

Why Revisit Energy Use Intensity?

Two good reasons:

Density

Transportation

Occupant Density

- Buildings very similar in construction and energy use can be occupied very differently.







Occupant Density

- A building can serve a greater number of occupants through shared facilities, hosting telework or remote staff with hoteling and conference space, and accommodating multiple shifts.







Occupant Density

- Looking at energy use per building occupant rather than per building square foot leverages the effectiveness of higher density.

Transportation

- Buildings very similar in construction and energy use can be located and therefore accessed very differently.

**THIS ONE
RUNS ON FAT
AND SAVES YOU MONEY**



**THIS ONE
RUNS ON MONEY
AND MAKES YOU FAT**

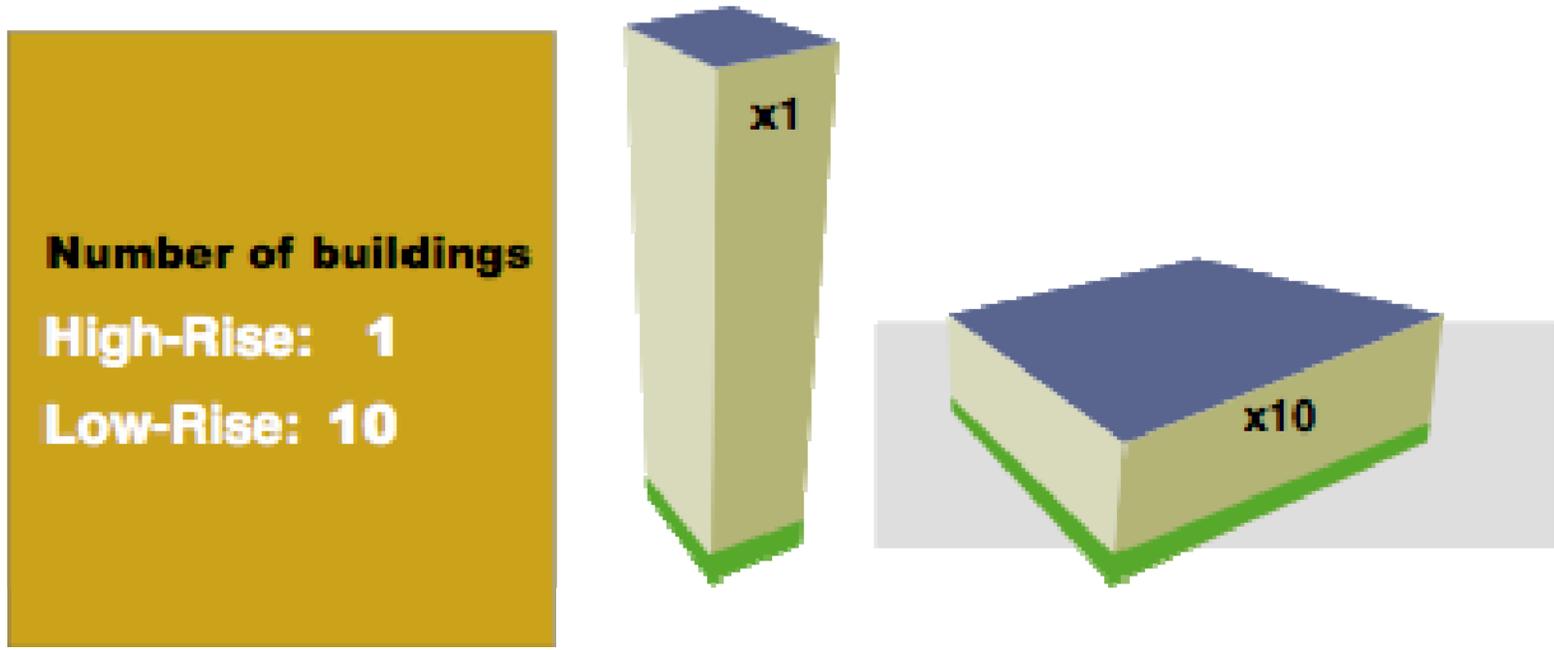




Energy Consumption: Tall Urban Building vs. Low-Rise Office Park



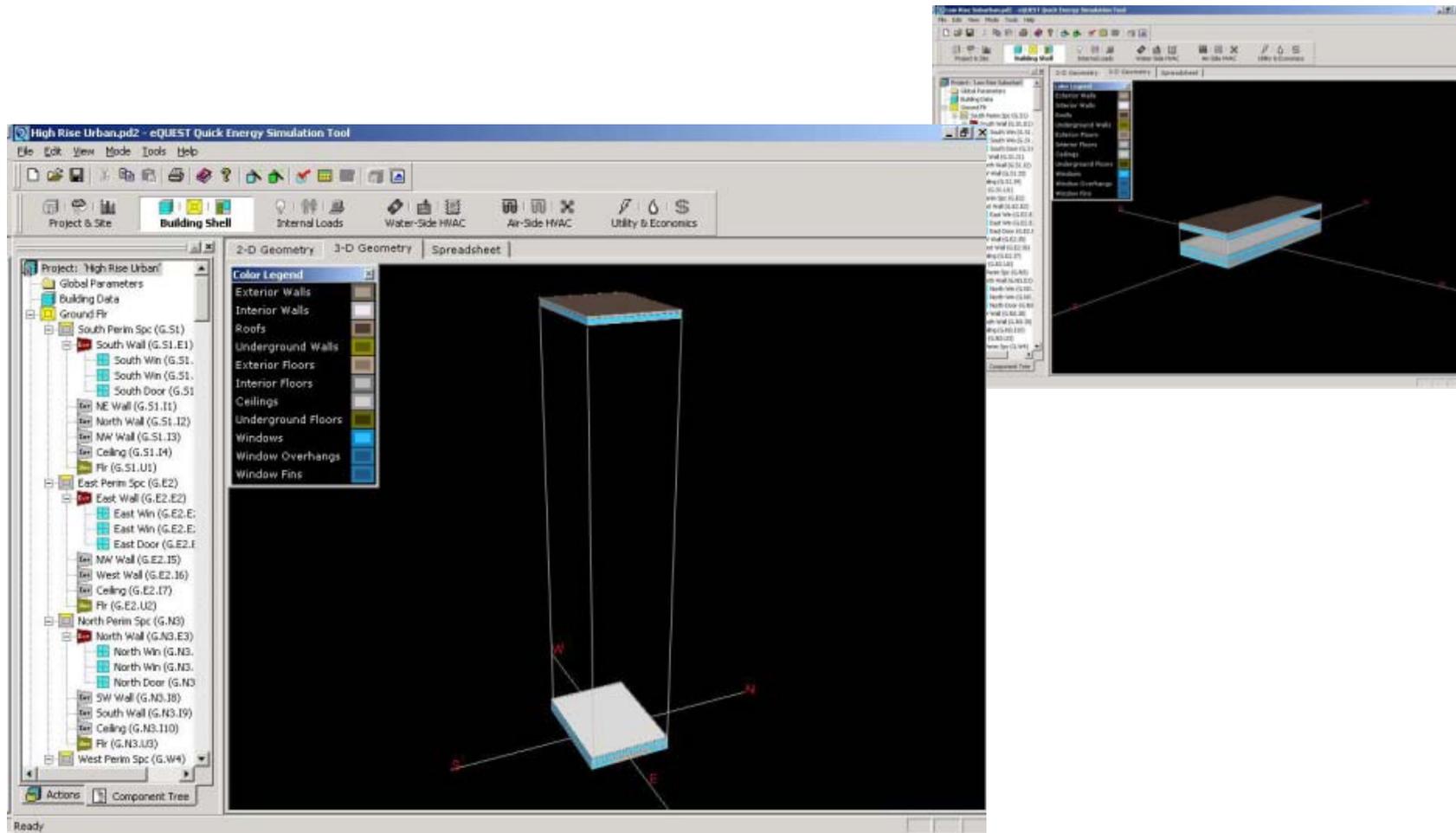
Energy Consumption: Tall Urban Building vs. Low-Rise Office Park



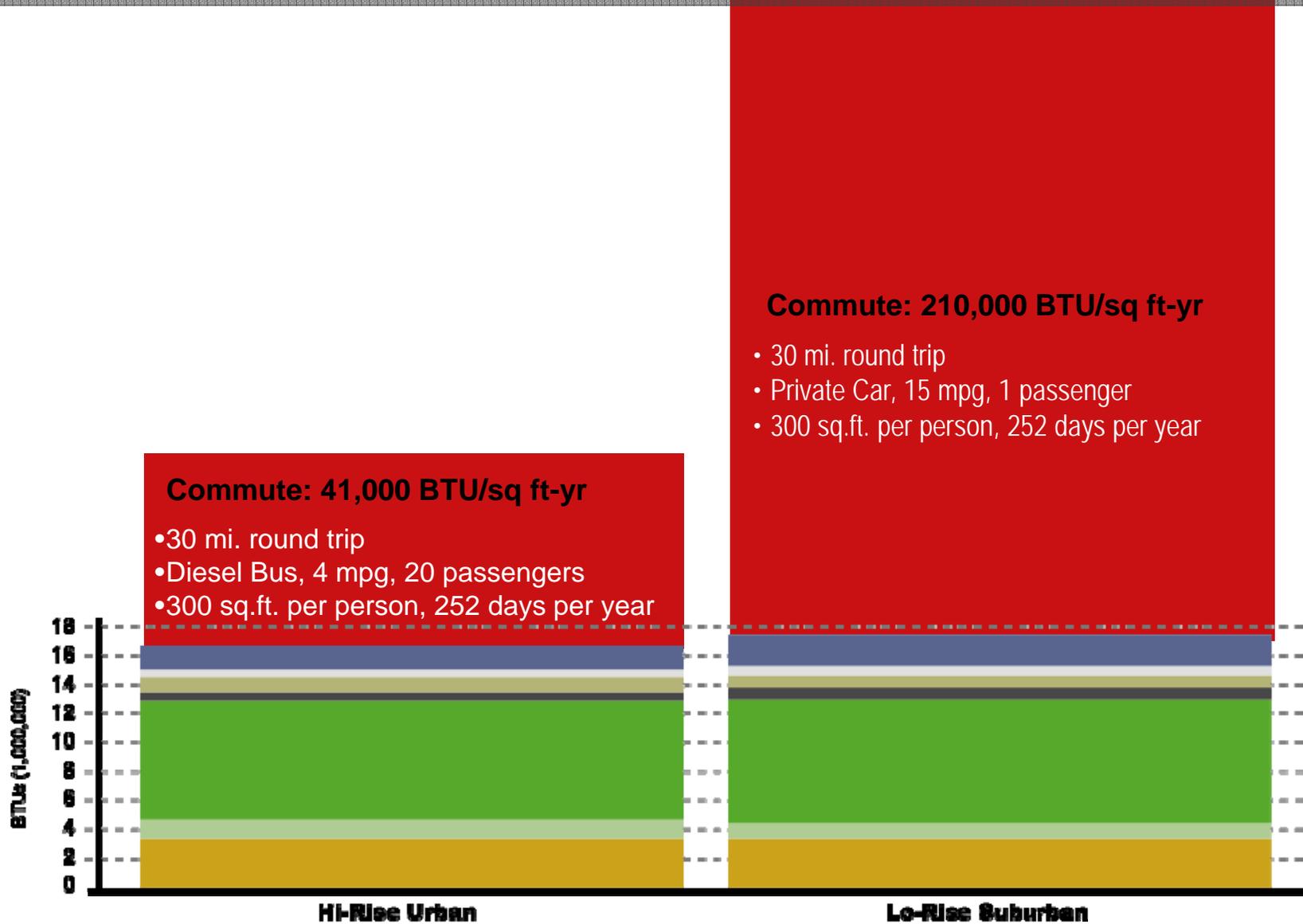
Number of buildings
High-Rise: 1
Low-Rise: 10

| | | |
|---------------------------|-------------------|---------------------|
| Average floor size | 30,612 sf | 36,000 sf |
| Area of roof | 88,000 sf | 375,000 sf |
| Area of ext. wall | 343,000 sf | 385,000 sf |
| Area for parking | 0 sf | 1,837,500 sf |

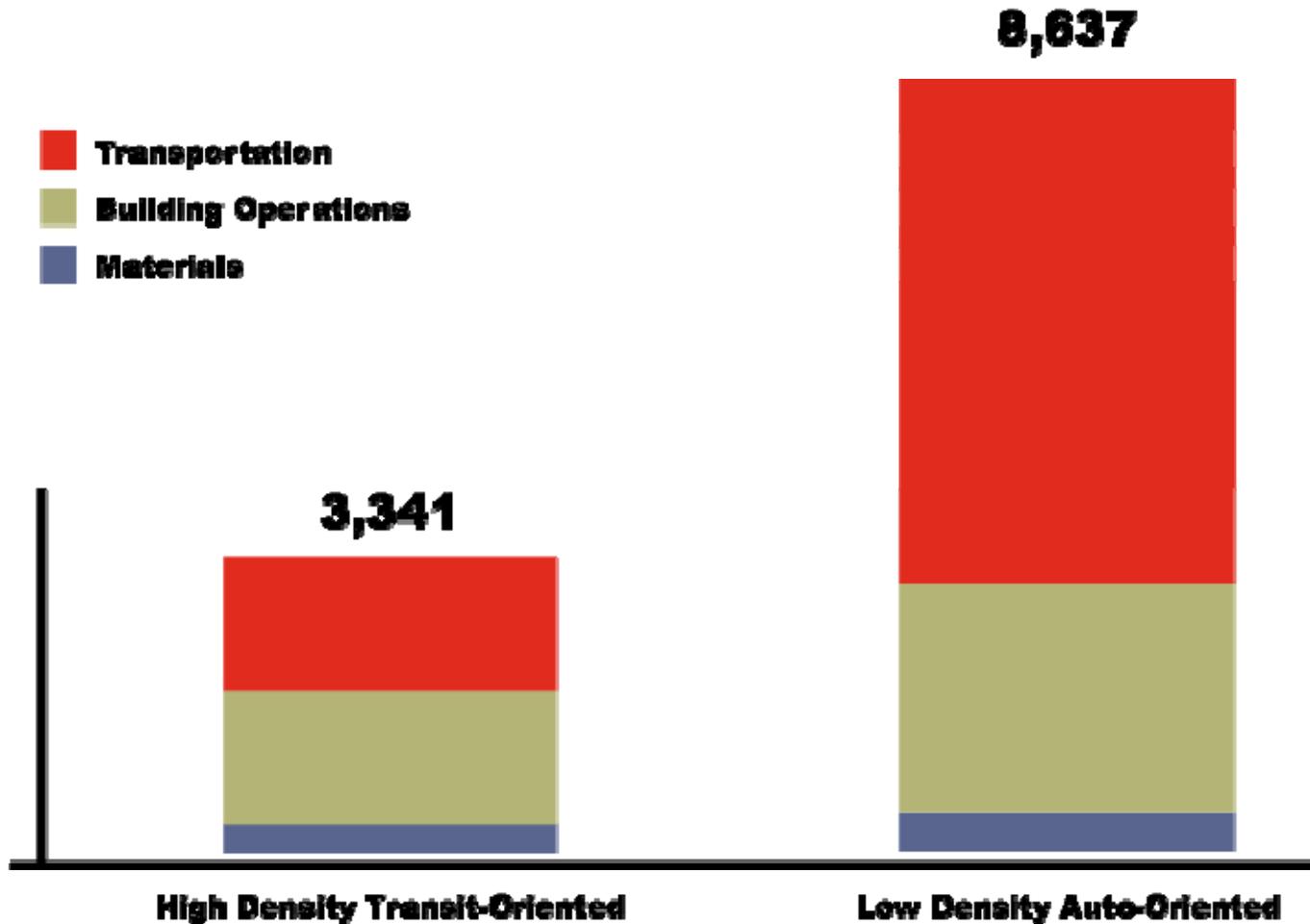
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GHG Per Person: Kg CO2E (Carbon dioxide equivalent) pa.



Source: Journal of Urban Planning and Development, Norman, March 2006