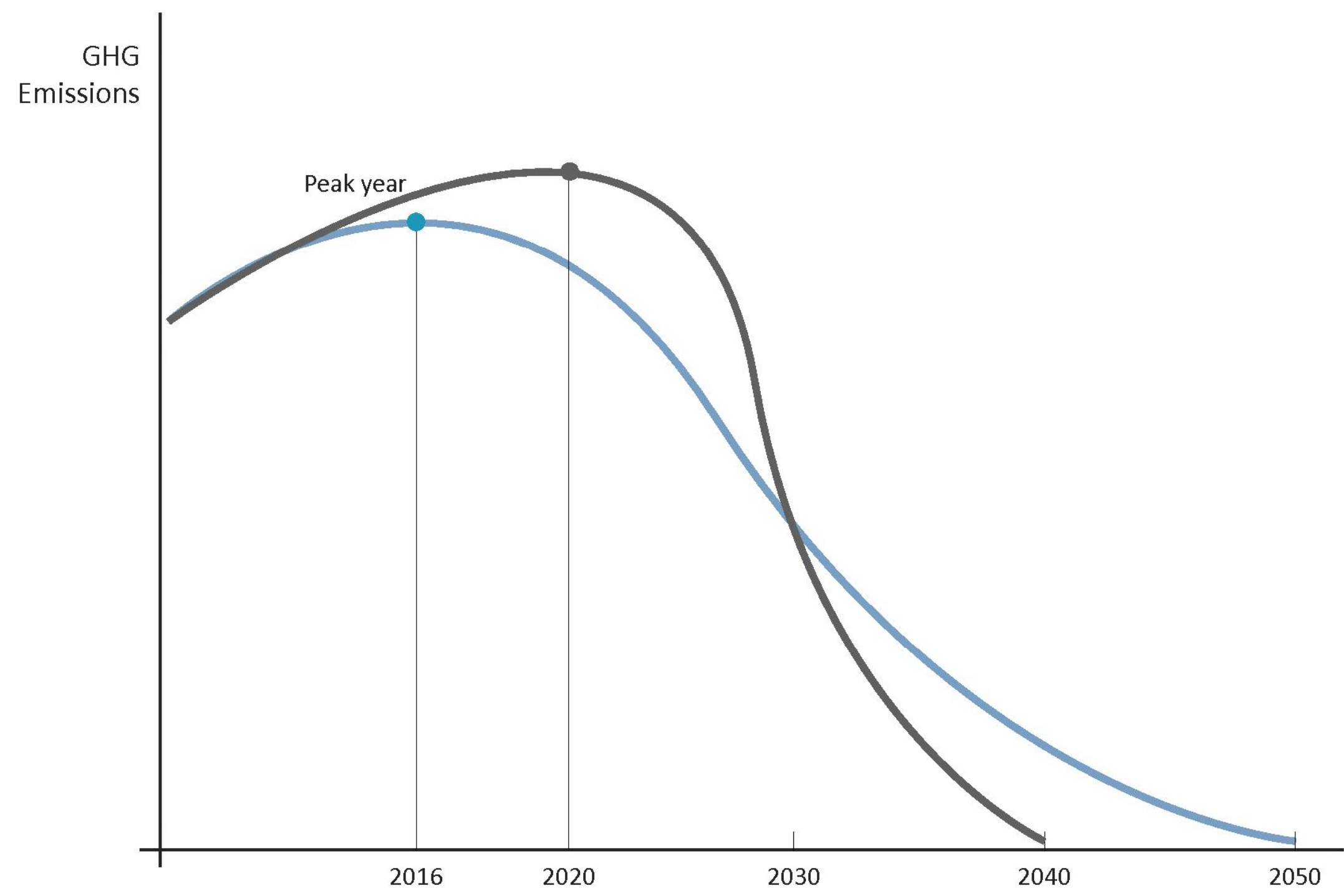


The Eco Proforma™

(Lessons Learned on our way to scaling Passive House in the U.S.)



TIMING MATTERS

HOW WILL THE MARKET CHANGE?

- A) Goodwill...“Just do it”
- B) Change the building code (everywhere)
- C) Capitalism

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Conventional Multifamily Apartment

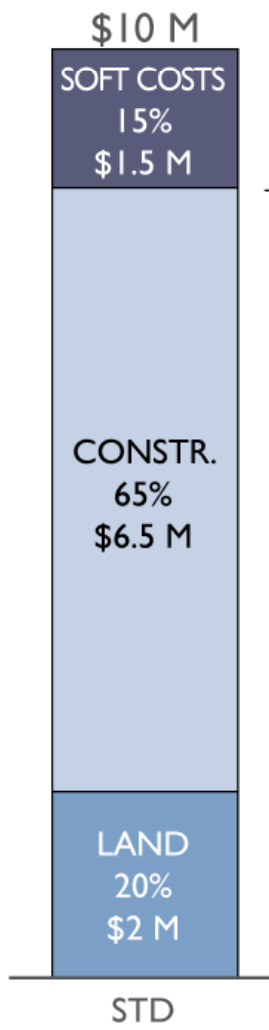


- 35,000 GSF, 30,000 rentable
- 40 Units, average 750 SF/unit
- 4 levels, type-VA construction
- \$170/sf construction cost
- \$2.93/sf/mo average rent
- 5.5% vacancy

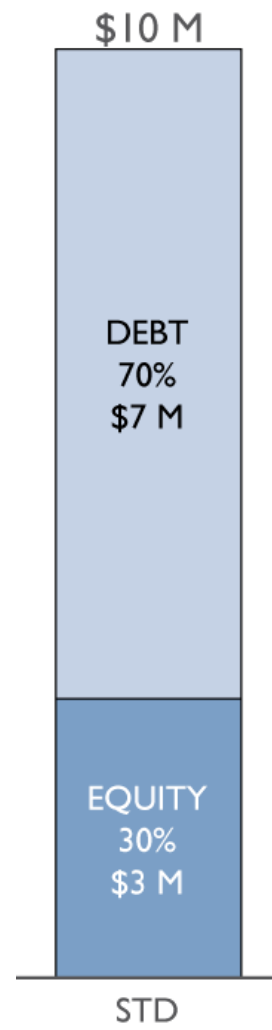
- \$2M land cost
- \$6M construction cost
- \$1M annual gross revenue

CONVENTIONAL APPROACH

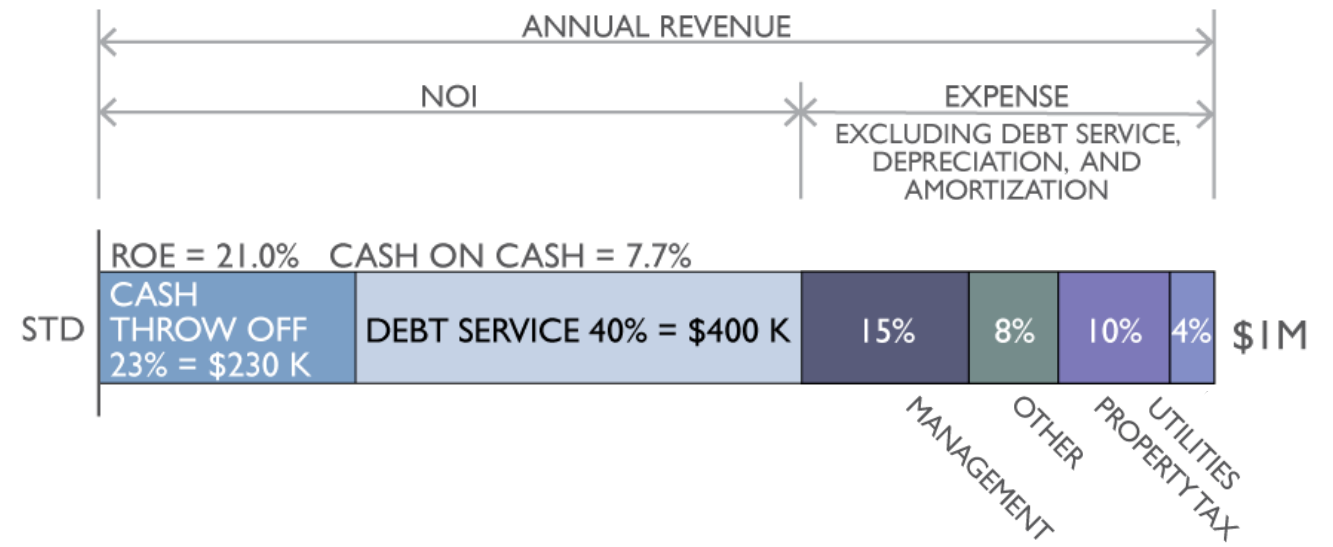
DEVELOPMENT COSTS



CAPITAL SOURCES

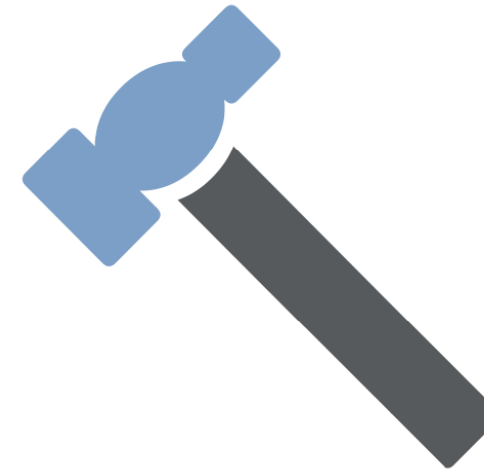
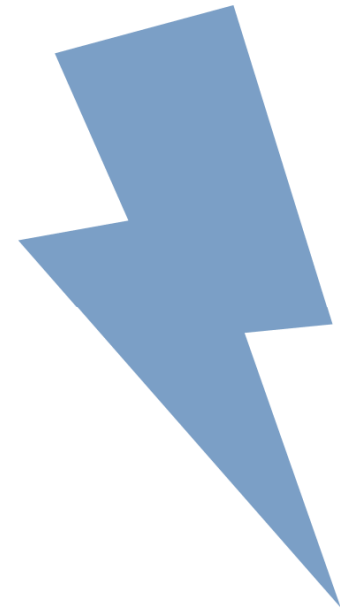


REVENUE ALLOCATION



“We made too many wrong mistakes.”

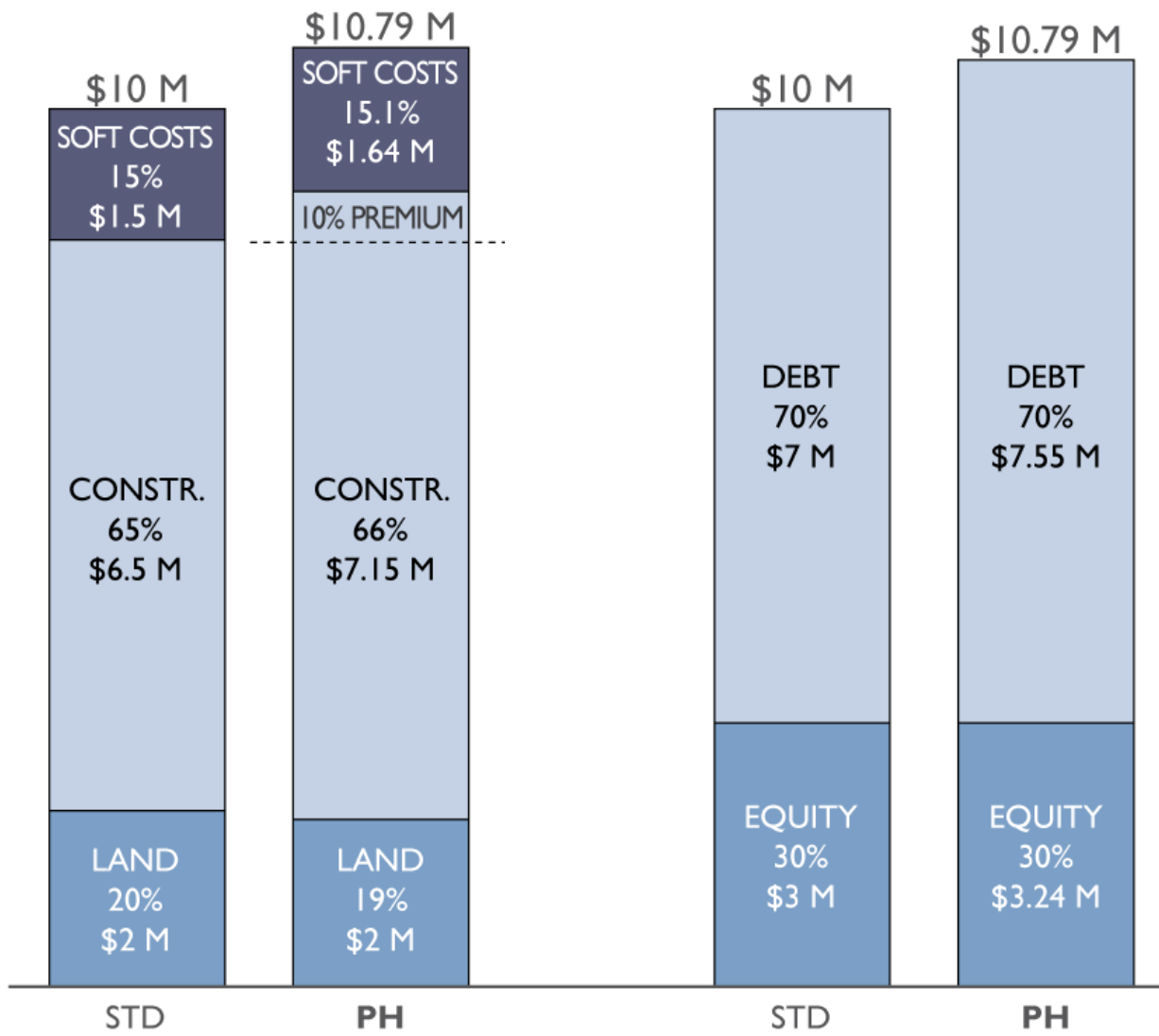
- Yogi Berra



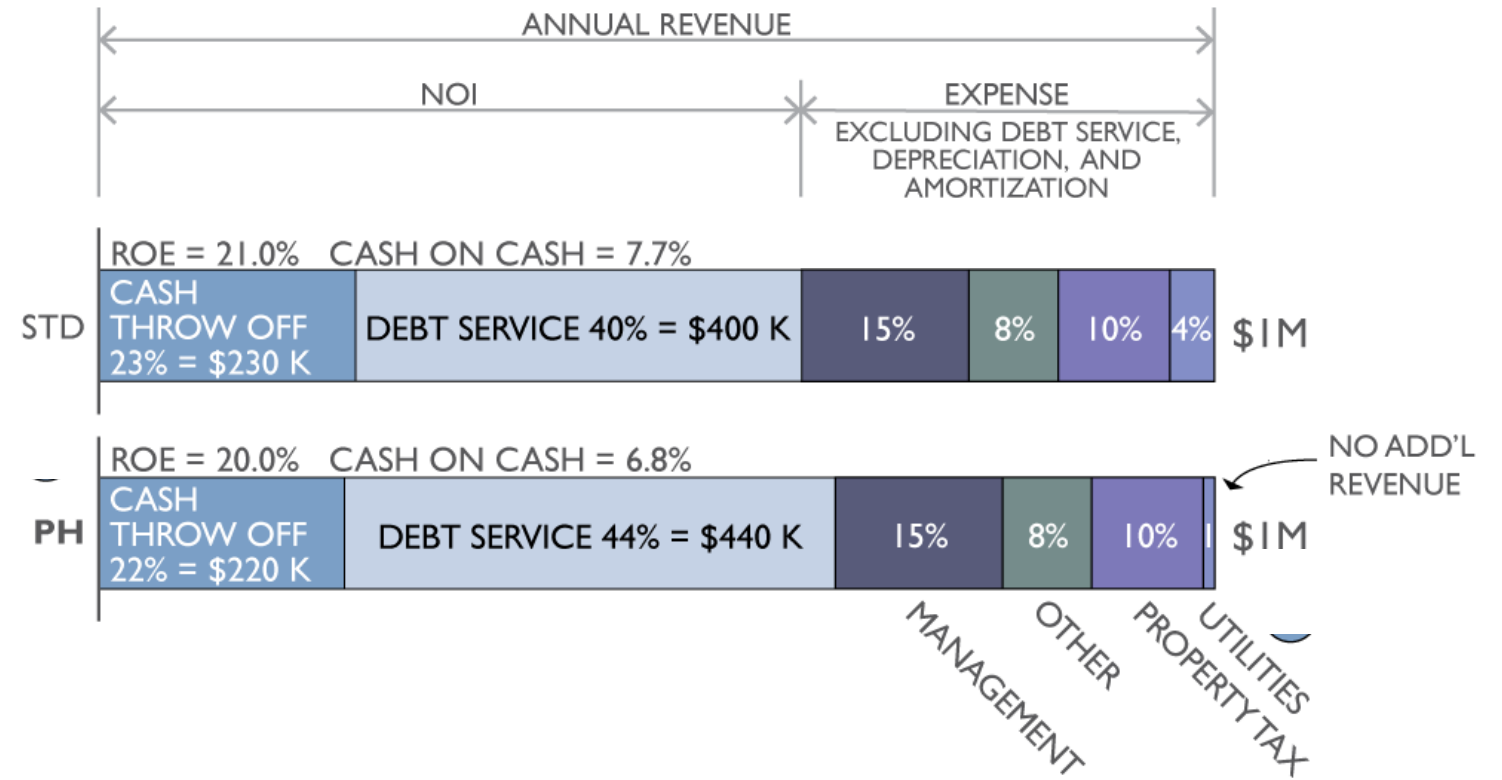
CONVENTIONAL APPROACH

DEVELOPMENT COSTS

CAPITAL SOURCES



REVENUE ALLOCATION

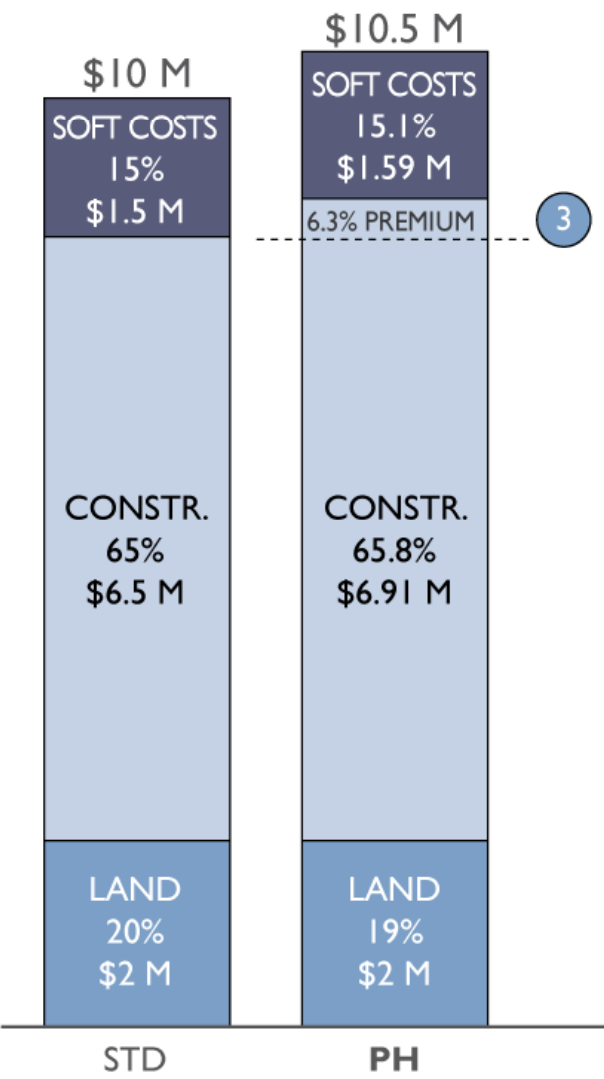


“The important thing is to learn a lesson every time you lose. Let me tell you, life is not fun when you're banging your head against a brick wall all the time.

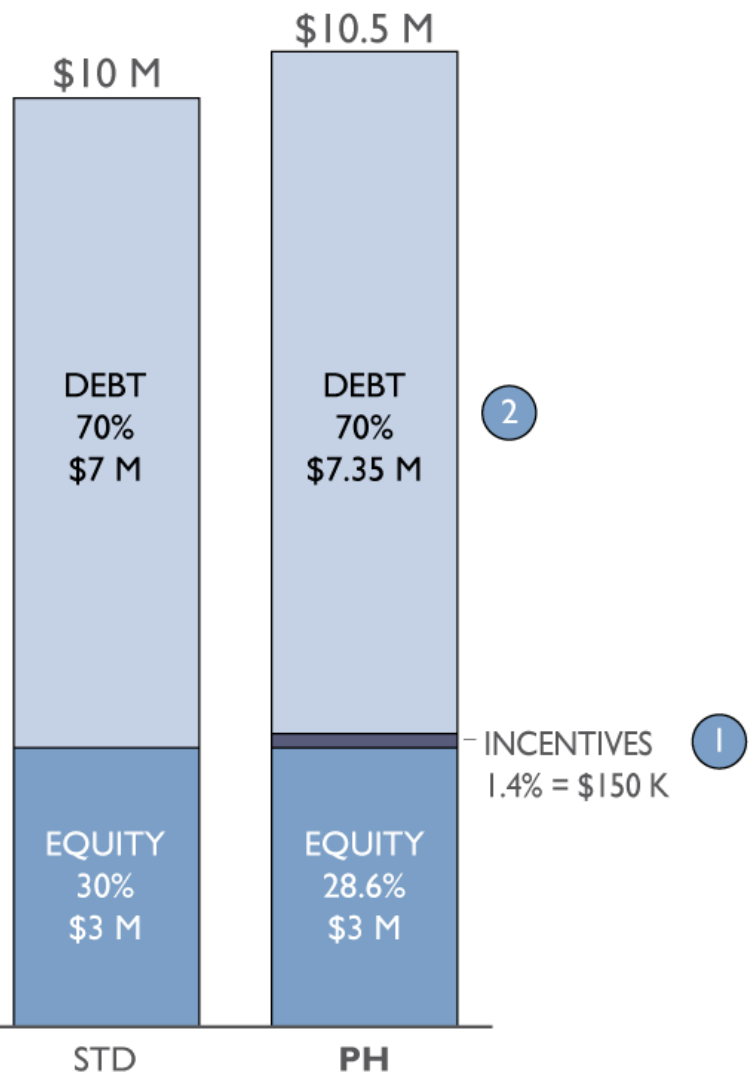
- John McEnroe

ENLIGHTENED APPROACH “NEW RULES”

DEVELOPMENT COSTS



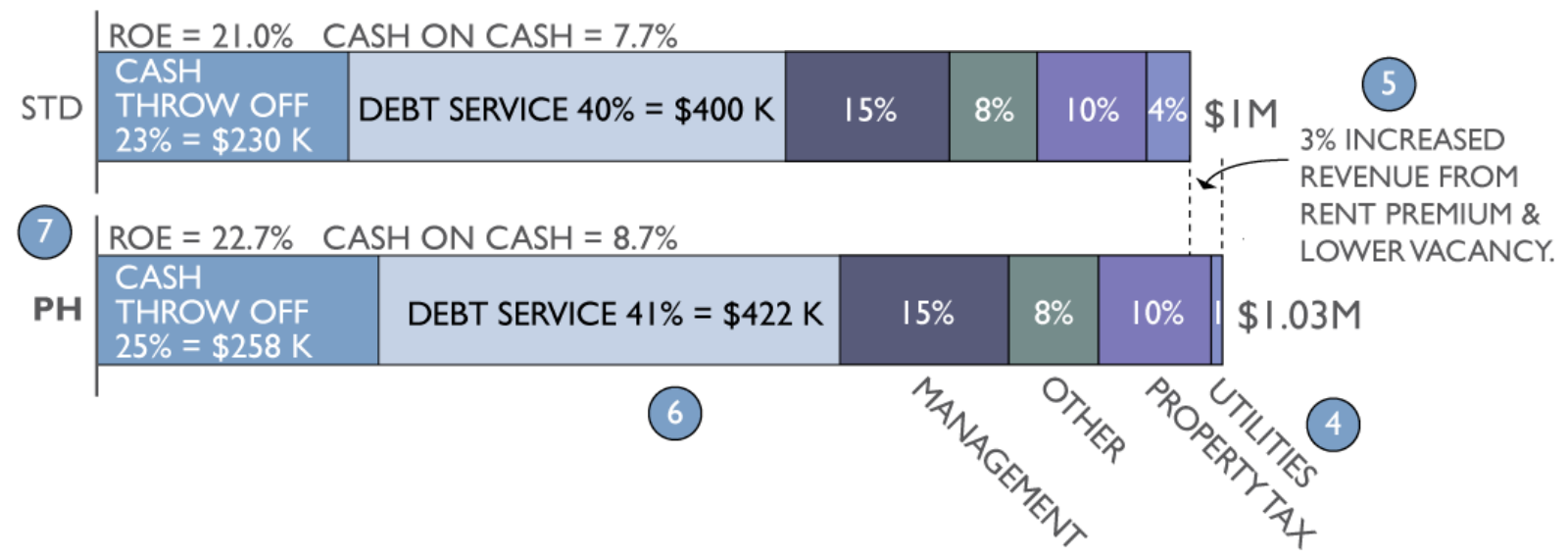
CAPITAL SOURCES



EcoProforma STEPS

- 1 IDENTIFY LOCAL INCENTIVES.
- 2 DETERMINE MAXIMUM LTV RATIO.
- 3 MINIMIZE CONSTRUCTION COST PREMIUM.
- 4 CALCULATE UTILITY SAVINGS.
- 5 ESTIMATE RENT & VACANCY PREMIUMS.
- 6 EXPLORE GREEN LOAN RATE REDUCTION.
- 7 CALCULATE NEW RETURN ON EQUITY (ROE).

REVENUE ALLOCATION



Rent Premiums / Month



\$20



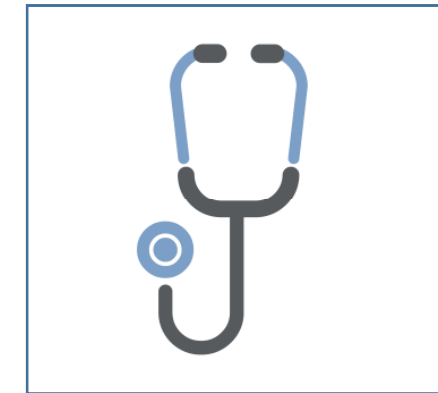
\$35



\$40



\$50



?

Source: JPI / MPF Research, 1999 Market Analysis, Issaquah, WA

Rent Premiums / Month



\$20



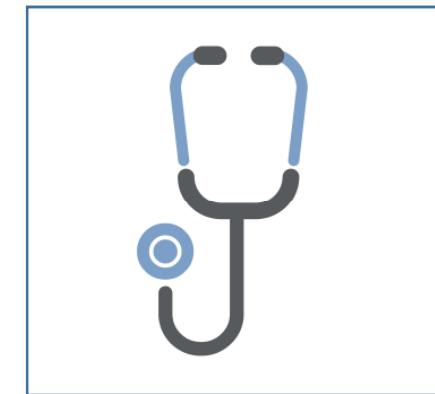
\$35



\$40



\$50

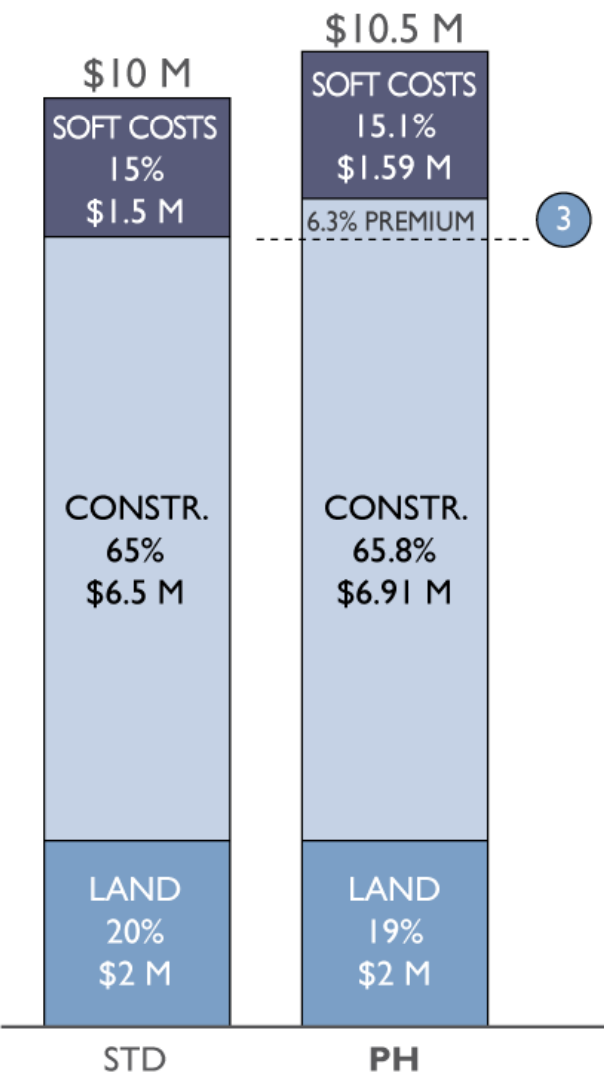


\$40

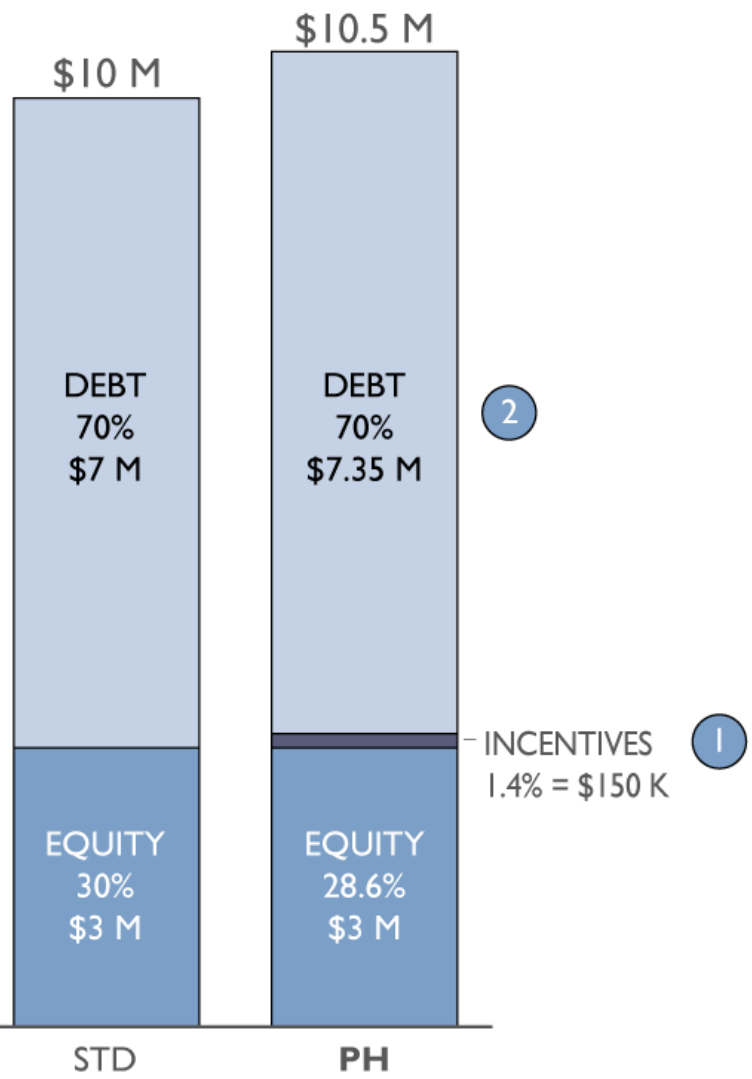
\$40/month of value ~ 2% rent increase on 750 sf unit
x40 units = \$20,000/yr additional revenue

ENLIGHTENED APPROACH “NEW RULES”

DEVELOPMENT COSTS



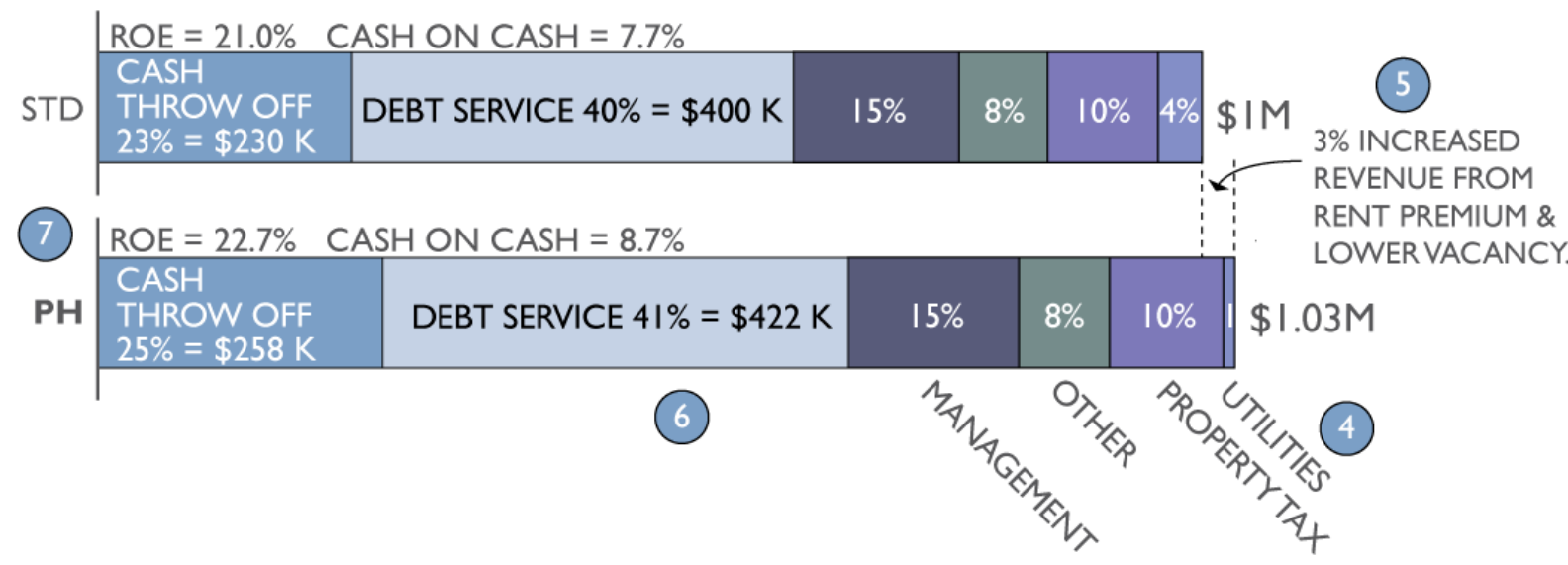
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REVENUE ALLOCATION



“Debt and equity markets do not like uncertainty .”

- Scott Matthews, Vulcan Real Estate

Thank You