of eligibility

D. Section 129 Loans (23 U.S.C. Sec. 129): Allows Federal participation in state loan to toll project (and now also to non-toll projects with dedicated revenue streams)

1. Benefits

2. Permissible revenue streams: Excise taxes, sales taxes, real property taxes, motor vehicle taxes, incremental property taxes, and other beneficiary fees.

3. Project selection process governed entirely by State law.

4. Limits on Federal-aid loan:

   a. May be for any amount BUT maximum Federal share of total eligible project costs must not be exceeded.

   b. Total eligible project costs limited to costs of engineering, right-of-way acquisition, and construction at the time FHWA authorizes loan to be made (i.e., does NOT include project costs incurred prior to loan authorization).

   c. Loan must be repaid to state beginning within five years after construction is completed and project is open to traffic. Repayment must be completed within 30 years after the date Federal funds were authorized for the loan.

E. Road Rehabilitation and Improvement Financing Program (RRIF): Makes Federal funding indirectly available, through loans and loan guarantees, to railroad capital improvements.

1. Loans and loan guarantees provided to state and local governments, government-sponsored authorities; and corporations, railroads and joint ventures including at least one railroad, for the purpose of acquiring, improving, developing or rehabilitating intermodal or rail equipment or facilities such as track, bridges, yards and shops.

2. Priority in project selection

3. Loan term may not exceed 25 years.
F. State Infrastructure Banks (SIBs): Authorizes states and territories to enter into cooperative agreements with Secretary of Transportation to establish infrastructure revolving funds eligible to be capitalized with Federal transportation funds.

1. Types of assistance:
   a. Loans
      1) Loans at subsidized rates and/or with flexible repayment provisions
      2) Grant Anticipation Notes (GANs)
      3) Short-term construction or long-term debt financing
      4) Certificates of Participation
   b. Credit enhancement
      1) Capital reserves and other security for bond or debt instrument financing
      2) Letters of credit
      3) Lines of credit
      4) Bond insurance and loan guarantees.

X. Lecture 10: March 19: Transportation infrastructure funding: Traditional and innovative revenue sources

[Readings for Lecture 10: Innovative Finance Primer 2004, Chapter 2 (Innovative Management of Federal Funds)]

G. Leveraging Federal grants and loans: Loosening timing, reimbursement and local match requirements

1. Federal matching flexibility
   a. Background: Certain percentage of costs of Federal-aid highway projects (and other Federal-aid projects) must come from non-Federal sources.
      1) This decreases cost, risk to Federal government.
   b. Tapered Match (“Delayed Local Match”) (23 USC Secs. 121, 133): Allows project's Federal funding share to vary from year to year so long as final (i.e., total) contribution of Federal funds does not exceed the project's maximum authorized share.
1) Lets state vary required matching ratio over life of project

2) Lets state begin work on project before fully securing all local match (such as bond financing) that will be required over the life of the project

3) Good where local agency initially lacks non-Federal matching funds but will obtain them over the life of the project.

c. Using Federal funds as match. Can be done with respect to:

1) Transportation enhancement projects: Funds from other agencies may count towards non-Federal matching share. 23 U.S.C. Sec. 133(3)(5)(C)(ii).

2) Funds from Federal lands management agencies may be used as match for all Title 23 projects and projects authorized by 49 U.S.C. Sec. 5300 et seq. 23 U.S.C. Sec. 120(k)

3) Funds from Federal Lands Highway program may likewise be used as match for all Title 23 projects and projects authorized by 49 U.S.C. Sec. 5300 et seq. 23 U.S.C. Sec. 120(l)

d. Toll Credits (“Soft Match”)

1) States may substitute certain previous toll-financed investments for state matching funds on current Federal-aid projects. 23 U.S.C Sec. 120(j).

2) “Toll Credits” are earned when public agency funds capital transportation investment with toll revenues earned on existing toll facilities.

e. Off-System Bridge Credits: 23 U.S.C. Sec. 144(n): Allows state and local funds expended on off-system bridges to be credited to the non-Federal share of Federal-aid bridge projects.

1) Amounts exceeding 20 percent of construction costs of certain off-system bridges to be used to reduce the amount of state and local funds needed to match Federal-aid bridge replacement and rehabilitation projects.

f. Program Match: 23 U.S.C. Sec. 133(e)(2) lets US DOT apply non-Federal matching requirement to a transportation program as a whole, rather than on a project-by-project basis as required before TEA-21/


g. Third-Party Donations: Lets states apply the value of funds, land, material, and services donated by third parties (private companies,
organizations, and individuals; and Federal, state and local
governments) toward their nonfederal share of project costs.

begin project even if it does not yet have full Federal-aid obligational
authority to cover Federal share of project costs. At later time, when State
does have the Federal obligatory authority, it converts the “advance-
construction” project to a Federal-aid project by obligating the permissible
share of its Federal-aid funds and receiving subsequent reimbursements.

   a. Partial Conversion of Advance Construction (“PCAC”): State
converts, obligates, and receives reimbursement for only a portion of
the Federal share of project costs. State need not wait until the full
amount of obligatory authority is available. State can convert the
advance-constructed project to a Federal-aid project in stages, based
on cash flow requirements and availability of obligatory authority,
rather than all at once on a single future date.

H. Pass-Through Tolls (“Shadow Tolls”): Per-vehicle or per-vehicle-mile toll paid –
not by motorists – but by state or local agency or authority to a private
concessionaire as reimbursement for particular services. In consideration for the tolls,
concessionaire must design, build, maintain, and/or operate a roadway for an agreed
period of time.

I. Availability Payments: Payments made by public agency to private concessionaire
in return for designing, constructing, operating, and/or maintaining a tolled or non-
tolled roadway for a set period of time. Payments are based on project milestones
(degrees of completion) or performance standards (level of service; incident
management; etc.)

   1. Often used for toll facilities not expected to generate adequate revenues to
pay for their own construction or operation. Project sponsor, not private
partner, bears risk underlying revenue risk associated with the toll facility.

J. Tolls on Federal-aid Highways (23 U.S.C. Sec. 129): States, toll authorities, and
their private partners may levy tolls on Federal-aid highways

XI : Lectures 11 and 12. March 26 and April 2: Public-Private Partnerships (P3s) (I)

[Readings for Lecture 11: FHWA’s Public-Private Partnership website, sections titled,
“P3 Defined” and “Tools and Programs.”]

[Readings for Lecture 12: FHWA’s Public-Private Partnership website, section titled,
“State P3 Legislation,” specifically the subsection titled, “View an Overview of the 28
Key Elements for P3 Enabling Legislation for Highway Projects; California Public
Contract Law, pp. 23-24.]

[Homework Assignment #4 due at beginning of Lecture 12.]
A. Introduction
   1. Definition of a P3
   2. Main types of PPPs
      a. For building new facilities
         1) Design-build
         2) Design-build-operate
         3) Design-build-finance-operate
      b. For operating, maintaining, etc. existing facilities
         1) O&M (Operation and Maintenance) concession
         2) Long-term lease
      c. Lease-develop-operate
B. Enabling legislation
C. Legal and practical limitations
   1. Cultural differences between private-sector and public-sector employees
   2. Legal limitations on public agency delegation of decisionmaking power

XII. Lectures 13 and 14: April 9 and April 16: How to stay out of jail: Civil and criminal sanctions for misappropriation and misuse of public funds

[Readings for Lectures 13 and 14: California Public Contract Law, Chapter 4 (Civil and Criminal Prohibitions), pp. 103-154]

A. Federal laws prohibiting and punishing misrepresentations by contractors or grant/loan recipients
   1. Perjury
   2. False claims submitted to public agencies
      a. Federal and State False Claims Acts
         1) "Qui tam" suits brought by members of public on government's behalf
      3. Misappropriation of public funds
      4. Destruction, alteration, or falsification of public records or evidence
      5. False evidence re use of public funds
      6. Obstruction of justice
B. Federal laws prohibiting and punishing "self-dealing" in connection with public contracts, grants and loans
   a. No "pay to play" : "Gratuities" and bribery
   b. "Self-dealing" by public officials
      1. Cal. Gov't. Code Sec. 1090 et seq.: Prohibitions on "interested transactions"
      2. Cal. Gov't. Code Secs. 87100 et seq.: Reporting of "lobbying" contacts/gifts
      3. Copeland (Federal) Anti-Kickback Act
C. Federal laws prohibiting and punishing whistleblower retaliation
   a. Federal False Claims Act

TAKE-HOME FINAL EXAMINATION DUE AT 11:59 PM ON MONDAY, MAY 7.