

**Columbia University**  
**Graduate School of Architecture Planning and Preservation**  
**Masters of Science in Real Estate Development Program**

**PLAN A6222: Affordable Housing Finance, Development and Policy**

**Tuesday 9:00 am – 11:00**

Professor Charles Brass: [cab2225@columbia.edu](mailto:cab2225@columbia.edu); [cbrass@forsythstreet.com](mailto:cbrass@forsythstreet.com)

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### **Course Overview**

The course provides a broad overview of the nation's affordable multifamily industry, the mortgage markets and capital markets that support it. The course will include a detailed study of the techniques for financing affordable housing. In combination with the focus on financing techniques, the course also looks at the development issues associated with this complex area and the policy focus of governmental programs.

The focus will be both at the macroeconomic and capital markets level as well as how the issues impact individual project finance. The course will provide substantial foundation and background for broader study in real estate finance and affordable housing finance.

Every real estate project, and especially affordable housing projects, has hidden partners: the federal government and, in New York, the state and city government. Although the course is focused on finance and financing techniques, it will consider the role of the public sector in regulating and creating incentives for the development and financing of affordable multifamily rental housing in particular. The public sector's role ranges from the establishment and regulation of the capital markets, to the creation of tax incentives and specialized treatment for real estate enterprises and to the offering of particular subsidies for the development of affordable housing, to the regulation of rents and returns on investment for developers. An

understanding of the public sector's financial and regulatory role is essential for understanding real estate financial markets in general and housing markets in particular.

Affordable housing finance is highly specialized and complex area: however, many of the techniques and mechanisms that are common in financing commercial real estate were first developed in the residential finance and affordable housing area. Equity formation through tax incentives, public-private partnerships, the use of tax exempt bonds, the securitization of debt are all techniques initially developed for use in the financing of affordable housing.

### **Cases (Additional Cases TBD)**

The Economics of 80-20 Housing: Using Subsidies to Build Rental Housing in Brooklyn; Originally by Charles Laven in 2005, Revised by Charles Brass in 2015.

“Stuyvesant Town Peter Cooper Village: America's Largest Foreclosure”, HBS Case 211106-PDF-ENG, December, 2011.

“Ocean Village”, a review of preservation of a federally assisted Mitchell Lama impacted by Hurricane Sandy.

### **Bibliography and Readings**

#### **Financial Analysis, Financial Skills and Taxation**

“Financial Analysis of Real Property Investments” by William Poorvu, HBS Case No. 379193-PDF-ENG

“Note on Taxation” by Arthur I. Segel, HBS Case No. 379-192

“Financial Analysis Workbook” by *Forsyth Street Advisors* (2004)

#### **Tax Credits**

CohnReznick, “The Low Income Housing Tax Credit Program at Year 30”, available at:

[https://issuu.com/cohnreznick/docs/cr\\_lihtc\\_dec2015](https://issuu.com/cohnreznick/docs/cr_lihtc_dec2015)

Ernst& Young, “Low Income Housing Tax Credit Survey”, Prepared for Enterprise Community Partners, Inc. and the Local Initiatives Support Corporation, October 2009

Novogradac & Company LLP, “Low-Income Housing Tax Credit, Assessment of Program Performance & Comparison to Other Federal Affordable Rental Housing Subsidies, 2011

[https://www.novoco.com/sites/default/files/atoms/files/special\\_report\\_lihtc\\_assessment\\_program\\_performance\\_052313.pdf](https://www.novoco.com/sites/default/files/atoms/files/special_report_lihtc_assessment_program_performance_052313.pdf)

NYU Furman Center – The Effects of the Low Income Housing Tax Credit (May 2017)

General Accounting Office – Low Income Housing Tax Credit: The Role of the Syndicators

### **Background/General on Credit Crisis and Housing**

Apgar, William, “Rethinking Rental Housing: Expanding the Ability of Rental Housing to Serve as a Pathway to Economic and Social Opportunity”, Joint Center for Housing Studies, Harvard University, August 2004.

Bagli, Charles V., “Other People’s Money – Inside the Housing Crisis and the Demise of the Greatest Real Estate Deal Ever Made”, Penguin Books, April 2013

Congressional Budget Office, An Overview of Federal Support for Housing, November, 2009. (Posted)

Gould, Ingrid Ellen, et. al., Improving U.S. Housing Finance through Reform of Fannie Mae and Freddie Mac: Assessing the Options, Furman Center, New York University, 2010. (Posted)

Joint Center for Housing Studies of Harvard University, The State of the Nation’s Housing 2017. Available at:

[http://www.jchs.harvard.edu/research.state\\_nations\\_housing](http://www.jchs.harvard.edu/research.state_nations_housing)

Katz, Bruce, Rethinking Local Affordable Housing Strategies: Lessons from 70 Years of Policies and Practices; The Brookings Institution; 2004. (PDF posted)

### **GSE Business Model and Securitization**

Fannie Mae, An Overview of Fannie Mae's Multifamily Mortgage Business available at:  
[https://www.fanniemae.com/content/fact\\_sheet/multifamilyoverview.pdf](https://www.fanniemae.com/content/fact_sheet/multifamilyoverview.pdf)

Freddie Mac, "Multifamily Securitization", 2013, available at:  
[http://www.freddiemac.com/multifamily/pdf/mf\\_securitization\\_investor-presentation.pdf](http://www.freddiemac.com/multifamily/pdf/mf_securitization_investor-presentation.pdf)

### **Real Estate Tax Incentives and Inclusionary Housing**

Enterprise and Forsyth Street Advisors, "Residential Property Tax Incentive Programs in New York City", February 2011  
Office of Council Member Brad Lander, "Inclusionary Zoning in New York City", August 2013

### **Preservation of Existing Affordable Housing**

Urban Land Institute, "The Preservation Compact: Rental Housing Action Plan for Cook County", available at:  
[http://www.macfound.org/media/article\\_pdfs/ACTION\\_PLAN\\_REPORT\\_51807.PDF](http://www.macfound.org/media/article_pdfs/ACTION_PLAN_REPORT_51807.PDF)

Donna Kimura and Christine Serlin, "Housing At Risk", AFFORDABLE HOUSING FINANCE • June 2012; available at:  
<http://www.housingfinance.com/ahf/articles/2012/june/0612-special-focus-Housing-At-Risk.htm>

Michael Bodaken and Todd Nedwick, "Saving America's Affordable Rental Housing Stock: The Need and the Role of National Banks" available at: <http://www.occ.gov/static/community-affairs/community-developments-newsletter/spring08/articles/landscape/cdn08spring03.htm>

### **Mixed-Income:**

Alex Schwartz and Kian Tajbakhsh, "Mixed-Income Housing: Unanswered Questions"  
Available at: [www.huduser.org/periodicals/cityscape/vol3num2/unanswer.pdf](http://www.huduser.org/periodicals/cityscape/vol3num2/unanswer.pdf)

Patricia Kirk, "Making Mixed-Income Housing Work", Urban Land Institute (ULI) available at:  
<http://urbanland.uli.org/Articles/2012/April/ul/KirkMixedIncome>

Robbie Whelan "Mastering Mixed-Income Housing", Wall Street Journal; Sept. 26, 2011 available at:  
<http://online.wsj.com/article/SB10001424052970204831304576593173249554748.html>

Alana Wrublin "Sorting through web of mixed income housing programs", Real Estate Weekly, December 14, 2011 available at:  
<http://www.rew-online.com/2011/12/14/sorting-through-web-of-mixed-income-housing-programs/>

### **Websites**

American Securitization Forum: <http://www.americansecuritization.com/>

Center for Responsible Lending: <http://www.responsiblelending.org/>

Harvard University Joint Center for Housing Studies: <http://www.jchs.harvard.edu/>

Inside Mortgage Finance: <http://www.imfpubs.com/>

National Housing Conference: <http://www.housingpolicy.org/>

Novogradac, Resource Center: <https://www.novoco.com/resource-centers/affordable-housing-tax-credits>

### **Course Requirements, Assignments and Grading**

There will be a reading assignment, case and/or finance problem set assigned for several classes. Active class participation based on the assignment will be expected.

Five assignments will be required to be submitted: an analysis of Ocean Village, a mid-term, a final exam and two additional policy write-ups to be determined.

Grading will be based on the assignments and class participation.

Date	Faculty	Topics	Case/Assignment/Discussion Questions
September 5 <sup>th</sup>	RF/CB	<ol style="list-style-type: none"> <li>1. Course Introduction</li> <li>2. Rental and Ownership Affordability Calculations</li> </ol>	<p>Issues of Income disparity and affordability challenges. Some discussion about NYC</p> <p>What can the government do to make housing more affordable?</p> <p>Who should the government help?</p> <p>Spectrum of assistance: homeless, low income, working class, middle class</p> <p>Assignment: Using the calculator below, or your own spreadsheet/analytics, be prepared to discuss the economics of renting vs. buying a home.</p> <p>Readings: <a href="http://www.nytimes.com/interactive/business/buy-rent-calculator.html">http://www.nytimes.com/interactive/business/buy-rent-calculator.html</a></p>
September 12 <sup>th</sup>	RF/CB	<ol style="list-style-type: none"> <li>1. Federal Housing Programs</li> <li>2. Public Housing</li> <li>3. Section 8               <ol style="list-style-type: none"> <li>a. Project Based</li> <li>b. Tenant Vouchers</li> </ol> </li> </ol>	<p>Readings: Green, Richard K. <i>Thoughts on Rental Housing and Rental Housing Assistance</i> Cityscape: A Journal of Policy Development and Research Volume 13, Number 2, 2011  <a href="http://www.huduser.org/portal/periodicals/cityscpe/vol13num2/Cityscape_July2011_thoughts_rentalhsg.pdf">http://www.huduser.org/portal/periodicals/cityscpe/vol13num2/Cityscape_July2011_thoughts_rentalhsg.pdf</a></p> <p>Delisle, Elizabeth Cove; <i>An Overview of Federal Support for Housing</i> Issue Summary from the Congressional Budget Office, November 3, 2009. Available at: <a href="http://www.charitableplanning.com/cpc_1859231-1.pdf">http://www.charitableplanning.com/cpc_1859231-1.pdf</a></p> <p>Charles L. Edson, <i>Affordable Housing – An Intimate History</i>, Chapter 1 (posted)</p>

<p><b>September</b> <b>19<sup>th</sup></b></p>	<p>RF/CB</p>	<ol style="list-style-type: none"> <li>1. Tax Exempt Bonds</li> <li>2. Rules</li> <li>3. Credit Enhancement Markets</li> </ol>	<p>Readings: Wayne Michael, "Tax-Exempt Housing Bond Basics," Novogradac &amp; Company LLP, available at: <a href="http://www.ipedconference.com/powerpoints/tax-exempt-housing-bond-basics.pdf">http://www.ipedconference.com/powerpoints/tax-exempt-housing-bond-basics.pdf</a></p> <p>Multifamily Rental Housing: Financing with Tax Exempt Bonds by Justin Cooper; Orrick Herrington &amp; Sutcliffe LLP, 2010. Available at: <a href="http://www.orrick.com/fileupload/2709.pdf">http://www.orrick.com/fileupload/2709.pdf</a></p> <p>Jennifer Dockery, "NYCHDC Issues First 'Recycled' Bonds," Journal of Tax Credit Housing, July 2009, Volume II, Issue VII. Posted</p> <p>Assignment: Short policy paper (2-3 pages). Questions distributed in class. Due September 26<sup>th</sup>.</p>
<p><b>September</b> <b>26<sup>th</sup></b></p>	<p>CB/RF</p>	<ol style="list-style-type: none"> <li>1. Review Bonds</li> <li>2. Tax credits</li> <li>3. Rules</li> <li>4. How to Calculate proceeds</li> <li>4. The Syndication Process</li> </ol>	<p>Readings: Comptroller of the Currency, Community Affairs Department, "Low-Income Housing Tax Credits: Affordable Housing Investment Opportunities for Banks", available at: <a href="http://www.occ.gov/topics/community-affairs/publications/insights/insights-low-income-housing-tax-credits.pdf">http://www.occ.gov/topics/community-affairs/publications/insights/insights-low-income-housing-tax-credits.pdf</a></p> <p>Ernst and Young, Low Income Housing Investment Survey; 2013 report: <a href="http://www.ey.com/Publication/vwLUAssets/EYs_2013_tax_credits_and_incentives_survey/\$FILE/EY-2013-tax-credits-and-incentives-survey.pdf">http://www.ey.com/Publication/vwLUAssets/EYs_2013_tax_credits_and_incentives_survey/\$FILE/EY-2013-tax-credits-and-incentives-survey.pdf</a></p> <p>Novogradac, Low Income Housing Tax Credit Assessment, 2011, available: <a href="http://www.novoco.com/products/special-reports/Novogradac_HAG_study_2011.pdf">http://www.novoco.com/products/special-reports/Novogradac_HAG_study_2011.pdf</a></p>
<p><b>October</b> <b>3<sup>rd</sup></b></p>	<p>RF</p>	<ol style="list-style-type: none"> <li>1. Overview of Multifamily Housing</li> <li>2. Brief History of NY Housing Programs</li> </ol>	<p>Readings: Furman Policy Briefs, <i>Housing Policy in New York City: A Brief History</i>, <a href="http://furmancenter.org/files/publications/AHistoryofHousingPolicycombined0601000.pdf">http://furmancenter.org/files/publications/AHistoryofHousingPolicycombined0601000.pdf</a></p> <p>Michael H. Schill, <i>Housing Issues and Options for New York City</i>, Gotham Gazette, 2001, available at:</p>

		<ul style="list-style-type: none"> <li>3. New Marketplace Housing Plan</li> <li>4. Housing New York Plan</li> </ul>	<p><a href="http://www.gothamgazette.com/commentary/78.schill.shtml">http://www.gothamgazette.com/commentary/78.schill.shtml</a></p> <p>Eric Jaffe, New York's 'Affordable Housing' Isn't Always Affordable, The Atlantic Cities, February 21, 2013, <a href="http://www.theatlanticcities.com/housing/2013/02/new-york-affordable-housing-isnt-always-affordable/4757/">http://www.theatlanticcities.com/housing/2013/02/new-york-affordable-housing-isnt-always-affordable/4757/</a></p> <p>"Affordable Housing in New York City", <a href="http://publicadvocategotbaum.com/policy/documents/AHS-ConferencePublication.pdf">http://publicadvocategotbaum.com/policy/documents/AHS-ConferencePublication.pdf</a> (please look at pages 13-39)</p> <p>Discussion Questions: Is affordable housing possible in NYC? Why should we care?</p> <p>Assignment: Tax Exemptions. Questions given in class due 10/10</p>
<b>October 10<sup>th</sup></b>	RF/CB	<ul style="list-style-type: none"> <li>1. Review Credits</li> <li>2. Real Estate Tax Incentives</li> <li>3. Inclusionary Zoning</li> <li>4. Tax Abatements</li> </ul>	<p>Readings: Citizens Housing and Planning Council, <i>The Future of Real Estate Tax Exemptions for Affordable Housing</i>, available at: <a href="http://www.chpcny.org/wp-content/uploads/2012/01/Tax-Incentives-Final-1-19-12.pdf">http://www.chpcny.org/wp-content/uploads/2012/01/Tax-Incentives-Final-1-19-12.pdf</a></p> <p>NYC Annual Report on Tax Expenditures (review section on Real Property tax exemptions) at: <a href="http://www1.nyc.gov/assets/finance/downloads/pdf/reports/reports-tax-expenditure/ter_2015_final.pdf">http://www1.nyc.gov/assets/finance/downloads/pdf/reports/reports-tax-expenditure/ter_2015_final.pdf</a></p> <p>ANHD, 421-a Developer's Tax Break, at: <a href="http://www.anhd.org/wp-content/uploads/2011/07/ANHD-421a-Analysis-Maps_-012815.pdf">http://www.anhd.org/wp-content/uploads/2011/07/ANHD-421a-Analysis-Maps_-012815.pdf</a></p> <p>HPD, 421-a Program, <a href="http://www1.nyc.gov/site/hpd/developers/tax-incentives-421a-main.page">http://www1.nyc.gov/site/hpd/developers/tax-incentives-421a-main.page</a></p> <p>Furman Center, <i>Distribution of the Burden of New York City's Property Tax</i> <a href="http://furmancenter.org/files/sotc/Distribution_of_the_Burden_of_New_York_Citys_Property_Tax_11.pdf">http://furmancenter.org/files/sotc/Distribution of the Burden of New York Citys Property Tax_11.pdf</a></p> <p>Heather Schwartz, Is Inclusionary Zoning Inclusionary? <a href="http://www.rand.org/pubs/technical_reports/TR1231.html#abstract">http://www.rand.org/pubs/technical_reports/TR1231.html#abstract</a></p> <p>Habitat NYC, "Information on Inclusionary Zoning", available at:</p>



			<a href="http://www.habitatnyc.org/pdf/Toolkit/InclusionaryZoning.pdf">http://www.habitatnyc.org/pdf/Toolkit/InclusionaryZoning.pdf</a> Discussion Question: What do we think about 421-a
<b>October 17<sup>th</sup></b>	CB Guests:	<ol style="list-style-type: none"> <li>1. Mixed Income Housing</li> <li>2. RFP response</li> </ol>	<p>Case: Seward Park</p> <p>Guest Invitees:</p> <p>Readings: NYS Request for Proposals: Multi-Family Housing Programs, available at: <a href="http://www.nyshcr.org/Funding/UnifiedFundingMaterials/2013/RFP_MultiFamilyPrograms.pdf">http://www.nyshcr.org/Funding/UnifiedFundingMaterials/2013/RFP_MultiFamilyPrograms.pdf</a></p> <p>Seward Park Request for Proposal (posted). Discussion Questions: What do you need to do to have a winning response?</p>
<b>October 31<sup>st</sup></b>	RF/CB	<ol style="list-style-type: none"> <li>1. Challenges of Underwriting</li> <li>2. Review of Pro Formas</li> <li>3. Different Variables</li> </ol>	<p>Case: Review Williamsburg Case Study</p> <p>Readings:</p> <p>Discussion Questions: What can you do to make a deal work? What are the variables?</p>
<b>November 14<sup>th</sup></b>	CB/RF Visitor:	<ol style="list-style-type: none"> <li>1. Preservation Programs</li> <li>2. Rental Assistance Demonstration</li> <li>3. 202 Refi</li> <li>4. Mitchell Lama</li> <li>5. Section 236 Decoupling</li> </ol>	<p>Case: Ocean Village</p> <p>Assignment: Ocean Village Financial Model</p> <p>Readings: HUD, “Preserving Affordable Rental Housing”, available at: <a href="http://www.huduser.org/portal/pdredge/pdr_edge_featd_article_072913.html">http://www.huduser.org/portal/pdredge/pdr_edge_featd_article_072913.html</a></p> <p>HUD, “Rental Assistance Demonstration” available at (please follow additional links in that section): <a href="http://portal.hud.gov/hudportal/HUD?src=/RAD/info">http://portal.hud.gov/hudportal/HUD?src=/RAD/info</a></p> <p>HUD, “What Happens to LIHTC Projects at Year 15 and Beyond”, available at: <a href="http://www.huduser.org/publications/pdf/what_happens_lihtc_sum.pdf">http://www.huduser.org/publications/pdf/what_happens_lihtc_sum.pdf</a></p>
<b>November 21<sup>st</sup></b>	CB/RF Visitor	<ol style="list-style-type: none"> <li>1. Lending for affordable housing</li> <li>2. CRA</li> </ol>	<p>Readings: Fannie Mae and Workforce Housing. Available at: <a href="https://www.fanniemae.com/content/fact_sheet/wpworkhouse.pdf">https://www.fanniemae.com/content/fact_sheet/wpworkhouse.pdf</a></p> <p>Bipartisan Policy Center, “Housing America’s Future : New Directions for Policy, Executive Summary” available at:</p>

		3. Role of GSEs Role of HUD	<a href="http://bipartisanpolicy.org/sites/default/files/BPC_Housing_Report_ExecSum_0.pdf">http://bipartisanpolicy.org/sites/default/files/BPC_Housing_Report_ExecSum_0.pdf</a> Discussion Questions: What role should banks play in lending for affordable housing? Midterm distributed and due on October 31.
<b>November 28<sup>th</sup></b>	RF/CB	1. Housing Preservation  2. Federal Programs  RAD, HOPE VI	Topic: “Preservation of Existing Federally Assisted Housing” Readings: Debra D. Schwartz, “Banking on Preservation: New Opportunities for Banks to Preserve and Improve the Existing Stock of Affordable Rental Homes” and Nancy Andersen and David Keene, “State Housing Bonds Preserve Affordable Rental Housing in Massachusetts” available at: <a href="http://www.occ.gov/static/community-affairs/community-developments-newsletter/CD_Newsletter_Spring2008.pdf">http://www.occ.gov/static/community-affairs/community-developments-newsletter/CD_Newsletter_Spring2008.pdf</a> “What Happens to LIHTC Properties at Year 15 and Beyond” , available at: <a href="https://www.huduser.gov/portal/publications/pdf/what_happens_lihtc_sum.pdf">https://www.huduser.gov/portal/publications/pdf/what_happens_lihtc_sum.pdf</a>
<b>December 5<sup>th</sup></b>	RF/CB	1. Work-outs  2. Financial Structuring  3. Housing Preservation	Case: Stuyvesant Town Peter Cooper Village: America’s Largest Foreclosure, HBS Case 211106-PDF-ENG, December, 2011. Readings: <u>Other People’s Money</u> by Charles V. Bagli Discussion Questions: What were the incentives for NYC and Blackstone to reach a deal on affordability? Final handed out. Due on December 12
<b>December 12<sup>th</sup></b>	RF/CB	Optional	Case: Review of Final Exam Assignment: Final