

# High Density Residential Development



**JANUARY 28, 2013**

# EXHIBIT A



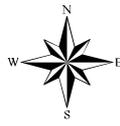
## High Density Residential: Campus Corner and DeBarr Neighborhood



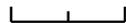
Map produced by the City of Norman Geographic Information System.

The City of Norman assumes no responsibility for errors or omissions in the information presented.

January 24, 2013



0 250 500 Feet



-  Campus Corner
-  DeBarr Neighborhood
-  Parcels

- |  |  |   |
|--|--|---|
|  Proposed Outer Loop          |  Office             |  Open                |
|  Very Low Density Residential |  Commercial         |  Flood Plain         |
|  Low Density Residential      |  Industrial         |  park                |
|  Medium Residential           |  Institutional      |  Lakepool / Floodway |
|  High Density Residential     |  County Residential |  Mixed Use           |

# Primary Cost Drivers



Four primary issues drive the cost of developing high density residential uses:

- Cost of land
- Density of the project
- Height of the buildings
- Requirement for parking garage
  - \$13,000-\$17,000 per parking stall
  - \$350,000 per level

# Cash Flow Analysis Scenarios



- Asked OHH to analyze economic viability of high density residential development in Campus Corner
- OHH established assumptions to analyze cash-flow with data provided by B3 Group, Elsey Brothers and BLW Architects.
- Assumptions were tested against rents and amenities at Crimson Park, an existing apartment development in Norman.
- Using those assumptions, OHH conducted 18 multi-year cash flow analyses based on building heights of 4 and 5 stories.

# Scenario Assumptions



- Land acquisition costs based on developers' data
- 1-acre site
- 100% lot coverage
- Unit sizes + rents based on developers' data
- Unit mix 1/3 studio, 1BR 2BR units based on developers' data
- Parking all in garage; one stall per bedroom
- Financing between 3.5-4.5%
- Seeking industry standard IRR of 18% over 18 years (acknowledge projects can/do work with less)

# Cash-Flow Analysis Scenarios

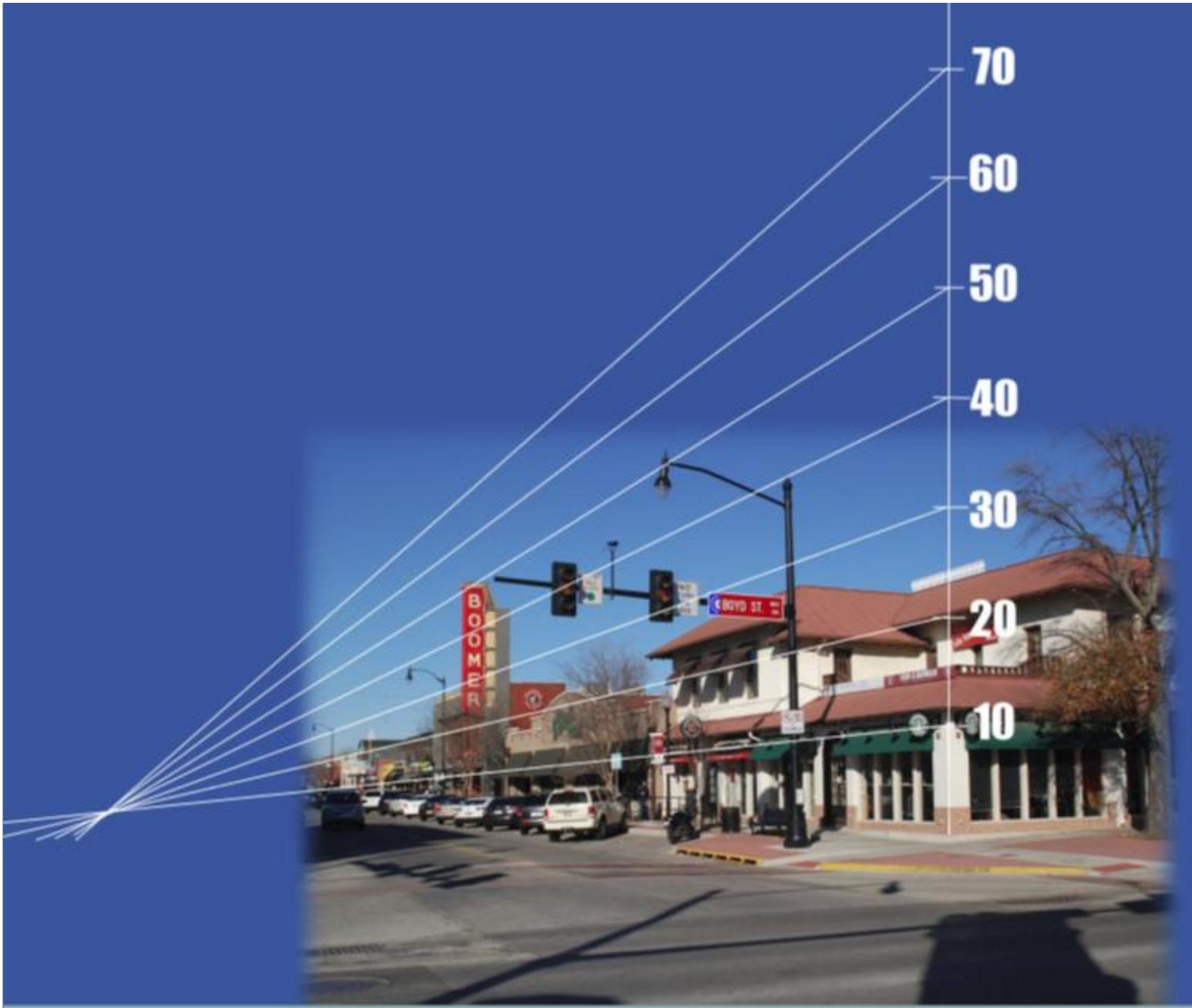


<b>Scenario #</b>	<b>Stories</b>	<b>Units/acre</b>	<b>IRR</b>	<b>Finance</b>	<b>Other</b>
12	4	148	13.3%	3.5%	30-year mortgage
12A	4	148	22.2%	3.5%	Assumes \$1 land acquisition
13	4	148	9.5%	4.5%	Sale at year 10
14	5	175	12.7%	3.5%	30-year mortgage
15	4	148	11.5%	3.5%	Sale at year 10
16A	4	60	11.5%	3.5%	Assumes \$1 land acquisition
17A	4	80	12.5%	3.5%	Assumes \$1 land acquisition

# How Tall is a Building Story?



- Most ground stories are between 12-16 feet tall.
- Upper stories are between 10-13 feet tall.
- Therefore the tallest 4-story building would be a maximum of 55 feet high.
- Tallest 5-story building would be 68 feet high.
- 75 feet is the limit before IBC classifies as “high rise” triggering regulations as to construction type, emergency systems and elevators



70

60

50

40

30

20

10

BOOM!

BOYD ST

# Conclusions



- Minimum height for economically viable high density projects is 4 stories.
- 4 stories + buildings could add amenities such as ground floor retail or enhanced architectural detailing.
- Density is used more commonly than FAR. Neither is perfect and both need to be accompanied by design guidelines to achieve high quality, compatible development.
- Design guidelines should be flexible to allow for varied architectural styles.
- Densities at or above 100 du/acre are more likely to achieve a reasonable IRR.
- Parking garages are necessary to make projects compact on smaller parcels.
- Given the right location, residents will walk more to surrounding amenities and adding density will attract additional amenities.
- Density must be located strategically with locations chosen to protect surrounding areas.
- The four primary drivers of the cost of high density development are:
  - Land cost
  - Project density
  - Buildings height
  - Required parking garages