MERCED COUNTY UNIVERSITY COMMUNITY PLAN
POLICY DISCUSSION PAPER

Air Quality

For CPAC Discussion: May 10, 2001Meeting

INTRODUCTION

This policy discussion paper presents objectives and policy options related to air quality management for inclusion in the Merced County University Community Plan. This policy discussion paper takes policy options suggested in two previous papers (Land Use[1] and Transportation[2]) that are currently evolving with continuing analysis and stakeholder input.

PLANNING CONSIDERATIONS

The Merced County General Plan only includes one Open Space/Conservation goal related to air quality: "...to properly manage air resources." Because land use planning, and the associated transportation and energy demand, affects management of air resources, this paper identifies options to improve coordination and planning for air resources. To the extent that compact development and efficient infrastructure can be encouraged, indirect air quality benefits may be realized by the University Community. Opportunities to integrate land use and transportation planning are especially relevant in reducing trip lengths and improving the potential for transit service, thereby reducing the reliance on the automobile and emissions from motor vehicle use. Goals and strategies recommended by the San Joaquin Valley Air Unified Air Pollution Control District[3] are identified in this discussion paper where they are available to coordinate the University Community Plan with regional air quality planning efforts through land use and transportation planning. Additionally, the paper identifies strategies for managing other specific activities that cause air pollution (e.g., energy use, wood-burning appliances).

GOALS AND POLICIES

Issue: Properly manage air resources.
(Merced County General Plan, Open Space/Conservation Chapter, Goal 2. June 1989.)

1. Effective communication, cooperation, and coordination is essential for developing and operating community and regional air quality programs. The CEQA environmental review process is an important tool for communicating the air quality effects of Merced County actions between with the public and other agencies. Air quality management efforts for the University Community need to be coordinated

[1] Land Use Policy Discussion Paper. Prepared for CPAC Discussion: March 29, 2001 Meeting.
[2] Transportation Policy Discussion Paper. Prepared for CPAC Discussion: April 26, 2001 Meeting.
[3] San Joaquin Valley Unified Air Pollution Control District, *Air Quality Guidelines for General Plans*. Adopted October 20, 1994.

with regional programs and those of neighboring jurisdictions, especially the City of Merced.

Policy Option 1.1:

Determine air quality effects of projects using analysis methods and significance criteria recommended by the SJVUAPCD. This would help to ensure impacts identified during CEQA review are consistently and fairly mitigated with feasible, implementable, and cost effective strategies.

Policy Option 1.2:

Work with the City of Merced and other jurisdictions and agencies to address cross-jurisdictional and regional transportation and air quality issues. Encourage staff planners to participate in activities of neighboring jurisdictions and regional agencies. The aim would be to examine congestion in other jurisdictions caused by University Community projects, effects of projects on viability of regional transit and pedestrian-oriented projects, progress of jurisdictions to construct segments regional bikeway plans, proposed land use or circulation changes that would alter traffic flow or increase urban sprawl in jurisdictions.

2. Travel behavior greatly affects regional air quality. Regional air quality management plans recognize the relationships between land use, transportation, and air quality planning. Because travel demand is affected by land use and transportation management, land use and transportation planning efforts should be integrated with air quality goals. Policy discussion papers for Land Use and Transportation issues indicate that the University Community Plan will be responsive to the goals of regional air quality management plans. Where previously discussed policy options would influence travel-related air quality, they are referenced below.

Policy Option 2.1:

Integrate planning efforts by considering air quality when planning land use and transportation systems and considering air quality and mobility when reviewing any proposed change to the land use pattern.

Policy Option 2.2:

Congestion management to reduce motor vehicle trips can be provided by previously discussed transportation policy options (Transportation Policy Option 1.1) related to congestion management provide grid streets and “flexible corridors” that provide travel-mode options and future capacity. Also previously discussed policy options (Transportation Policy Option 2.2) include street design standards for bicyclists, pedestrians, and traffic calming.

Policy Option 2.3:

Establish mixed uses, managed land use densities, and planned activity centers to reduce the length and number of motor vehicle trips. Previously discussed

land use policies related to providing managed density and intensity of development, a planned "heart" of the community, centralized village greens, pedestrian-oriented mixed use districts, neighborhood convenience commercial, neighborhood schools, and centralized large-scale commercial and office uses in village centers with appropriate transportation services (Land Use Policy Options 1.5, 1.6, 2.2, 2.5, 2.6, 4.6, 5.1, 5.2, 5.8, 5.11, and 6.8). Compact development to force orderly outward expansion of contiguous development and infrastructure through "land use phasing" and establishing urban limit lines (Land Use Policy Options 3.1 through 3.5).

Policy Option 2.4:

Design streetscapes, housing, and village centers to improve access by pedestrians and bicyclists. Previously discussed land use policies provide a land use structure maximizing pedestrian activity and transit use (Land Use Policy Options 2.1, 2.6, 4.9, 4.13, 5.15, and 5.16, and Transportation Policy Option 2.2).

Policy Option 2.5:

Implement a transportation infrastructure that provides opportunity for reduced trip lengths and minimized new trips while anticipating a multi-modal system (Transportation Policy Option 1.1). Plan and construct a comprehensive system of bikeways (Transportation Policy Option 2.2, and Land Use Policy Option 6.6).

In addition to previously discussed planning options for transportation infrastructure: Incorporate multi-modal connections to regional transportation system (airports and passenger rail facilities). Ensure that funds for bicycle and transit improvements are used for those purposes. Require bicycle storage and parking at appropriate sites. Incorporate infrastructure for telecommunication facilities.

3. Air resources can locally affect land use compatibility. With proper land use management, health risks from air contaminants and exposure to airborne nuisances, such as odors and dust, can be minimized.

Policy Option 3.1:

Adequately separate or buffer sensitive uses from sources of odors and dust. Require new point sources of pollution to be located an adequate distance from sensitive receptors.

4. Use of energy affects regional air quality. Electricity and natural gas consumption in the built environment typically results in emissions caused by fuel combustion.

Policy Option 4.1:

Energy conservation approaches are addressed in the Energy policy section of the University Community Plan.

5. Land development can affect regional emissions of particulate matter through travel on paved and unpaved roads and construction activities.

   Policy Option 5.1:

   Require measures to reduce construction particulate emissions. Reduce emissions of particulate matter from construction access roads, parking areas, and unpaved roads.

6. Residential development can include wood-burning appliances that emit particulate matter, toxic air contaminants, and other pollutants.

   Policy Option 6.1:

   Limit installation of fireplaces. Require installation of low-emitting, EPA-certified wood-burning appliances or natural gas fireplaces.

7. Public procurement and operations can be oriented toward improving air quality.

   Policy Option 7.1:

   Identify opportunities for and encourage procurement and use of alternative fuel vehicle fleets by large employers in the University Community and UC Merced. Collaborate with UC Merced on an alternative fuel vehicle shuttle system servicing the campus, the University Community, and the City of Merced.