

City of Exeter

Housing Element

F. Opportunities for Energy Conservation

Government Code Section 65583(a)(7) requires “an assessment of housing needs and inventory of resources and constraints relevant to the meeting of these needs. The assessment and inventory shall include the following: An analysis of opportunities for energy conservation with respect to residential development.”

This section of the element will inventory and analyze the opportunities to encourage the incorporation of energy saving features, energy saving materials, and energy efficient systems and design for residential development. Planning to maximize energy efficiency and the incorporation of energy conservation and green building features can contribute to reduced housing costs for homeowners and renters, in addition to promoting sustainable community design and reduced dependence on vehicles. Such planning and development standards can also significantly contribute to reducing green house gases.

Planning and Land-Use

- Exeter, through its Land Use and Housing elements, will implement programs that will provide an adequate supply of housing to ensure affordable housing for full range of income groups. This will reduce commutes by persons searching for affordable housing.
- Exeter, through its Land Use and Housing elements, will implement goals, policies and action programs that will promote increased employment in the community. This increased employment will reduce the need for persons in Exeter to commute out of town for employment purposes. In 2000, the median commute time to work was 23 minutes; over 228 persons, 6.7 percent of the Exeter workforce, commuted over an hour to work.
- Exeter has promoted higher residential densities in its *Southwest Exeter Specific Plan* planning area and infill in its downtown through its recently completed *Infill Housing and Downtown Revitalization Plan*. These two plans promote housing affordability, maximize existing land resources, reduce pressure to convert agricultural resources, and conserve habitat and environmentally sensitive areas. According to the Urban Land Institute publication *Growing Cooler*, “conserving or developing infill housing within a more urban core has been shown to reduce primary energy consumption an average of 20 percent per household over newer sprawl developments”

City of Exeter Housing Element

-
- In Exeter's *Southwest Exeter Specific Plan*, plan policies and the layout of future land uses and circulation improvements will result in lower Vehicle Miles Traveled (VMT). The Plan is intended to promote pedestrian-friendly design (e.g. bikepaths, shaded sidewalks, street connectivity, and roundabouts) and mixed-use, both of which, reduce vehicle miles traveled, less air pollution and reduced transportation costs.
 - Exeter has recently contracted with the City of Visalia for public transportation services. Visalia has established two bus routes between the two communities. A recent presentation before the Exeter City Council indicated that ridership had been increasing ten percent on an annual basis.
 - In Exeter's *Southwest Exeter Specific Plan*, policies throughout the document promote energy and water conservation. Proper orientation of residential units, planting of street trees, reduced street widths, and use of xerophytic landscaping all serve to conserve valuable resources within the specific plan planning area.

Conservation Incentives for the Building Industry and Residents

- Exeter, using CDBG funds, has assisted existing residents with energy conservation retrofits and household weatherization in many of its older neighborhoods.
- In Exeter's *Southwest Exeter Specific Plan*, policies throughout the document promote energy conservation, conformance with Title 24 standards, passive solar orientation, effective tree shading, and installation of Energy Star appliances.

Energy Conservation

- In Exeter's *Southwest Exeter Specific Plan*, which is where most of the community's development will occur over the next 20 years, water conservation will be promoted through reduced lawn area, planting of xerophytic plants and potential use of rainbarrels.
- Promote increased energy conservation in the Southwest Exeter Specific Plan area by encouraging developers to exceed California Title 24 standards.
- Encourage initiatives to increase the use of solar in multifamily developments with a goal of decreasing energy consumption. Any multi-family tax credit projects that will be located in the planning area will be designed to incorporate solar panels in the development.

Southwest Exeter Specific Plan, Conservation policies

City of Exeter Housing Element

1.Exeter shall work with residential developers to insure that each home constructed exceeds Title 24 standards. Passive solar orientation, reduced street widths, and installation of Energy Star appliances will significantly reduce energy consumption per household.

2. In the Southwest Exeter Specific Plan, innovative water conservation strategies will be incorporated into all development, including reduced lawn areas, installation of xerophytic plants, utilization of low impact development (LID) strategies, incorporation of rainbarrels, and installation of smart irrigation technology.

3. In the Southwest Exeter Specific Plan, storm water will be managed using LID strategies. In addition, storm water will be detained in a park/pond facility, which provides dual benefits - storm water detention and ground water recharge.

4. In the Southwest Exeter Specific Plan, park/pond basins will also be designed to accept water during large runoff events. This runoff can be diverted to each basin from the Locust-Grove Ditch for recharge opportunities.

5. In the Southwest Exeter Specific Plan, efficient land use and development patterns are incorporated into the plan that will conserve resources such as fuel, water and land.

6. Exeter shall support the installation of photovoltaic systems on multi-family tax credit projects, which will result in more affordable, long-term rental rates.

Southwest Exeter Specific Plan, Conservation programs

1. New Single and Multi-family development

New single family and multi-family development in Exeter, especially when this type of development occurs in the Southwest Exeter planning area, will be designed and built to reduce water consumption. The incorporation of water efficient devices, drought tolerant landscape, a reduction in lawn area and the utilization of Smart Irrigation water audit, will significantly reduce water consumption as well as the energy needed to pump water.

2. Energy Conservation

New single family and multi-family development in Exeter, especially when this type of development occurs in the Southwest Exeter planning area, will be designed and built to reduce energy consumption. The Southwest Specific Plan requires all development within the planning area, which encompasses 320 acres, to be energy efficient. This

City of Exeter Housing Element

objective will be accomplished by implementing the following strategies:

- subdivisions will orient streets in an east/west direction.
- residential development will utilize passive solar design.
- all residential streets will be narrowed and will be tree-lined.
- garages will be sited on the lot so that they serve as a insulating mass for living areas.
- use of solar panels will be encouraged.
- pedestrian-friendly design will encourage persons living in the planning area to walk, ride their bike or take more direct pathways to shopping centers.

3. Landscape Design Ordinance

Exeter will implement a citywide landscape design ordinance, which encourages the use of plant materials to reduce heat island effects and requires drought tolerant plants and low-flow irrigation systems. The irrigation systems must include rain sensing devices to shut irrigation off during rainy periods and soil sensing devices to measure the amount of moisture in the soil.

4. Energy Star Appliances

Exeter shall encourage all new residential development constructed in the community to install Star Energy appliances in each residential unit.

5. SolarCity Partnership Program

Exeter will encourage residential developers to enter into solar leases with SolarCity. Under this program, SolarCity installs solar panels on residential dwellings at no charge to the home owner. The owner leases the solar panel for a period of 15 years. During this period of time, the owner's utility bill and solar lease is less than the owner's utility bill without the installation of solar panels.

6. General Plan

As part of Exeter's General Plan update, the city emphasized efficient land use and development patterns which conserve such resources as fuel, water and land. The Southwest Exeter Specific Plan incorporated concepts of higher-density development, a

City of Exeter Housing Element

pedestrian-oriented development pattern and preservation of open space areas are intended to reduce energy consumption and conserve land and water resources.