

Council Subcommittee April 30, 2008



Chandler Fire Admin. Building

Chandler Green Building Program



Presentation Overview

- ◆ Why Green Building?
- ◆ LEED
- ◆ Green Building Program Progress
- ◆ Green Building Program





Building Statistics

- Buildings Consume (Nationwide):
 - **70%** of electricity
 - **39%** of primary energy
 - **25%** of all water supplies
 - **40%** of all raw materials
- Buildings Generate:
 - **35%** of solid waste
 - **36%** of CO₂ emissions
 - **46%** of SO₂ emissions
 - **19%** of NO_x emissions
 - **10%** of fine particulate emissions



Sources: DOE, EPA, U.S. Geological Survey, Worldwatch Institute



Green Building Characteristics

- ✓ Energy Efficiency
- ✓ Water Conservation
- ✓ Healthy Indoor Environments
- ✓ Sustainable Site Development
- ✓ Environmentally-Sensitive
Material Use
- ✓ Smart Investment



Chandler CARE Center:
Pursuing LEED Certification



What is LEED?

- ◆ Leadership in **E**nergy and **E**nvironmental **D**esign
- ◆ Nationally-Recognized Green Building Rating System
- ◆ Established by the U.S. Green Building Council (1998)



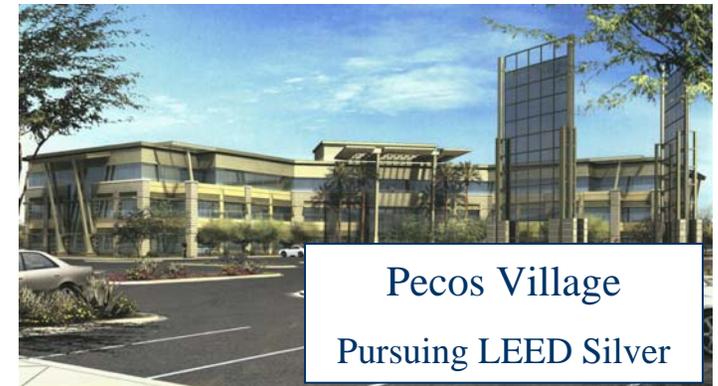


LEED Categories

- ◆ 69 Points and 7 Prerequisites in 6 Categories:
 - ◆ **Sustainable Sites**
 - ◆ **Water Efficiency**
 - ◆ **Energy and Atmosphere**
 - ◆ **Materials & Resources**
 - ◆ **Indoor Environmental Quality**
 - ◆ **Innovation & Design**

LEED Certification Levels

- ◆ **Meet all Prerequisites and Earn Points as Follows:**
 - **Certified (26 – 32 Points)**
 - **Silver (33 – 38 Points)**
 - **Gold (39 – 51 Points)**
 - **Platinum (52 – 69 Points)**



Chandler Green Building Program



Chandler CARE Center:
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Green Building Timeline

- ◆ Dec. 2006 - P&D Clientele Survey
- ◆ Nov. 15, 2007 – Energy and Green Building Forum
- ◆ Nov. 30, 2007 – Green Building Task Force Meeting
- ◆ Feb. 12, 2008 – Green Building Task Force Meeting
- ◆ April 30, 2008 – Council Subcommittee
- ◆ *May, 2008 – Mayor and Council Briefing*
- ◆ *June, 2008 – P&Z Briefing*
- ◆ *June, 2008 – Green Building Task Force Meeting*
- ◆ *July, 2008 – P&Z Hearing*
- ◆ *August, 2008 – Council Hearing*



November 15th Energy and Green Building Public Forum

- ◆ 63 Attendees
(Including Staff)
- ◆ Participant Support For:
 - City Green Building
 - Incentives to Encourage Private Green Building
 - Some Minor Regulations





Chandler Green Building Program

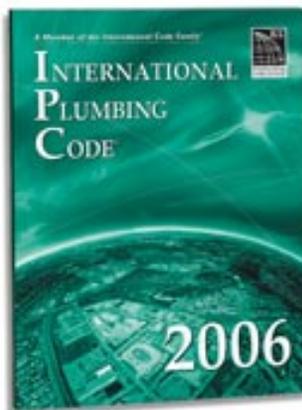
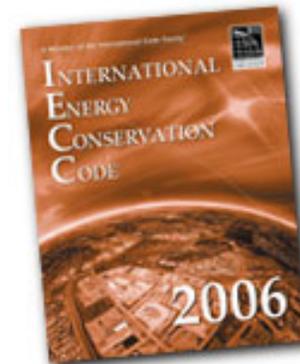
Draft Program

1. Code Modification
 - a. International Energy Conservation Code (2006)
 - b. International Plumbing Code (2006)
2. Incentives for Private Development
3. City Green Building
4. Green Building Education and Outreach
5. Green Development Program



Code Modification

- ◆ International Energy Conservation Code (2006)



- ◆ International Plumbing Code (2006)



Draft Program Incentives for Private Development

- ◆ Incentives Awarded to LEED-Certified Projects:
 - Expedited Plan Review
 - Developer Recognition
 - Technical Assistance
 - LEED Certification Fee Reimbursement





Draft Program City Commitments

- ◆ LEED-Certification for New City Buildings
- ◆ Energy Upgrades to Existing Buildings
- ◆ Education and Outreach





Green Development Program

- ◆ Completely Voluntary
- ◆ 5 Objectives
 - Alternative Transportation
 - Urban Heat Island Impact Reduction
 - Increased Shade
 - Energy-Efficient Site and Building Design
 - Water Conservation





Staff Recommendation

- ◆ Incentives for Private Development, City Commitments, Energy Code, Plumbing Code,
- ◆ Voluntary Green Development Program
 - Utilize this program over the next year
 - Re-examine the green building program in one year



Pecos Village
Pursuing LEED Silver Certification

Discussion

Questions/ Comments

