Green Buildings

Why is this important?

Buildings dictate or influence everyday human behavior, and they have broad impacts on the environment, the economy, and human health and productivity. "Green building" is the practice of decreasing a building's demand for energy, water, and other materials and reducing a building's negative impacts on human health and on the local environment. It is an increasingly mainstream approach to construction and development. In California and most of the country, the amount of greenhouse gas emissions directly related to the construction and operation of buildings is second only to emissions from transportation, and the location of buildings has a strong impact on transportation behavior. According to the U.S. Green Building Council, buildings annually consume more than 30% of the total energy and 60% of the electricity used in the United States. Since the built environment usually changes very slowly over time, building decisions made now will have ramifications far into the future. While new green buildings can have an accumulating, long-term impact, the green retrofit of existing buildings can have an immediate, short-term impact. Existing buildings will make up the majority of the building stock for some time to come, so a comprehensive strategy to reduce the overall environmental impact of buildings must address them.

Redwood City does not currently have a coordinated effort to encourage green building, but is actively developing a green building program that should be in effect in 2009. Future indicator reports can track the number of buildings – both new green buildings and green retrofits of existing buildings – involved in the program each year.

Defining Sustainability

Sustainable buildings are resource efficient, non-toxic, designed to encourage sustainable behavior in building users, and sited in a way that preserves local environmental quality.

Indicator Results

Number of LEED-Certified Buildings

LEED (Leadership in Environmental and Energy-Efficient Design) is a green building rating system developed by the non-profit U.S. Green Building Council (USGBC). LEED is the most widely-used green building rating system in the country, and the number of LEED-certified buildings in the United States has increased exponentially since the first LEED rating system was released in 1998. USGBC has developed specialized LEED rating systems for various kinds of development, including new construction, neighborhoods, existing buildings, commercial interiors, and many others. As of August 2008, Redwood City had:

- One LEED-certified commercial building (the Rudolph and Sletten Corporate Headquarters commercial building).

- One LEED-certified 58-unit residential development (Villa Montgomery affordable housing).
- One approved single-family residence that will be LEED-certified when built.

Summary of Results

Redwood City is in the process of establishing a city-wide green building program, to be in effect by 2009. There is currently one LEED-certified commercial building and one 58-unit LEED-certified residential development in the City. There is also 1 LEED-certified single-family residence planned and approved.

Potential Policy Responses

- Finalize and implement the City's green building program.
- Develop the City's green building program to address both new and existing buildings.
- Offer tax-increment financing to homeowners for installation of solar panels or efficiency retrofits, taking advantage of the statutory authority recently granted to California cities through passage of AB 811.
- Require that all new City-owned buildings or retrofits over 3,000 square feet meet a minimum standard of LEED Silver.
- Collaborate with organizations and neighboring jurisdictions to offer green building educational programs to the community.
- Incentivize or require adaptive reuse of existing buildings in re-development projects.
- Encourage green retrofits of existing buildings.
- Work for consistent standards in the region, which will lead to wider uptake and compliance with green building standards.