

# Economic Impact of New Affordable Residential Development and Occupancy Supported by Federal Tax Credits in North Carolina

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# Web Slides

- <http://www.csb.uncw.edu/cbes/events/index.htm>

# Objective

- Estimate the economic impact of new affordable residential development and occupancy supported by Federal tax credits on the State of North Carolina for 2010-2012

# Selected Literature

- Harrold. “Smart Growth: The Economic Impact of LIHTC Development,” The Capital Issue. April-May 2012.
  - [http://www.lancasterpollard.com/Uploads/Documents/newsletters/2012-04AprilMay\\_AH\\_Economic-Impact-of-LIHTC-Development.pdf](http://www.lancasterpollard.com/Uploads/Documents/newsletters/2012-04AprilMay_AH_Economic-Impact-of-LIHTC-Development.pdf)
- Housing Policy Department, National Association of Homes Builders. The Economic Impacts of Affordable Housing Programs in Montana. June 2012.
  - <http://housing.mt.gov/content/docs/confElliotEisenberg.pdf>
- HR&A Advisers, Inc. Economic Impacts of Affordable Housing on New York State’s Economy. May 22, 2012.
  - <http://www.nysafah.org/cmsBuilder/uploads/HR&A-Economic-Impact-Report.pdf>
- National Low Income Housing Coalition. Literature Review Looks at Potential Economic Impacts of Affordable Housing. January 21, 2011.
  - <http://nlihc.org/article/literature-review-looks-potential-economic-impacts-affordable-housing>
- Wardrip, Williams and Hague. The Role of Affordable Housing in Creating Jobs and Stimulating Local Economic Development. Center for Housing Policy, January 2011.
  - <http://www.nhc.org/media/files/Housing-and-Economic-Development-Report-2011.pdf>

# Data

- Development cost
  - Total development cost of projects supported by Federal housing credits
- Annual occupancy
  - Assume \$20 million split evenly between debt service on home ownership and rental payments each year

# Methodology

- IMPLAN<sup>®</sup>
  - Version 3
  - Acronym for Impact Analysis for PLANning
  - 2009 state economic structure
  - Available from
    - MIG, Inc.
    - Hudson, WI
  - First released in 1979
    - Originally developed by the USDA Forest Service in cooperation with the Federal Emergency Management Agency and the USDI Bureau of Land Management to assist the Forest Service in land and resource management planning

# Theoretical Foundation

- Export-base theory of regional economic growth
  - The oldest, simplest, and most widely used technique for regional economic analysis
  - The basic theoretical tenet is that a region grows in direct proportion to export sales or other “new” money, i.e., money new to the region, being spent.

# The Analysis

- Major assumption
  - The residential development and thus occupancy would not have occurred in the absent of Federal financial support.
- Using data on the development of new residential housing supported by Federal tax credits for 2010-12, the following impacts on the state's economy were estimated:

Output <sup>a</sup>	Local and State Government Tax Collections
Employment <sup>b</sup>	Federal Government Tax Collections
Labor Income <sup>c</sup>	

<sup>a</sup> Impact on Gross State Product

<sup>b</sup> Part-time and full-time employment

<sup>c</sup> Wages and salaries, self-employment income, and property income



# Types of Impacts

- One-time development impacts
- Annual occupancy impacts

# Impact Drivers

- Direct spending
- Indirect spending
- Induced spending

# Direct Spending

- Spending on products produced by firms in a specific industry, e.g., construction and related residential development companies

# Indirect Spending

- Spending by firms who supply firms in a specific industry

# Induced Spending

- Spending by employees of firms in a specific industry and employees of firms that supply that industry

# 2010-12 Cumulative One-Time Development Impacts

	2010	2011	2012	Total
Output	\$450.3 m	\$484.9 m	\$554.7 m	\$1,489.9 m
Employment	3,070	3,310	3,720	3,370 <sup>a</sup>
Labor Income	\$127.8 m	\$137.6 m	\$157.4 m	\$422.8 m
Total Local and State Government Tax Collections	\$16.5 m	\$17.8 m	\$20.3 m	\$38.6 m
Total Federal Government Tax Collections	\$23.6 m	\$25.4 m	\$29.1 m	\$78.1 m

<sup>a</sup> Three-year average

Source: North Carolina IMPLAN<sup>®</sup> model.



# Development Multipliers

Impact	Multiplier
Output	1.73 <sup>a</sup>
Employment	2.15 <sup>b</sup>
Labor Income	2.17 <sup>c</sup>

<sup>a</sup> One dollar in revenues received by the construction and related development sector supports an additional \$0.73 in output statewide.

<sup>b</sup> One job in construction and related development supports an additional 1.15 jobs statewide.

<sup>c</sup> One dollar in labor income earned in construction and related development firms supports an additional \$1.17 in labor income statewide.

Source: North Carolina IMPLAN<sup>®</sup> model.



# Top 10 Largest Impacts by Sector in 2012 (Development)

Output Impact		Employment Impact		Labor Income Impact	
Construction	\$319.7 m	Construction	1,700	Construction	\$72.7 m
Wholesale Trade	\$15.8 m	General Merchandise Retail	130	Wholesale Trade	\$7.0 m
Rental Agencies	\$11.7 m	Food Services/Drinking Places	120	Architecture/Engineering Services	\$4.2 m
Real Estate Firms	\$11.0 m	Wholesale Trade	90	Health Care Offices	\$3.8 m
Financial Activities	\$8.4 m	Food and Beverage Retail	90	Motor Vehicle and Parts Retail	\$3.8 m
Truck Transportation	\$8.4 m	Real Estate Firms	90	General Merchandise Retail	\$3.7 m
Architecture/Engineering Services	\$8.1 m	Motor Vehicle & Parts Retail	70	Truck Transportation	\$2.9 m
Food Services/Drinking Places	\$7.1 m	Miscellaneous Retail	70	Hospitals	\$2.6 m
Health Care Offices	\$6.8 m	Architecture/Engineering Services	60	Food and Beverage Retail	\$2.6 m
General Merchandise Retail	\$6.7 m	Truck Transportation	60	Food Services/ Drinking Places	\$2.5 m
Percent of Total	72.8	Percent of Total	66.7	Percent of Total	67.2

Source: North Carolina IMPLAN® model.





# Annual Occupancy Impacts

- Impacts of \$20 million spent annually on debt service or rent
  - \$10 million on home ownership
  - \$10 million rental payments

# 2012 Annual Occupancy Impacts<sup>1</sup>

	Total Impact
Output	\$33.0 m
Employment	220
Labor Income	\$7.8 m
Total Local and State Government Tax Collections	\$2.1 m
Total Federal Government Tax Collections	\$2.0 m

<sup>1</sup> \$20 million divided annually between debt service on home ownership and rental payments

Source: North Carolina IMPLAN<sup>®</sup> model.



# Annual Occupancy Multipliers

Impact	Multiplier
Output	1.60 <sup>a</sup>
Employment	1.83 <sup>b</sup>
Labor Income	1.57 <sup>c</sup>

<sup>a</sup> One dollar in revenues received by the lending or rental sectors supports an additional \$0.60 in output statewide.

<sup>b</sup> One job in construction supports an additional 0.83 jobs statewide.

<sup>c</sup> One dollar in labor income earned in the lending or rental sectors supports an additional \$0.57 in labor income statewide.

Source: North Carolina IMPLAN<sup>®</sup> model.



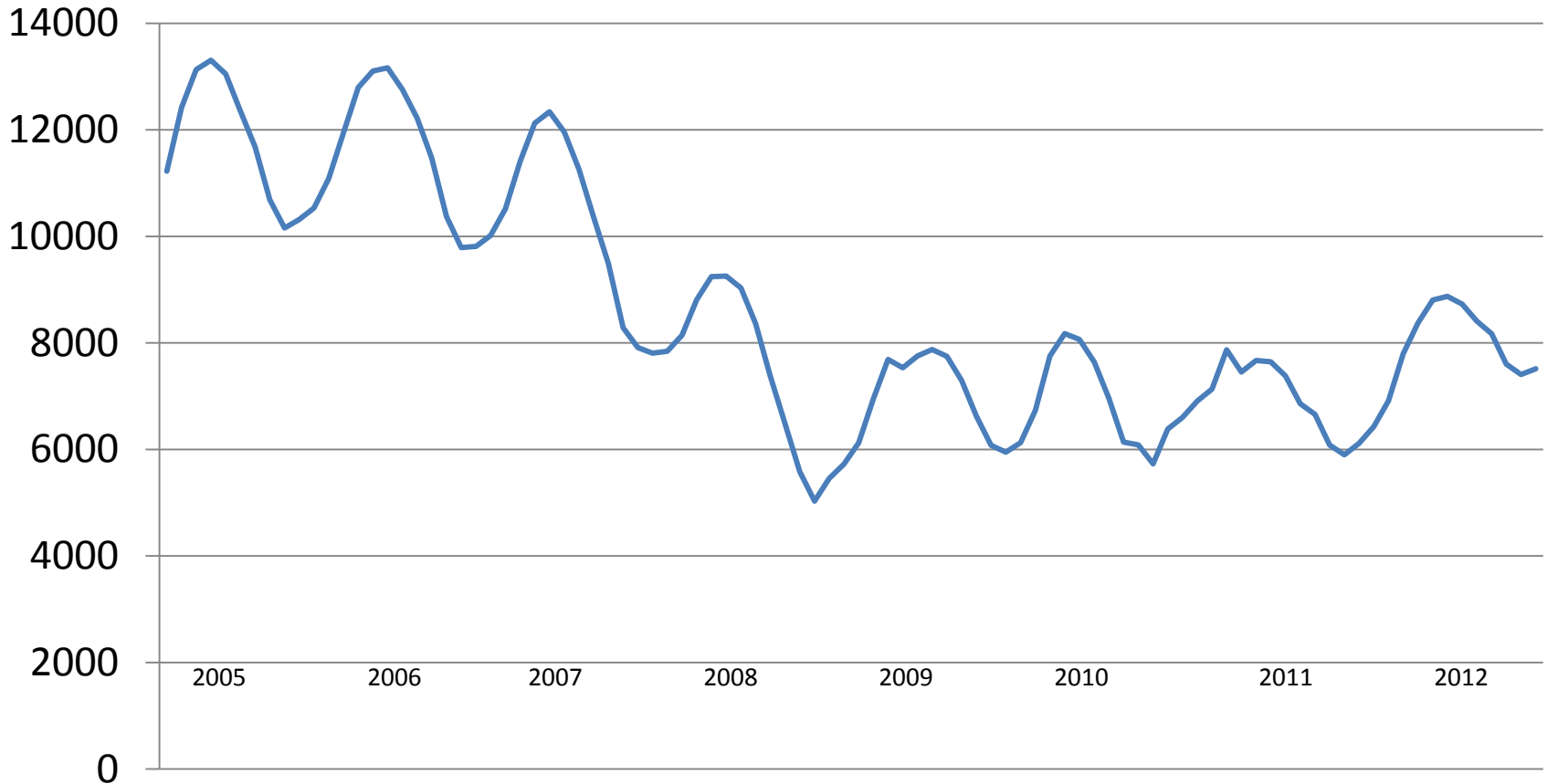
# Top Ten Largest Impacts by Sector in 2012 (Occupancy)

Output Impact		Employment Impact		Labor Income Impact	
Financial Institutions	\$11.9 m	Real Estate Firms	90	Financial Institutions	\$3.1 m
Real Estate Firms	\$11.5 m	Financial Institutions	40	Real Estate Firms	\$1.1 m
Consumer Finance Companies	\$0.9 m	Food Services/Drinking Places	10	Financial Advisers	\$0.3 m
Food Services/Drinking Places	\$0.6 m	Financial Advisers	10	Food Services/Drinking Places	\$0.2 m
Rental Agencies	\$0.6 m	Building Services	10	Health Care Offices	\$0.2 m
Insurance Carriers	\$0.4 m	Employment Agencies	5	Consumer Finance Companies	\$0.2 m
Building Services	\$0.4 m	Professional and Civic Organizations	5	Building Services	\$0.1 m
Telecommunications	\$0.4 m	Health care Offices	<5	Hospitals	\$0.1 m
Health Care Offices	\$0.3 m	Building Maintenance	<5	Wholesale Trade	\$0.1 m
Financial Advisers	\$0.3 m	Consumer Finance Companies	<5	Employment Agencies	\$0.1 m
Percent of Total	82.7	Percent of Total	80.7	Percent of Total	70.5

Source: North Carolina IMPLAN® model.



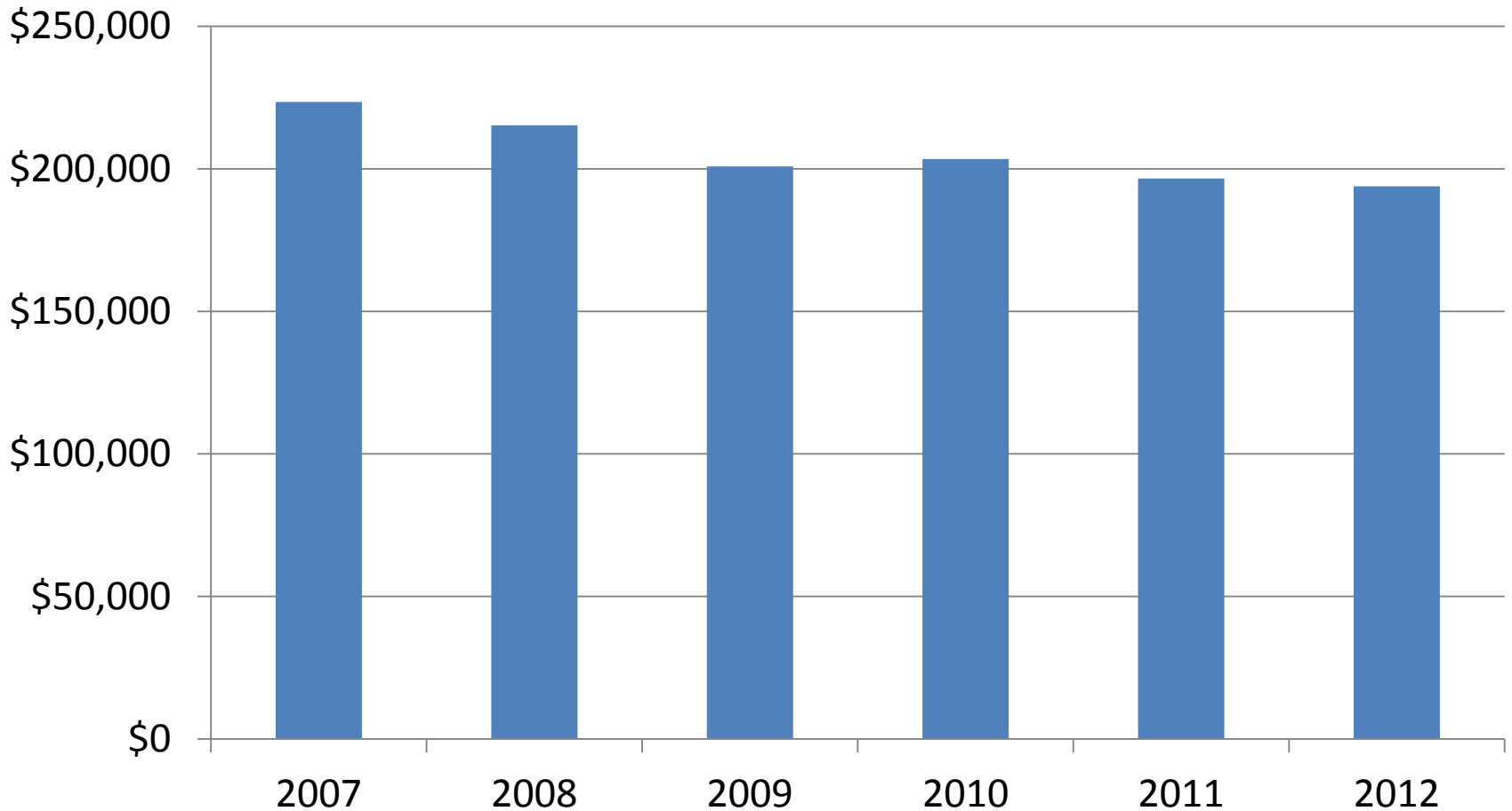
# Sales of Existing Single-Family Homes in North Carolina (5-Month Centered Moving Average)



Source: NC Association of Realtors.



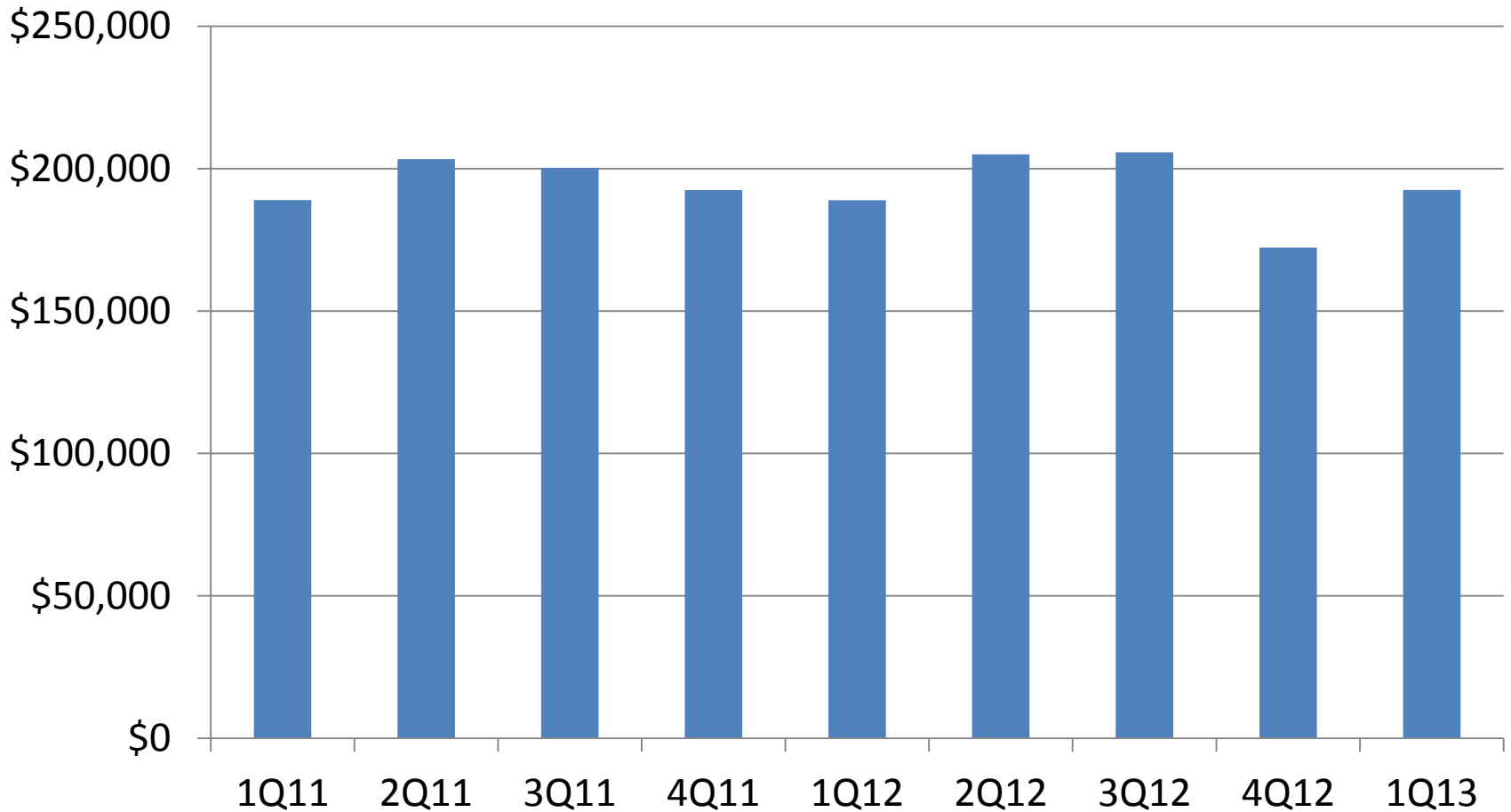
# Average Annual Sales Price of Existing Single-Family Homes in North Carolina



Source: NC Association of Realtors.




# Average Quarterly Sales Price of Existing Single-Family Homes in North Carolina



Source: NC Association of Realtors.



# Quarterly Barometer



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## Economic Barometer



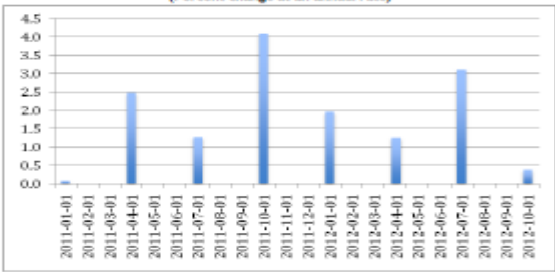
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### The U.S. Economy: Are Green Chutes Emerging?

News on the economy in recent months has on balance been upbeat, suggesting that growth may have shifted up from the sluggish pace of 2012. This seems to have happened even as taxes were increased as a result of the January 1 agreement to avoid the worst of the "fiscal cliff," and as sequester cuts in federal spending kicked in on March 1. Does this mean that the economy may finally be emerging from the doldrums?

The chart below illustrates growth in real GDP through the end of last year. While growth was sluggish over the year, it ended on an especially weak note. This weakness was compounded by the disruption from Hurricane Sandy and some other one-off factors. Clearly, more economic vigor is long overdue.

**Growth in Real GDP**  
(Percent change at an annual rate)



Quarter	Percent Change
2011-01-01	0.0
2011-02-01	0.0
2011-03-01	0.0
2011-04-01	2.5
2011-05-01	0.0
2011-06-01	1.5
2011-07-01	0.0
2011-08-01	0.0
2011-09-01	0.0
2011-10-01	4.0
2011-11-01	0.0
2011-12-01	2.0
2012-01-01	0.0
2012-02-01	0.0
2012-03-01	0.0
2012-04-01	1.5
2012-05-01	0.0
2012-06-01	0.0
2012-07-01	3.0
2012-08-01	0.0
2012-09-01	0.0
2012-10-01	0.5

### Readings on the Labor Market More Upbeat

Overall, readings on the labor market have been more favorable over recent months. Even with a pause in March, private sector payrolls have grown an average of 200 thousand per month since last fall, well above the pace required to absorb labor force entrants. Beyond this, employers have been upping the hours of work for their em-



# Real Estate Investment: Affordable Housing

NCCDA Spring Training  
Conference

May 16, 2013  
Wilmington, NC

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# ***An Introduction to Real Estate Investment, with a Consideration of Affordable Housing***

## ***Today's Agenda:***

A Representative Real Estate Deal

Market Efficiency and Real Estate Market Inefficiency

Affordable Housing, Public Policy, and the Real Estate Market

## ***An Introduction to Real Estate Investment, with an Affordable Housing Enhancement***

- A Representative Real Estate Deal
  - “Distressed” condo in Florida; 1250 square feet
  - Purchased from Duetsche Bank, mortgage owner
  - Purchased in 2007 by the prior owner for \$120,000
  - Purchase price in 2009 of \$49,000
  - All cash deal, with no investment borrowing available
  - Later occupied by a Section 8 tenant. A good tenant.

## ***Introduction to Real Estate Investment: Terms of the Deal?***

- Renting for \$775 per month
- Expenses of \$3,600 per year (HOA, Mgt, Taxes and Insurance, etc)
- Total potential gross income per year:
  - $12 \times 775 =$  \$9,300
  - Expected vacancy (1 month) (775)
  - Effective Gross Income \$8,525
  - Operating Expenses (est) (3,600)
  - Net Operating Income \$4,925

## ***Introduction to Real Estate Investment***

- Net Operating Income or NOI of \$4,925
- Against a purchase price of \$49,000?
- NOI/Purchase Price? Ignoring financing? Cash deal?

$$\text{The Return} = 4,925/49,000 = .1 \text{ or } 10\%$$

Seems like a good investment. But, how might affordable housing platforms improve the returns? There is a tradeoff – the investor “settles” for the struggling low income tenant, and gets the tax credit, or the Section 8 subsidy.

## ***Real Estate Investment and Affordable Housing: Drawbacks ...***

- First, were this a new property, it could not have been built for \$40 per square foot including the land. LIHTC's do not cover costs of land.
- Second, LIHTC's apply to multi-unit developments, with occupancy structured per the 20/50 or 40/60 rules. LIHTC standards do not restrict the composition of a housing unit (married, single, etc). Many compliance guidelines. Household income limits, etc. Reporting requirements. Big pain. (More colorful language avoided here!) Section 8 and other affordable housing subsidies exist, as well.

## ***Real Estate Investment, LIHTC “Enhancements,” and the Affordable Housing Dilemma***

- Third, “median income” in New Hanover County is \$62,700 for 2013. LIHTC income limits are set by county. The household income limit under the 20/50 rule for a 4-person household is \$31,350 (50% of \$62,500). Under the 40/60 rule it is \$37,620. Pretty straightforward, one would think. But it is not.
- Fourth, once a developer is approved for a multi-unit development, and adheres to these standards of low-income occupancy, the 9% credit against construction or redevelopment costs, per year for 10 years, is available. Potentially 90% of my costs! It seems easy. It is not. (Your experience?)

## *The Affordable Housing Dilemma ...*

- Bottom line? Close to 10 million renters with incomes below 50% of the area median do not receive rental assistance....under-served by the LIHTC, Section 8 or other housing support.
- With a need for over 5 million additional low income housing units, the enhanced returns don't motivate enough new supply. And rental subsidies are obtained only with difficulty (for the tenant) and approvals of subsidies are often followed by decades of tenancy (average? 20.8 yrs.). Public policy falls short ... why?



***So what might be the “issue” with real estate investment and affordable housing? It might come down to the market’s “efficiency.”***

### ***What is market efficiency?***

- An efficient market is one where prices broadly reflect available and relevant information. An efficient market requires an unobstructed transaction to allow this “information delivery.”
- With “efficient” pricing in a well-functioning market, resources can more likely be allocated to the areas of the market most in need.

## ***Real Estate Market Inefficiency: What makes a market, like the NYSE, efficient?***

- Large number of buyers and sellers
- Unobstructed flows of information
- Low transaction costs
- Lack of large-scale government interference
- Homogenous (nearly identical) products
- Product liquidity

Real estate “fails” the efficiency test. That can make real estate investment both better (for some), and worse (for most).

## ***Real Estate Investment: Real Estate Market Inefficiency***

- **Features of Real Estate Market Inefficiency?**
  - (compare it to the market for gasoline)
  - Limited number of buyers and sellers
  - Information flows obstructed, infrequent “trading”
  - High transaction costs
  - Substantial government “interference” (regulation)
  - Heterogeneous products
  - Product illiquidity (hard to convert to cash)

## ***Real Estate Investment: Real Estate Market Inefficiency***

- So, what about the “problems” of the real estate market (like inefficiency) and affordable housing?
  - The real estate market is becoming more and more efficient (more buyers and sellers, better information flows, lower transaction costs, more homogeneous properties) in most areas. But not in all areas....

## Affordable Housing, Public Policy, and the Real Estate Market

- Government controls, one of the real estate market “imperfections,” are getting more detailed, more costly, and more onerous...
- ...as the market is encouraged to provide more “affordable housing,” public policy may be one of the problems ... compliance guidelines, reporting protocols, political issues, etc...
- New occupancy rules (probably a good thing) and expanded funding may take up some of the slack...

## Affordable Housing, Public Policy, and the Real Estate Market

- So, if this greater inefficiency contributes to affordable housing shortcomings, what (and where) are the solutions? What are some of your ideas?
- There could be a Nobel prize in Economics in it for you...along with eight round-trip tickets to Stockholm.
- Or round trip tickets to Oslo (the other Nobel prize), if you think about it ... this is important stuff.

# Real Estate Investment: Affordable Housing

- Thank you!
- And, if you have any questions or comments?
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