

ATTACHMENT 3

LAND USE STRATEGIES

Introduction

Land Use, Transportation and Air Quality Linkage

**Land Use Concepts Recommended for Consideration by
County and City Planning Agencies**

**Transportation System Management Policies
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LAND USE STRATEGIES

1.0 INTRODUCTION

Over the next 30 years, the population of Santa Barbara County is forecast by the Santa Barbara County Association of Governments to increase by 30 percent to a population of 521,000.

According to the Santa Barbara County Planning and Development Department, Santa Barbara County will also face tremendous pressure for growth and for land on which to build. Both the increases in local population and the land use decisions required to accommodate the anticipated growth could significantly affect trip generation, trip length, mode choice and, thereby, air quality.

This Chapter discusses the connection between land use development, transportation and air quality and introduces some ideas and concepts about how air pollution impacts of growth can be minimized. It is not the intent of this chapter to establish land use policies and it is not envisioned that local jurisdictions will consider all of these concepts. Communities can and should decide which land use policies would ultimately result in the least negative effects to air quality.

It should also be cautioned that a comprehensive approach needs to be applied when considering the ideas discussed in this chapter. Applying any one element alone may lead to unintended results. For example, land use policies that intensify development with the intent of reducing vehicle trips may not succeed if adequate alternative transportation opportunities are not provided.

1.1 LAND USE, TRANSPORTATION, AND AIR QUALITY LINKAGE

The largest source of human-generated onshore air pollution in Santa Barbara County is motor vehicles. Consistent with state and national trends, and as discussed in Chapter 5 of this 2004 Plan, motor vehicle use continues to increase and the rate at which vehicle miles traveled is

growing is much faster than the rate of population growth. There are many factors that contribute to this phenomenon. One of the principal reasons for this phenomenon is land use development design which has resulted in an imbalance between the location of jobs and the location of housing, leading to long-distance commuting from home to work. Local land use design that is oriented toward the automobile with regard to the relative locations of housing and services can also result in increasing numbers of vehicle trips as people must rely on there automobiles to access their basic day to day consumer needs and entertainment. Other social and economic factors that affect the price of housing can result in demographic shifts that are not conducive to reductions in vehicle miles traveled and number of trips.

Within local communities, sprawling , residential developments isolated from commercial areas make it very difficult to walk, bike, or use transit to meet our every day needs. According to the Federal Centers for Disease Control, urban sprawl and the increasing time spent in the private automobile may have contributed to myriad of societal ills such as obesity, isolation of children and elderly and of course, poor air quality. Consequently, increased attention is now being focused on new patterns of growth that provide alternatives to the traditional sprawling patterns. These concepts include:

- Promoting a balance of jobs and housing in the community
- Strengthening existing communities by directing development towards infill locations
- Taking advantage of compact and green building designs
- Preserving open space and agricultural land
- Providing a variety of housing opportunities and choices
- Creating walkable communities with a variety of transportation choices.

Traditional neighborhood design concepts involve a mixed-use community within a typical 2,000-foot walking distance of a transit stop and core commercial area. The design, configuration, and mix of uses emphasize a pedestrian-oriented environment and reinforce the use of alternative modes of transportation while not excluding the use of the automobile. Traditional neighborhood design development, if designed correctly, can help benefit air quality by reducing the number of auto trips and vehicle miles traveled by creating opportunities to utilize transit, and to walk and bike, while enhancing the area's quality of life

The APCD encourages local governments to adopt concepts that plan and design communities to minimize their impacts on air quality and to maximize the use of less polluting designs and technologies. These strategies focus on reducing vehicle miles traveled, vehicle trips and peak hour travel. The implementation of these measures will control both regional and localized automobile-related air quality impacts from carbon monoxide and ozone forming oxides of nitrogen and reactive organic compounds, the primary air pollution concern on a regional scale for most land use projects.

The ARB's study "*Transportation-Related Land Use Strategies to Minimize Motor Vehicle Emissions: An Indirect Source Research Project (June 1995)*" concludes that implementing traditional neighborhood design land use strategies could reduce vehicle emissions in an urban area by as much as 30 percent.

1.2 LAND USE CONCEPTS FOR CONSIDERATION BY COUNTY AND CITY PLANNING AGENCIES

Land use policies should be designed to reduce dependence on the private auto and to enhance the viability of alternate forms of transportation. Active measures that allow a choice of transportation alternatives such as buses, bicycles and walking should be considered. It is not envisioned that all local jurisdictions will become uniform in considering more land intensive development policies. Communities can decide which of these ideas to accept and to offer opportunities not currently available.

1.2.1 Appropriate Location and Density

Contiguous development within existing urban boundaries is preferred. Urban growth boundaries delineate where development ends and open space begins. They are an effective way to reduce sprawl and preserve agriculture and environmentally sensitive resources. The preservation of open space areas with urban boundaries can also increase quality of life and

reduce potential vehicle trips. At the same time, infill, redevelopment, and reuse of vacant or underused parcels within already developed areas and along existing or potential transit corridors may encourage walking as well as the potential for higher rates of transit use because activities are located closer together. Infill development, however, should not place residents or employees near sources of nuisance dust or odors, or expose them to chronic or acute health risks or accidental releases of hazardous or toxic substances.

Concepts

- *Cities and unincorporated urban communities should incorporate appropriately located development designed to reduce the relative share of car trips and travel distances and encourage the use of alternative forms of transportation.*
- *Urban growth should occur within the urban boundary lines of cities and unincorporated communities. Rural areas should be maintained as open space, agricultural lands and very low-density residential development.*
- *Local planning agencies should encourage walking and transit use by planning neighborhoods and commercial centers to allow for convenient access to, and use of, local and regional transit systems.*
- *Transit providers and local planning agencies should collaborate to ensure that convenient and regular transit service is available at the same time as when development occurs.*

1.2.2 Mix of Land Uses

Mixed-use neighborhoods reduce automobile use by allowing people to work, shop and play near where they live. Locating compatible land uses within walking distance of each other can result in a higher level of walking and more transit use compared to single use projects. Development projects that provide or contribute to a diverse mix of residential, commercial and institutional land-use types and open space are desirable. However, as with infill projects, mixed-use projects should not compromise the health and safety of the public. While conventional zoning typically results in the spatial separation of different land uses, mixed use recognizes that some land uses are functionally compatible with one another and need not be physically separated.

Concepts

- *The mixing of compatible commercial and residential land uses should be encouraged when it will reduce dependence on the automobile or improve the balance between jobs and housing without creating incompatible land use relationships.*

1.2.3 Balancing Jobs and Housing

The home-to-work trip accounts for about one-quarter of all private vehicle trips in a typical urban area; in rural areas the ratio is even higher. The length and location of these trips is an important factor in determining the type of transportation alternatives available to the commuter and the quantity of air pollutants generated. If the average travel distance between the home and workplace is relatively long, private vehicle emissions increase and non-motorized travel alternatives become less viable.

Imbalances between jobs and housing result in longer travel distances between home and work and, consequently, more air pollution from cars. It may not be possible to achieve a jobs-housing balance in all communities because of their size, population characteristics, or limited resources. However, it is desirable to narrow the quantitative as well as qualitative gap between jobs and housing, or at least make sure that it does not increase.

Concept

- *Within cities and unincorporated communities, the gap between the availability of jobs and housing should be assessed and mitigated to the greatest extent feasible through land use plan policies.*

1.3 TRANSPORTATION SYSTEM MANAGEMENT POLICIES AND PROGRAMS

In order to encourage the design and construction of transportation systems in a manner that supports alternative travel modes and decreases reliance on single occupant motor vehicles, it is necessary to improve accessibility for all travelers as the primary transportation objective.

1.3.1 Promoting Accessibility in the Transportation System

Providing direct routes for vehicles, pedestrians, and bicycles can result in safer environments for bicyclists and pedestrians while maintaining travel times for vehicles. Adequate, direct sidewalks can increase pedestrian accessibility and paths as well as affording protection from fast vehicular traffic.

Concept

- *Jurisdictions should adopt the concept of improved accessibility as a planning goal and as a means to coordinate land use and transportation planning efforts.*

1.3.2 Promoting Walking and Bicycling

Designing pedestrian-scaled and bicycle-friendly residential and commercial neighborhoods requires a connected network of streets. Such a network of sidewalks and pathways makes walking and biking routes shorter and more convenient. Such features encourage people to walk and bike in a neighborhood with wide sidewalks, trees and attractive buildings that face the street.

Concepts

- *Local planning agencies should encourage walking by planning for existing and new residential and commercial areas to include a safe and interconnected street system with adequate sidewalks and/or pedestrian trails.*
- *Local planning agencies should develop pedestrian- and bicycle-friendly design standards that apply to all residential and commercial projects.*

1.3.3 Transportation Demand Management

Transportation Demand Management strategies are designed to reduce single occupant vehicle trips by providing more transportation options. This measure encourages jurisdictions to implement programs that encourage or require new development projects to provide facilities and amenities supporting the use of alternative transportation modes. Implementation of a structured, Transportation Demand Management-based program by local jurisdictions could also partially mitigate the negative transportation and air quality impacts associated with the planned development of commercial and retail land uses. A successful program can reduce the need for parking, thus reducing construction costs. As parking demand goes down, areas devoted to parking could be converted to more beneficial functions such as additional office or production space, a transit stop and shelter, on-site child care, bike storage, picnic areas, or other uses which, in turn, can help further the effort to reduce private vehicle trips.

Concept

- *Jurisdictions should support actions to reduce single occupant vehicle trips by adopting programs that encourage or require new commercial and industrial development projects to provide facilities and amenities that reduce reliance on private vehicle use and support the use of alternative transportation.*