



A R R I
BUSINESS
EXTENSION
CENTERS



SBOC



North Texas
Small Business
Development
Center Network

WHY BUILD GREEN?



“LEED is an internationally recognized green building certification system, providing third-party certification for buildings or communities designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, greenhouse gas emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts” - USGBC



Global CO₂ Emissions by Sector

#1. Buildings

#2. Transportation

#3. Industry

IMPACTS OF U.S. BUILDINGS ON RESOURCES

40% primary energy use*

72% electricity consumption*

39% CO₂ emissions*

13.6% potable water consumption**

Sources:

*Environmental Information Administration (2008). EIA Annual Energy Outlook.

** U.S. Geological Survey (2000). 2000 data.

**ENERGY
USE**

24%* -50%**

**CO₂
EMISSIONS**

33%*** -39%**

**WATER
USE**

40%**

**SOLID
WASTE**

70%**

Green Buildings Can Reduce...

* Turner, C. & Frankel, M. (2008). Energy performance of LEED for New Construction buildings: Final report.

** Kats, G. (2003). The Costs and Financial Benefits of Green Building: A Report to California's Sustainable Building Task Force.

*** GSA Public Buildings Service (2008). Assessing green building performance: A post occupancy evaluation of 12 GSA buildings.

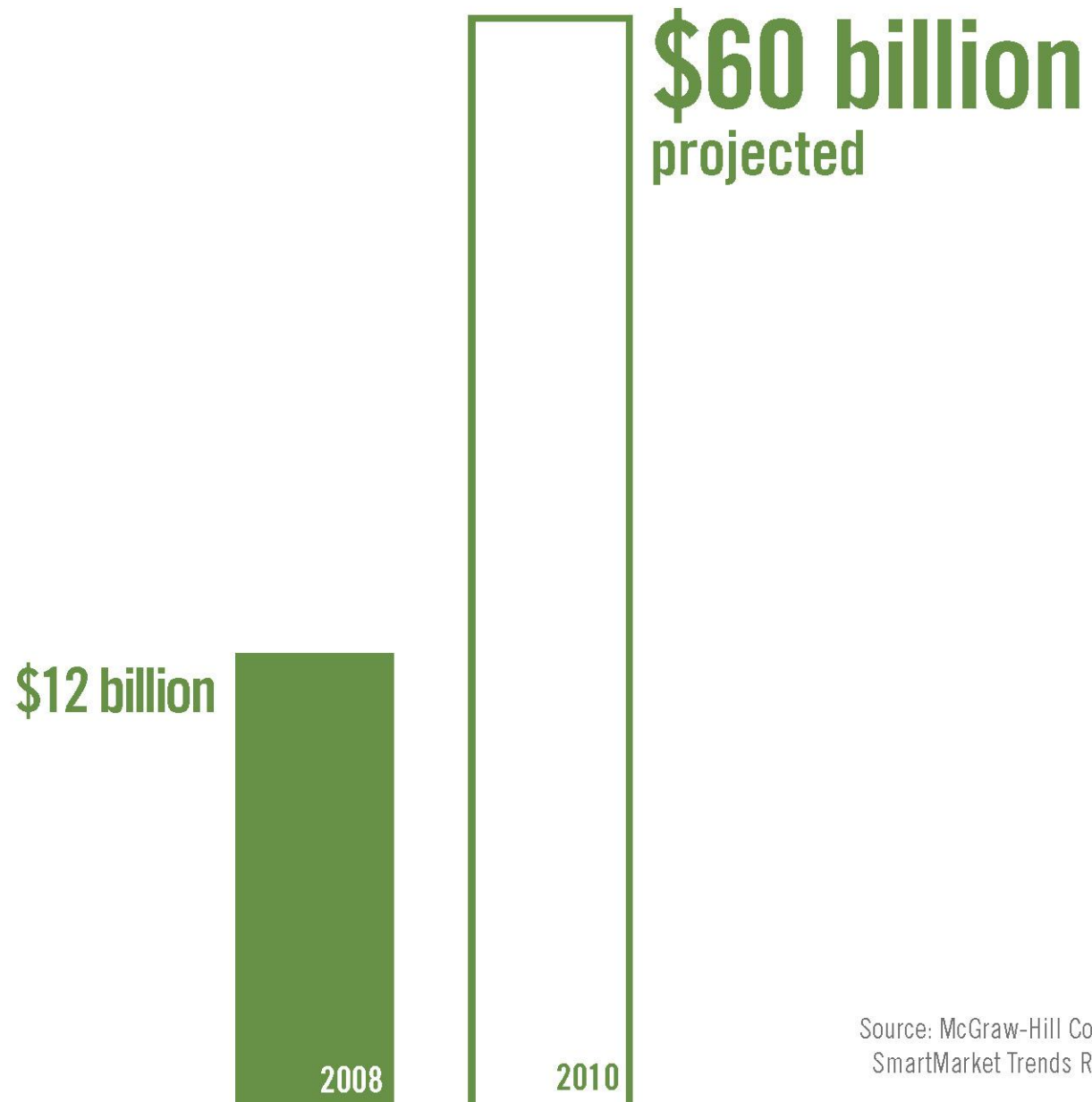
Green Building Occupants Are Healthier & More Productive

- In the U.S., people spend, on average, 90% or more of their time indoors*
- Green buildings typically have better indoor air quality and lighting
- LEED certified project case studies illustrate 2-16% increased worker and student productivity**

* Source: The Total Exposure Assessment Methodology (TEAM) Study. EPA 600/S6-87/002. U.S. Environmental Protection Agency. 1987.

** Source: LEED project data, USGBC

Green Building is in Demand



Source: McGraw-Hill Construction,
SmartMarket Trends Report 2008

Why the Demand?

- Unprecedented level of government initiatives
- Heightened residential demand for green construction
- Improvements in sustainable materials

PERCEIVED BUSINESS BENEFITS TO GREEN

8-9%* operating cost decreases

7.5%* building value increases

6.6%* return on investment improves

3.5%* occupancy ratio increases

3%** rent ratio increases

* Source: McGraw-Hill Construction, Key Trends in the European and U.S. Construction Marketplace SmartMarket Report, 2008

** Source: McGraw-Hill Construction, Greening of Corporate America SmartMarket Report, 2007

PREDICTIONS IN GROWTH OF GREEN

Commercial: By 2010, approximately 10% (~\$23 billion) of construction starts*

Corporate America: By 2009, 80% of corporate America expected to be engaged in green at least 16% of the time; 20% engaged 60% of the time**

Institutional: Dedication to green health care and educational facilities expected to increase dramatically over the next five years**

Sources:

* McGraw-Hill Construction, Green Building SmartMarket Report, 2006

** McGraw-Hill Construction, Greening of Corporate America SmartMarket Report, 2007

*** McGraw-Hill Construction, Education Green Building SmartMarket Report, 2007 and Health Care Green Building SmartMarket Report, 2007

Projected Green Building Market Value

	2006	2010
Projection U.S. Market	\$12 billion (new) \$130 billion (renovation)	\$30-\$60 billion (new) \$240 billion (renovation)
Commercial & Institutional	\$4 billion	\$10-\$20 billion
Residential	\$8 billion	\$20-\$40 billion