# Density & Development Economics



Nadine Fogarty October 10, 2008



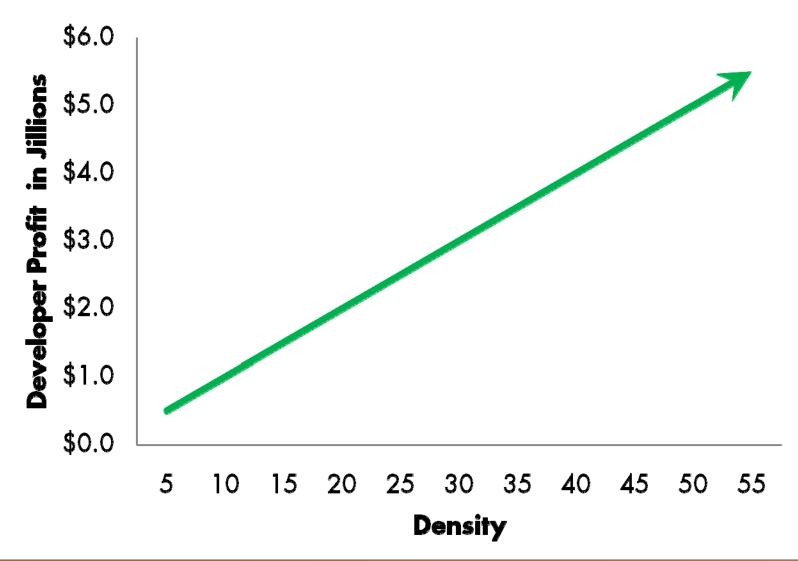
#### Density is "In"



Multiple surveys show that between 30 and 55 percent of Americans want to live in mixed use, mixed density places

-"Option of Urbanism" by C. Leinberger

#### **Common Perception of Density**





#### **Primer on Financial Feasibility Analysis**

#### What is a land residual analysis?

- A basic measure of financial feasibility and the amount of value that could be generated by development
- Estimated value of the land given the income that could be generated from development
- A way to determine the "highest and best use" of a property

#### **Financial Analysis How-To**

#### **Step 1:**

Generate Assumptions About:

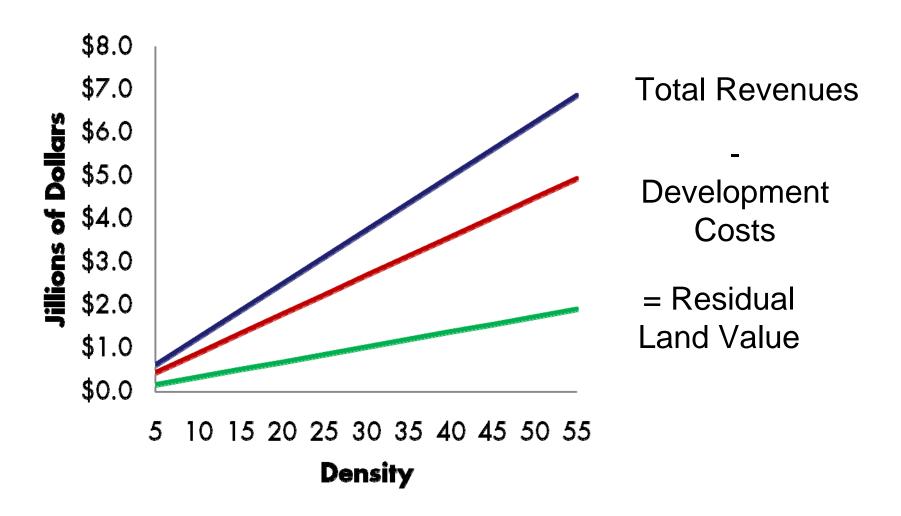
- Development Costs
- ExpectedProject Revenues

#### **Step 2:**

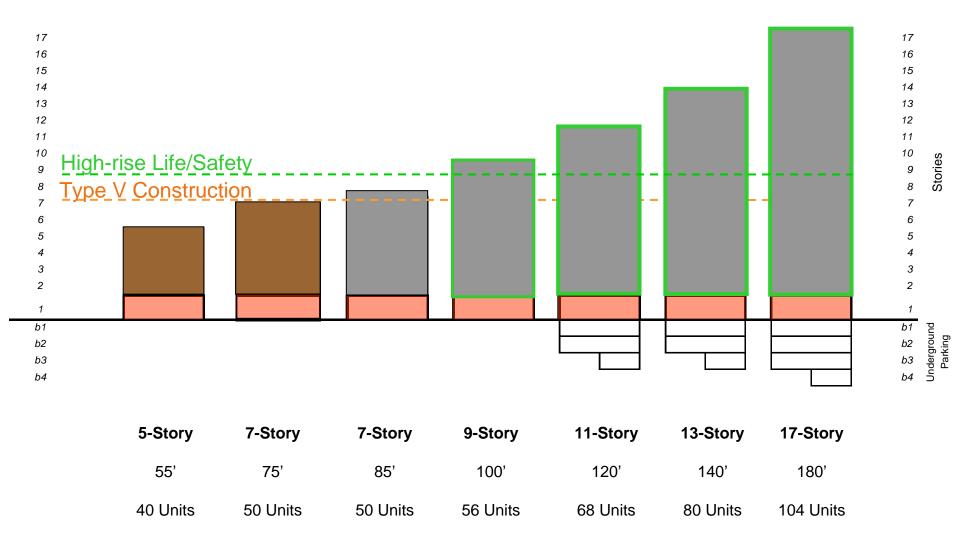
Value Based on Expected Revenues from Development

- Total Development Costs
  - = Land Residual Value

#### **Simplified Land Residual Analysis**

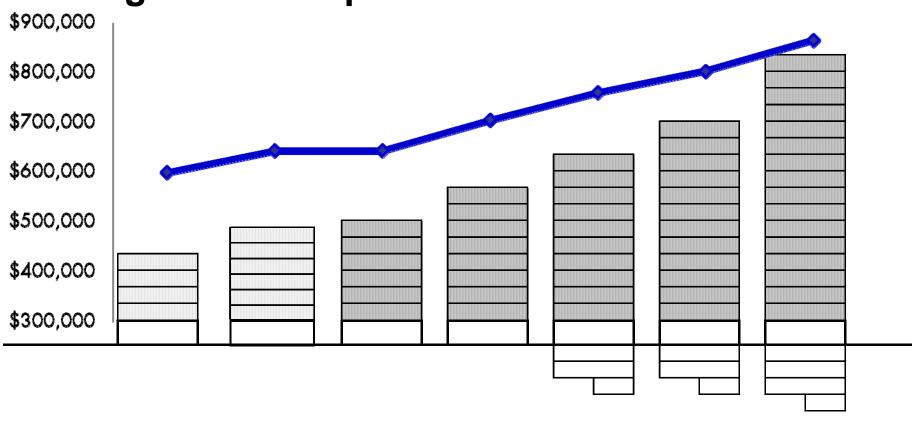


#### How Does it Work in the Real World?





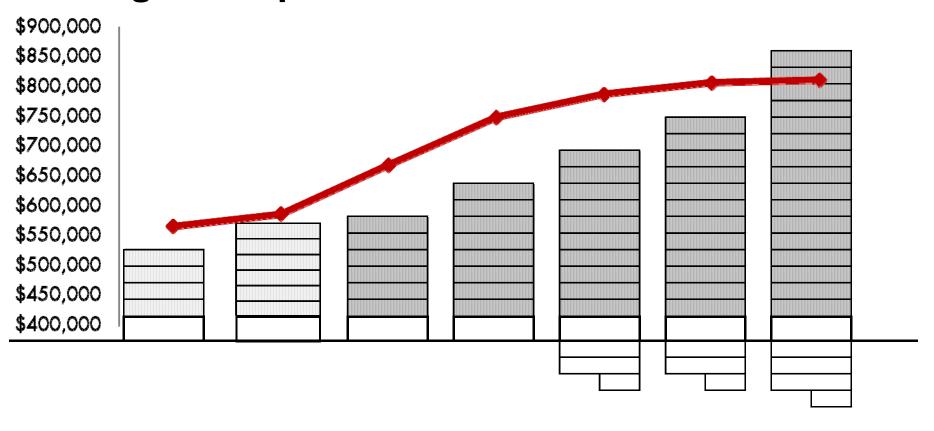
#### **Average Revenue per Unit**







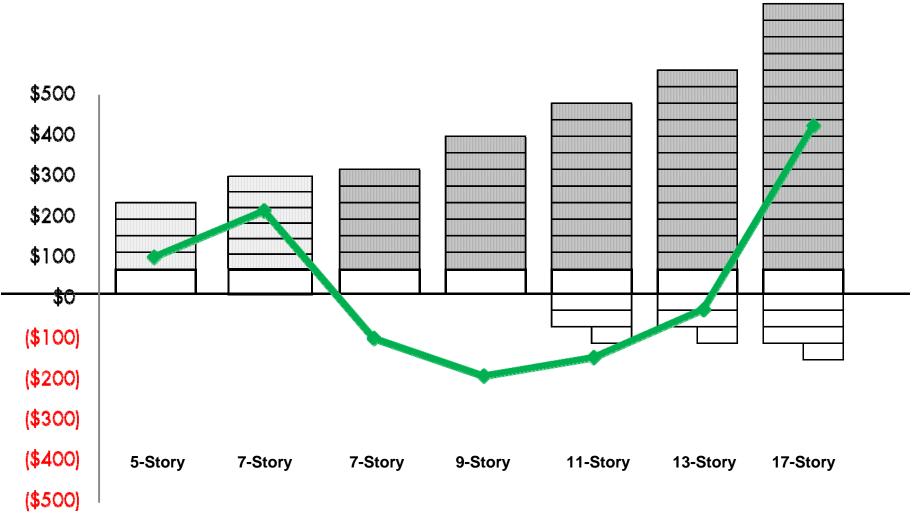
#### **Average Cost per Unit**





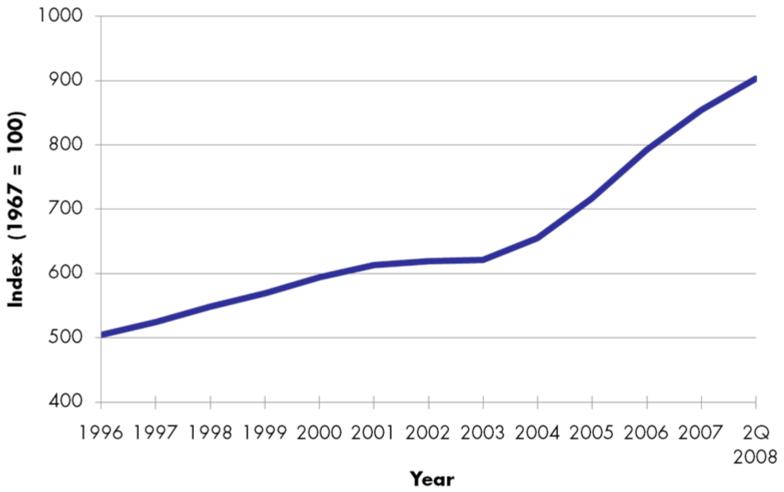


# Residual Land Value (per Square Foot Land)



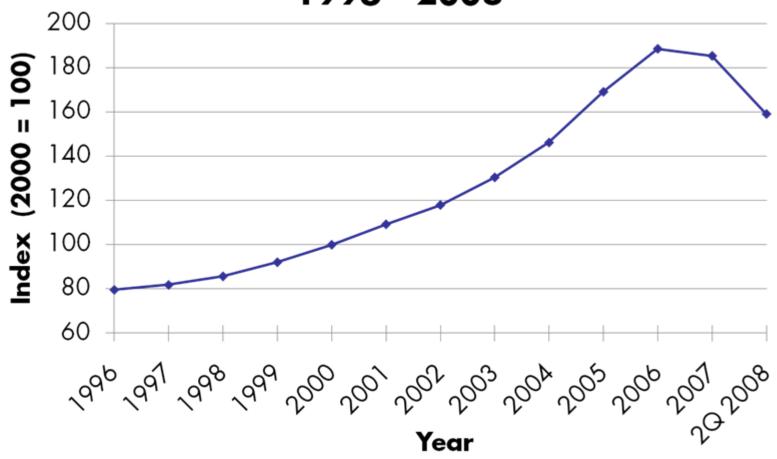


#### US Building Cost Index, 1996 - 2008



Source: Turner Construction Index

#### US Single Family House Prices, 1996 - 2008



Source: Case-Shiller House Price Index

#### How Can We Influence What's Feasible?

 Promote Quality Mixed-Use Neighborhoods

Price Premium – 10 to 20%



#### How Can We Influence What's Feasible?

2. Provide Access to High Quality Transit





Lower parking requirements = lower development costs

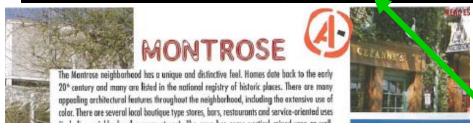
- plus -

Transit is a desirable neighborhood amenity for both residents and resulting in a premium

#### How Can We Influence What's Feasible?

#### 4. Encourage Places with "Character"

	West University	Montrose	Midtown	Katy
2006 Average Sales Price	\$591,215	\$277,310.01	\$274,209	\$136,726
Placemaking Grade*	A	A-	В	D+







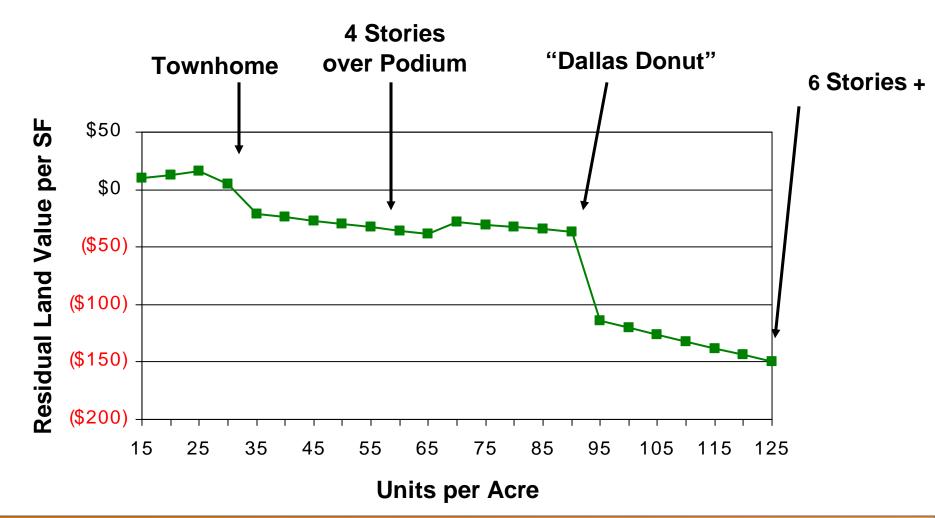




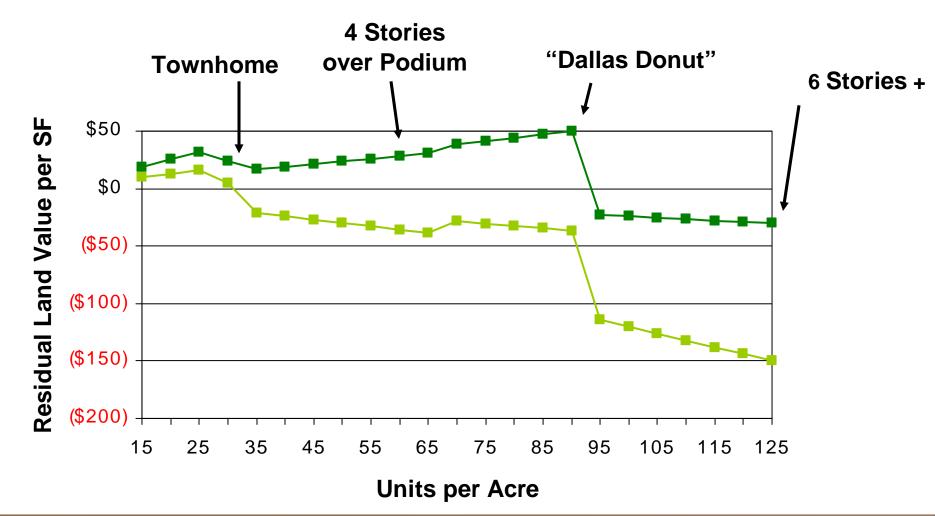
\*Placemaking grade source: "State of Place" project by Wulfe and Company. 002 Houston Magazine, April, 2005.



#### **Houston Example**



## Impact of 15% "Placemaking" Premium and Lower Parking Ratios



#### St. Paul Central Corridor Example



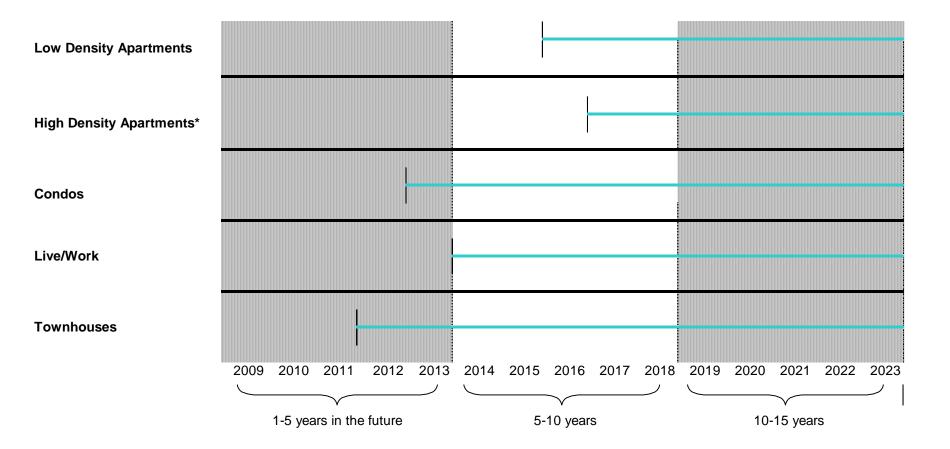
### Current

### **Future Vision**





#### **Projecting Future Feasibility**





#### **Food for Thought**

- 1. Planners and communities need to be realistic about what kinds of development are likely to be feasible in both the short and long term
- 2. The best way to enable higher density development is to think more broadly than individual projects and to promote quality, mixed-use neighborhoods
- 3. Community benefits, including affordable housing, should be dealt with holistically, not on a project by project basis
- 4. Transit is an important opportunity
- 5. In some places, government may need to take a more proactive role in encouraging density

