

ENERGY

INTRODUCTION

Land use planning provides an effective means to direct growth and development in an energy efficient manner. Significant energy savings are possible when private citizens and public officials can separately and jointly focus on energy demands of alternative land use patterns. In view of the different alternatives and their energy consequences, more energy efficient land use decisions can be made.

The energy goal in Marion County is to direct land use development in a manner that maximizes conservation of all forms of energy.

Traditional and innovative land use controls can promote energy savings in a variety of ways.

Without effective planning, development tends to progress in a haphazard manner. By encouraging orderly growth, development will occur where public facilities and services can be provided more economically and efficiently. By clustering activities and mixing land uses, less energy will be used for transportation between home and employment, shopping and public facilities.

One of the most important energy considerations relating to land use planning is distribution and location of housing, employment, shopping and public facilities. The clustering or mixing of these land uses, if compatible, can produce substantial energy savings to both the consumer and supplier of these services. Other energy-related considerations include:

- a. The integration of transportation and land use plans which can result in significant energy savings.
- b. An increased use of mass transit could lead to a substantial reduction in the amount of energy consumed for transportation. The use of public transportation can be encouraged by locating housing as well as shopping centers and public facilities close to transit lines.
- c. Innovative building codes designed to reduce the amount of energy consumed in heating and cooling can result in substantial energy savings.
- d. In an effort to conserve energy, development of recycling facilities and use of recycled materials should be supported.
- e. Industry consumes a great amount of energy and it is therefore important that land use planning direct the type, design and location of industrial developments in the most energy efficient manner possible.
- f. Since energy demands are increasing and present energy sources are no longer capable of meeting additional demands it will be necessary to develop alternative energy sources. It is necessary to consider modifying the land use and its relationship to energy conservation. It is the job of planners and public officials to balance energy needs with environmental concerns and concerns of residents of the County.

It has gradually become apparent that present energy sources will not be adequate to meet increasing energy demands. It is therefore important to conserve energy wherever possible and to use and encourage the use of alternative sources of energy.

The U.S. Army Corps of Engineers has predicted that demand for electric power in the Pacific Northwest will grow an average of 4.5 percent per year for the next ten years. Projections from the Oregon Department of Energy indicate that total energy usage will increase approximately 2.9 percent per year over the next 20 years. Recognizing the increasing demands and limited supply of energy, it is essential that development occurs in the most energy efficient manner possible.

Effective planning will serve to reduce the amount of power that will be needed. However, the final energy decision rests with individual consumers and public agencies. The residents of Marion County must determine the manner in which they choose to deal with the energy problem.

ENERGY POLICIES

1. Future development should progress in the most energy efficient manner possible.
 - a. The majority of residential development should occur in urban areas where it is less expensive to distribute energy and less energy is consumed in providing public facilities and services.
 - b. Housing should be located near commercial and industrial employment centers in order to reduce the amount of energy consumed in transportation between home and the job.
 - c. Commercial services should be located within or adjacent to residential areas to limit the energy consumed by travel between residential and shopping areas.
 - d. Development should progress in an orderly manner. It is more energy efficient to develop adjacent vacant lands rather than to allow continued "leap frog" development patterns.
 - e. Residential, commercial and industrial development should be energy efficient in design, siting and construction.
2. It is the intent of the County to encourage conservation of present energy sources and the use and development of alternative sources.
 - a. The expansion of present energy sources must be examined with consideration for the impact such development would have in regard to natural resources, changes in land use patterns, and the economy of the area.
 - b. In an effort to conserve energy, the development of recycling facilities and the use of recycled materials shall be supported.

3. Plans for the development of new transportation facilities and the improvement of present facilities should be designed to achieve the most energy efficient system possible.
 - a. Bicycle paths and footpaths should be provided to encourage non-motorized transit. Special emphasis should be given to routes between residential areas and the locations where the people are employed.
 - b. Mass transit and car pooling should be supported and encouraged. Park and ride facilities should be located along transit lines to encourage ridership.
 - c. Zoning should promote denser development near major arterials and collectors where mass transit lines can be run most efficiently. This would provide better access to mass transit for more people and would increase its use.
 - d. Standards should be established for street construction that encourage the conservation of land and materials. Recycling pavement is one possibility.
4. Public facility planning provides the framework for future urban growth. It is essential that energy consumption and recycling be considered in determining the type, location, and delivery of public facilities and services.
 - a. Public facilities should be located in easily accessible areas so that one trip can serve several purposes.
 - b. The possibilities of recycling municipal waste and sewage for use as fuel should be explored.
 - c. Public facilities and services should be planned and controlled in order to promote more desirable patterns of growth from an energy standpoint.
 - d. The electric, telephone, and gas companies should coordinate the provision of services with the goals and policies of the Comprehensive Plan to promote the wise and efficient use of energy.
5. Industry is a primary consumer of energy and land use planning should serve to direct the type, design and location of industrial developments in the most energy efficient manner possible.
 - a. Industry should be accessible to public services and should be located adjacent to major transportation facilities.
 - b. Location of industry should be convenient to mass transit lines.
 - c. Energy intensive and polluting industries should be discouraged.
 - d. Industrial waste heat should be captured and reused wherever possible.

- e. The potential of locating industry near energy sources such as geothermal reserves should be explored.
- f. Industry should be located close to the source of its raw products wherever possible.