

V. PUBLIC SERVICES & FACILITIES ELEMENT



CA/KB

OVERVIEW

The Public Services and Facilities Element, one of nine elements of the General Plan, contains County policies on the planning and provision of public services and facilities that are necessary for orderly growth and development.

The Public Services and Facilities (PSF) Element is organized as follows:

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| <ul style="list-style-type: none">• Overview• Purpose of the Element• Relationship to Other Elements | <ul style="list-style-type: none">• Constraints and Opportunities• General Public Services and Facilities Goals, Objectives and Policies• General Public Services and Facilities Implementation Programs• Flood Control System• Waste Management System• Water System• Wastewater System• Transportation System• Community Facilities |
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The Public Service and Facilities Element includes general goals, objectives, policies, and implementation programs. They are in addition to those presented in each specific public service and/or facility topic listed above.

The Community Facility Component includes the Orange County Fire Authority; Orange County Public Library; Orange County Sheriff-Coroner; Local Special Service District; Schools; and Child Care.

PURPOSE OF THE ELEMENT

The Public Services and Facilities Element sets forth a comprehensive strategy for the planning, management, and implementation of public facilities that are necessary to meet Orange County's existing and future demands.

The Public Services and Facilities Element focuses on those publicly managed services and facilities which have a direct influence on the distribution and intensity of development that can be accommodated through the utilization of existing technologies and assumptions that are used to determine adequate service levels.

These services include flood control, waste management, water and wastewater, transportation, and community services (fire protection, library, sheriff patrol, local special services districts and public school facilities).

This strategy is expressed as an integrated framework of public facility goals, policies, and programs. The goals of the Element are based primarily on quantified objectives, an assessment of public facility needs, and the identification of problems impeding the planning, management, or implementation of County public facilities.

The policies and programs of the Public Services and Facilities Element form an effective implementation plan to meet the established goals. Consequently, the Public Services and Facilities Element serves to guide and direct local government decision-making in public facility-related matters and also fosters coordination with regional, state, and federal policies and programs.

The primary objectives of the Public Services and Facilities Element include:

- 1) Establishment of a framework that identifies and provides for the coordination and planning of public services and facilities (as described in the Element's six components).
- 2) Integration of public facilities planning with the other General Plan elements.
- 3) Establishment of a process that promotes the provision of public services and facilities necessary to implement the General Plan.

The basis for much of the data and analysis that are portrayed in the Element is a compilation of adopted studies/plans

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prepared in the past by county agencies and departments. These include the Development Monitoring Program (DMP), the County Water Plan, the Solid Waste Master Plan, the Master Plan of Capital Facilities, the Long- and Short-Range Transportation Plans and Orange County Transportation Authority's (OCTA) Fifteen Year Investment Plan.

Future amendments to the Public Services and Facilities Element will address additional community-level facilities and expand the scope and detail of the service system analysis.

As the County continues to grow, the pressure on public services and facilities will increase. All public services and facilities will experience increasing demand as the urbanized area expands, but the methods employed to meet these demands will vary.

For example, an adequate supply of land resources for facilities already exists in the unincorporated areas, but it is necessary that affirmative steps be taken to set aside areas during the planning and development review process.

The demand for some other services and facilities, such as flood control and water, cannot be met entirely within the borders of Orange County. The County must ultimately depend on cooperation with other counties and agencies for the provision of an adequate supply of these services.

One of the major purposes of the Public

Services and Facilities Element is to provide a clear statement of County policy so that timely steps can be taken to ensure that an adequate supply to all necessary services and facilities will be available to meet the County's growth needs.

RELATIONSHIP TO OTHER ELEMENTS

The Public Services and Facilities Element achieves its consistency with other General Plan elements through the use of common socioeconomic projections and assumptions and the pursuit of common major goals such as balanced land use and public facilities development. Consistency of PSF implementation with specific elements is described below:

1. All figures contained in the PSF Element are for informational purposes only and are not a part of this Element. Those adopted figures contained in the Land Use, Transportation, Recreation, and Resources (Open Space) Elements shall provide General Plan policy guidance for implementing public facilities planning.
2. Major county public facilities shall conform to the adopted Noise and Safety Elements.
3. Innovative financing, funding, and implementation programs which could serve to minimize infrastructure costs, and thus housing costs are included in the PSF Element consistent with

Housing Element direction.

4. Regional transportation facilities will be mapped in the Transportation Element.

Regional public facilities (excluding transportation) will be mapped, to the extent feasible, as Land Use Category 4 (Public Facilities) on the Land Use Element.

5. The Public Services and Facilities Element provides specific implementation and financing policies and programs for transportation facilities. The Transportation Element (e.g., Circulation Plan) is the County master plan for transportation and provides general policy and program guidance for facility planning and siting.

CONSTRAINTS AND OPPORTUNITIES

This section identifies existing and potential constraints to and opportunities for satisfying the projected public facilities demands for Orange County. While these constraints do not always represent absolute barriers, they may inhibit the timely achievement of key public facility service objectives. The implementation policies and programs in this chapter are intended to eliminate or minimize these constraints and utilize the identified opportunities.

Constraints

- ***Environmental Constraints***

ENVIRONMENTAL QUALITY

Statutory requirements protecting environmental quality (e.g., CEQA, Federal 208 Water Quality Standards) may often directly and indirectly result in project delays and other requirements that are associated with these mandates.

Further, added costs may occur in order to comply with environmental standards such as air pollutant or water quality regulations, which result from these mandates.

FACILITY SITING AND IMPLEMENTATION

Due to urbanization, it has become increasingly difficult to site new public facilities or expand existing facilities in Orange County. This situation is particularly true for noxious facilities such as wastewater treatment plants, landfills, and airports; but it also remains an issue for flood control and highway facilities.

- ***Fiscal Constraints***

At the same time that operating and capital expenses have risen, many traditional revenue sources have been severely cut, and spending limitations have been placed on local governments, thus leaving them faced with reduced revenues at a time of growing need. Major fiscal factors constraining local governments today in the provision of

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basic services and facilities include:

PROPOSITION 13

The passage of Proposition 13 in 1978 seriously limited local property taxes as a major revenue source for local governments. In fiscal year 1974-75, property taxes provided 35 percent of total County revenues and 24 percent of city revenues. The amount dropped to 20 percent and 14 percent, respectively, in fiscal year 1979-80. For fiscal year 1998-1999, only six percent of the typical property tax dollar supported County revenues.

PROPOSITION 4 (THE GANN INITIATIVE)

Passage of the Gann Initiative in 1979 placed constitutional limitations on the annual appropriations that can be made by each state and local government entity. These appropriations are limited to those made in fiscal year 1978-79. Further, they can only be increased in any one year in proportion to inflation rates or personal income increases (whichever is lower) and increases in population. Excess revenues over appropriation limits must be returned to citizens through reduced fees and taxes.

CAPITAL IMPROVEMENTS

In the past, general obligation bonds were used extensively to finance those capital improvements for which it was not practical or desirable to recoup

costs from user fees. Proposition 13 has inhibited the ability of local governments to raise property tax revenues to meet financial obligations, by requiring a positive two-thirds vote of the qualified electorate. This situation has limited seriously the ability of governments to issue general obligation bonds.

REDUCTIONS IN FEDERAL AID TO LOCAL GOVERNMENT

Federal assistance has been a prime mover in both state and local budgets, accounting for 20-25 percent of these budgets, particularly since the late 1960s. Federal aid to state and local governments rose from \$20 billion in 1970 to nearly \$88 billion in 1980. However, significant federal budget cuts have been implemented over the last several years.

Although many of the cuts affect social programs, they also affect grants available for operation of public service systems and capital improvements. Mass transit operating subsidies and construction grants for wastewater treatment facilities are potentially the hardest hit grant programs in the public service category.

The fiscal ability or inability of local governments and special districts to provide additional services and facilities will in large part determine the degree to which the County can grow.

Historically, the availability of public services and facilities has determined frequently the location, timing, and intensity of growth. Given the serious fiscal problems currently facing local governments, it is not at all certain whether the County will be able to accommodate the planned levels of growth unless major fiscal and programmatic changes are forthcoming and/or priorities and standards are reset. This variable makes the constraints described in this section significant.

- ***Governmental Constraints***

DEVELOPMENT OBJECTIVES AND PRIORITIES

Competing public needs can result in conflicting priorities and programs. Many issues such as cost/benefit and future impact of public facility programs will need to be addressed. An issue of increasing public concern is the high cost of housing and its relationship to governmental regulation and fees, particularly those necessary to ensure public facility implementation.

INTERGOVERNMENTAL COORDINATION

It is especially important for the County, cities, and special districts to continue to communicate and cooperate with one another in order to strive for common goals and objectives because public service facility funding and site location could easily become a volatile issue.

- ***Economic and Market Constraints***

COUNTY GROWTH PACE

The pace of growth in Orange County and the surrounding counties will affect the pace at which new public facilities will be needed. If growth occurs at the expected pace, there may have to be a curtailment or an elimination of facilities. Curtailment or elimination of certain public services because of budget shortfalls may reduce development in Orange County and shift some growth into outlying counties. Also, the high cost of living in Orange County and the existence of competitive affordable housing opportunities in surrounding counties may also shift growth.

- ***Planning Constraints***

Since the late 1970s, the County and its special districts have faced the threat of significant cost-revenue shortfalls in the provision of public services and facilities. Capital improvements and operation and maintenance expenses have risen at an escalating rate as a result of:

- 1) General inflation, in combination with rising wage levels and employee benefit programs;
- 2) Expansion of public service systems to accommodate the growing population base of the region;

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- 3) The rising real costs of constructing and expanding capital facilities at rates which exceed general inflation and have made it increasingly more expensive to furnish public works;
- 4) Aging infrastructure in need of rehabilitation; and
- 5) The inability of local government and public service entities to raise revenues through traditional funding mechanisms (e.g., General Obligation Bonds, etc.) to pay for the initial capital costs for needed new facilities.

The cumulative effects of both revenue reductions and spending limitations present serious problems for the County. The response to these problems has, and is, taking many forms.

For one, the County is attempting to expand the use of existing financial resources. Secondly, the County is identifying new resources to supplement existing sources so that current levels of service will be maintained and basic infrastructure provided. Innovative public facility funding techniques, direct cost to users, and private developer participation are alternative funding sources.

In addition, the County has decreased expenditures by reducing certain services, contracting out services to the

private sector when they can be provided less expensively, deferring maintenance on public facilities, and postponing capital improvements.

The magnitude of fiscal constraints varies by public service function, depending on the traditional source of revenues used by a service and the extent to which these revenues have been affected by recent fiscal policies. In addition, the magnitude of fiscal problems depends upon the mix of relied upon revenues.

There are numerous issues associated with siting and implementation of public facilities. Foremost among them is the scarcity of potential sites due to the increase in the County's population and resultant shift in land use from primarily agriculture and open space to residential, commercial, and industrial.

Many public services require the physical plant be located in, or near, the service area due to increased service costs associated with distance. For instance, fire and police facilities should be located within the safeguarded communities in order to provide service within a reasonable response time.

Unfortunately, other facilities, such as disposal sites, must also be located within reasonable distances from communities because of the high cost of long distance hauling and the effect of distance on facility operation efficiency.

Public opposition is often the primary

response to such facilities.

Potential facility sites are scarce because the unavoidable environmental impacts of certain facilities exclude many sections of the County. Many facilities require large sites and the competition for available land among other types of needs and uses, combined with the high cost of land in Orange County, may exclude some sites from consideration.

Opportunities

- ***Environmental Opportunities***

The amount of undeveloped land in Orange County, particularly in the unincorporated area, can provide unique opportunities to consider and address public service facilities concerns through innovative land use planning.

Portions of undeveloped Orange County may be ideal sites for certain public facilities because they are sparsely populated, are within County unincorporated areas, and, yet, are within service distance of those communities with service needs.

- ***Governmental Opportunities***

COORDINATED PLANNING OBJECTIVES AND STANDARDS

Orange County encourages long-range planning for the coordination of state and local government and private sector aims with the objective of phasing

development according to the availability of adequate public services and facilities and the availability of financial resources for the construction of sufficient new facilities. The County promotes and supports planning efforts which emphasize increased system efficiency including programs which: contract various services to the private sector when they can be provided at less cost; shift some responsibility for service provision to non-governmental entities such as homeowner organizations; and promote the consolidation of services and the use of new technologies to reduce demand for new facilities.

BALANCED COMMUNITY OBJECTIVES

The planned community concept embraced by Orange County encourages the development of balanced land use plans in the unincorporated area. Balanced land uses serve to address concerns regarding transportation facility deficiencies and promote the efficient use of other facilities (e.g., water/wastewater).

- ***Fiscal Opportunities***

INNOVATIVE FINANCING

The provision of basic public facilities and the maintenance of current levels of service is an objective the County of Orange is attempting to meet by

expanding the use of existing financial resources and identifying new resources to supplement existing ones. These resources include the increased use of: user fees; non-property-based taxes and miscellaneous revenues; developer financing for on-site and off-site capital improvements associated with new development; benefit assessment bonds; revenue bonds; lease financing for special facilities; redevelopment financing which relies on public/private sector relationship; and joint funding for improvements such as signals at intersections and road widening.

GOVERNMENTAL INCENTIVES

The County has considerable flexibility to provide incentives for efforts that do not threaten public safety. This flexibility, coupled with increasing financing incentives for infrastructure provision and other public facility activities, can create a positive environment for facility implementation efforts, both public and private.

- ***Economic and Market Opportunities***

The presence of large-scale landholdings in southern Orange County has facilitated innovative land use planning. The investment potential of the area and the prudent financial practices of the development industry have allowed for the provision of public services and facilities in accordance to need. Continued development phasing

and funding will provide for maintenance of existing and provision of new facilities to support projected growth demands.

GENERAL PUBLIC SERVICES AND FACILITIES GOALS, OBJECTIVES AND POLICIES

Goal 1

Provide a network of public services and facilities that are integrated, complementary, and compatible with other countywide regional land use and development goals.

- ***Objective***

- 1.1 To plan public services and facilities consistent with the Orange County General Plan.

Goal 2

Encourage the funding and development of public services and facilities to meet the County's existing and future demand.

- ***Objectives***

- 2.1 To achieve target service levels through the coordination of funding programs and planning efforts.
- 2.2 To develop adequate and dependable public services and facilities that support existing and future development as defined by

the General Plan.

Policies

1. PHASING AND FUNDING

To implement public facilities in a manner that supports the implementation of the overall land use development policies and the needs of County residents and is consistent with the funding capabilities of the County.

Proponents of planned communities or tentative tract or parcel maps in conventionally zoned communities shall provide ultimate, fair share infrastructure improvements for regional services as required by County and service provider plans in effect at the time of project implementation.

Proponents shall also participate, on a fair share basis, in provision of community level facilities. The County and service providers shall strive to provide facilities and services necessary to complete the service system.

2. SYSTEM PROGRAMMING AND

FUNDING

To maximize use of available funding sources, including federal, state, and local, as well as support necessary increases in such sources and require private participation in assessment/fee and other programs established by the Board of Supervisors in order to implement necessary facilities.

3. LAND USE COMPATIBILITY

To coordinate facility planning in a manner compatible with surrounding land uses and to review planned land uses adjacent to facilities for their compatibility with facility operations.

4. INTERGOVERNMENTAL COORDINATION

To encourage and support a cooperative effort among all agencies towards the implementation of necessary public facilities through intergovernmental activities.



GENERAL PUBLIC SERVICES AND FACILITIES IMPLEMENTATION PROGRAMS

1. COMPREHENSIVE FACILITIES FINANCING PROGRAM

Action:

Continue to work on the development of a facilities funding and financing plan to establish priorities for County public facility needs and the development and application of a proper mix of methods to foster economic development.

Discussion:

The CEO has completed a Phase I document which is the first iteration towards the ultimate goal of developing a County of Orange Comprehensive Facilities Financing Program which will set forth a facility improvements

programming process, a facility budgeting process, and a strategic implementation plan.

The program is intended to integrate intermediate and long-term funding requirements and revenue sources for the construction, operation, and maintenance of County public facilities into a comprehensive program which will enable the County to meet its future needs in the most cost-effective and resource conserving manner. RDMD will continue to support this effort.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agency: CEO

Source of Funds: County General Fund

2. MASTER PLAN OF COUNTY FACILITIES (MPCF)

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Action:

- Continue the Master Plan for County Facilities (MPCF) process and other related planning documents prepared annually.
- RDMD will continue to review these documents to determine any necessary Land Use Element and other element amendments.

Discussion:

The Master Plan for County Facilities, prepared by the County Facilities Management Team presents a detailed five-year plan for (a) major (greater than \$500,000) capital projects, and (b) major consolidation/ relocation proposals identified by various County agencies and departments. The majority of the projects represent physical improvements required due to County growth, demand based or adopted growth projections contained in the General Plan, or the maintenance requirements of capital facilities. Projects included in the Plan are advisory only and are intended to guide consideration of projects through the budget process.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: Various agencies

Source of Funds: Various sources

3. GROWTH MANAGEMENT PROGRAM

Action:

- Continue with and expand public services and facilities section of the Growth Management Program (Appendix III-2 of the General Plan Appendices) for the purposes of ensuring the provision of necessary services and facilities in a timely manner.
- Continue to require Annual Monitoring Reports (AMRs) that evaluate projects on an annual basis, to the extent to which project phasing and implementation is consistent with public facilities and community balance goals, and adopted General Plan and Planned Community policies.

Discussion:

Presently, the County requires confirmation of facility adequacy from certain service agencies (e.g., water) prior to approval or extension of approval of tentative tract maps. This provides assurance that the Agency is capable of coordinating delivery through construction of necessary facilities. However, these letters are usually conditional upon funding or implementation actions of the project proponent. Project implementation phasing is dependent upon the status of facility planning and ongoing negotiations between the project proponents and the service agency.

The County of Orange General Plan,

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Land Use Element, provides for the phasing of development consistent with the adequacy of public services and facilities (Policy 1: Phasing and Funding). In the case of many facilities, the absolute necessity of certain services to development will ensure adequate incremental capacity. However, the County should be appraised of the status of ongoing planning, agreements, and delivery phasing as it ultimately may determine the phasing of development and the need for other support services.

Public service demand and facilities capacity information is requested with the submittal of Annual Monitoring Reports (AMR) prepared by Planned Community development proponents (see Land Use Element Implementation Programs). This information is compared to facilities plans prepared by service agencies to monitor public service delivery and to help update small area demographic projections. When discrepancies are found between proposed development activity portrayed in the AMRs and service delivery planning documents, further information will be requested in subsequent AMRs or, if necessary, in development processing documentation.

This program is closely related to Program No. 7 (DMP), with a more direct focus on the review of specific projects.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: CEO and RDMD

Source of Funds: Various sources

4. EVALUATION OF PUBLIC SERVICE SYSTEM OBJECTIVES AND ALTERNATIVE MANAGEMENT STRATEGIES

Action:

Continue ongoing evaluation of existing public service system criteria and service objectives and periodically propose alternative management strategies to the Board of Supervisors as part of PSF Element amendment process and the Development Monitoring Program (DMP).

Discussion:

Future growth in Orange County requires the delivery of adequate services to all residents at an ever increasing expense to the County and Special Districts. The County and its Districts are presently facing serious fiscal constraints in generating revenue to pay for needed services and facilities. An ongoing review of existing service criteria and objectives and alternative management strategies (e.g., Transportation System Management (TSM), waste recycling and reduction techniques) which could serve to meet these objectives will be conducted as a continuation of the overall PSF work

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effort.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: CEO and RDMD

Source of Funds: Various funding sources

5. GENERAL PLAN CONSISTENCY PROGRAM

Action:

- Continue review of public and private projects for consistency with the Orange County General Plan.
- Evaluate current implementation practices, including conditions of approval, as part of the Public Services and Facilities Element-Phase II process.

Discussion:

This program satisfies requirements that private and public projects are consistent with the local government's General Plan. All public works projects, development projects, discretionary permits, capital improvement plans and other private and public agency proposals are reviewed for consistency. The private project review will be conducted in accordance with the following guidelines:

a) **Flood Control**

Compliance/Consistency:

- Participation in AMR review process, if required.
- Standard conditions/mitigations for flood protection and the Flood Plain Zoning Regulations shall be applied.
- Participation in flood and drainage facility and financing programs established by the Board of Supervisors.

b) **(Solid) Waste Management**

Compliance/Consistency:

- Projects encroaching near an active landfill will be reviewed for compatibility with landfill operations.
- Projects will be encouraged to utilize waste recycling and reuse measures which extend the operating life of landfills per existing standard EIR mitigation measures.

c) **Water System**

Compliance/Consistency:

- Participation in AMR review process, if required.
- Standard conditions on water distribution systems and service commitments from water purveyors.

d) **Wastewater System**

"Government is not reason, it is not eloquence, it is a force; like fire, a troublesome servant and a fearful master. Never for a moment should it be left to irresponsible action."

George Washington

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Compliance/Consistency:

- Participation in AMR review process, if required.
- Standard conditions on wastewater disposal and service commitments from wastewater agencies.

e) **Transportation System**

Compliance/Consistency:

- Participation in AMR review process, as required.
- Participation in assessment/fee programs established by the Board of Supervisors to implement facilities.
- Provision of all necessary on-site facilities and responsibility for fair share of off-site facilities as established by Board of Supervisors policy and standard conditions for projects.

f) **Community Facilities**

Compliance/Consistency:

- Participation in AMR review process, if required.

- Participation in assessment/ fee programs established by the Board of Supervisors to implement facilities.
- Standard conditions for community facilities (e.g., fire service, CSA annexations) in accordance with Board of Supervisors policy.
- In areas with documented future facility deficiencies, General Plan Amendment and/or Zone Change conditions applied to projects to ensure provision of necessary community facilities shall be addressed/ incorporated in subsequent project approvals.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: RDMD

Source of Funds: County General Fund



6. INTERGOVERNMENTAL COORDINATION AND PUBLIC PARTICIPATION

Action:

Intergovernmental and intra-governmental coordination will continue through increased cooperation and contact with federal, state, regional, countywide, and Orange County agencies which impact or influence Public Services and Facilities Element implementation.

Discussion:

This program facilitates both intra- and inter-governmental coordination and citizen participation in order to promote a greater understanding of the County General Plan. Appropriate governmental agencies, organizations, and citizens are provided an opportunity to review documents and provide input during the General Plan revision and amendment process. Appropriate agencies are also consulted and involved in many of the

implementation programs defined in this document.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: CEO and RDMD

Source of Funds: County General Fund

7. DEVELOPMENT MONITORING PROGRAM (DMP)

Action:

Continue DMP Report Process which incorporates AMR information (see Implementation Program No.3 Growth Management Program) and other public facility and fiscal needs monitoring.

Discussion:

This program provides an annual report which documents ongoing and projected infrastructure system capacities and

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demands for various service providers in Orange County. The DMP report also contains fiscal projections for each of the Board governed Special Districts and service agencies. Coupled with small area population and housing projections, the DMP is a tool for use in short-range and long-range facilities planning, budget planning, and in the land use decision making process. The DMP will continue to be used as an early warning system to alert affected bodies to existing and future public service and facility imbalances.

New or Existing Program: Existing

Implementation Schedule: Since 1993, due to staffing and budgetary constraints, the DMP Report has not been produced on an annual basis.

Responsible Agencies: CEO and RDMD

Source of Funds: Various sources

8. CITY/SPECIAL DISTRICT COORDINATION

Action:

Continue and expand cooperative public facility planning and implementation activities with Orange County cities and special districts.

Discussion:

Many public facility systems involve several special districts and/or local jurisdictions. The increasing scarcity of fiscal resources and decreasing opportunities for facility siting and implementation support a more active, cooperative role among all public agencies in Orange County towards public service goals. Such efforts include the existing County Water Plan and Flood Control Programs and emerging county-wide public facility planning activities such as the Comprehensive Public Facilities Financing Program.

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New or Existing Program: Expand existing activities

Implementation Schedule: Ongoing

Responsible Agencies: CEO and RDMD

Source of Funds: County General Fund

FLOOD CONTROL SYSTEM

Introduction

It is paradoxical that areas such as Orange County which suffer from a chronic shortage of water are vulnerable to severe flooding. Due to its lack of vegetation and increased exposure to the sun, the ground surface of semi-arid Orange County is less able to accommodate extremely heavy rainfall than are counties in more humid climates.

During peak rain periods, the ground passages become sealed and the rate of runoff increases.

Runoff is further increased by urbanization because whenever the ground is covered by pavement or an impermeable surface, direct absorption of precipitation by the underlying soil is precluded. These natural forces are only a portion of Orange County's flood problem. The regional context of the County's flood control watershed and the necessary improvements in this large-scale watershed further complicate the provision of flood control facilities in Orange County.

Existing Conditions

Orange County's flood control effort is divided among three major areas: Tri-County system (San Bernardino, Riverside, and Orange Counties), regional system, and local drainage program. An overview of each is provided below.

TRI-COUNTY SYSTEM

The Santa Ana River Basin area is the largest watershed in Southern California with over

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3,200 square miles. The watershed area is separated into an upper and a lower basin divided by Prado Dam and Reservoir near the City of Corona.

The lower basin which encompasses Orange County is protected from flooding by Prado Dam. During heavy rains in 1970, Prado Dam was found only to be capable of withstanding a (once every) 70 year flood.

To rectify this situation, the U.S. Army Corps of Engineers is constructing the Santa Ana River Mainstem Project to provide 190-year flood protection. The Santa Ana River Mainstem Project (including Santiago Creek) (See Figure V-1), contained in the Water Resources Development Act of 1986 (PL 99-662), was signed into law by the President on November 17, 1986.

REGIONAL SYSTEM

- **Orange County Flood Control District:**
The Orange County Flood Control District (OCFCD) is empowered to construct and maintain flood control works to prevent or minimize loss of life and property caused by flooding, and for water conservation. The Resources and Development Management Department (RDMD) is responsible for implementing the Flood Control District's funded activities program which includes the design, construction, operation, and maintenance of regional flood control facilities.

The Flood Control District program prioritization is assisted by the City

Engineers Flood Control Advisory Committee (CEFCAC), which is composed of one City Engineer from each Supervisorial District appointed by the Orange County Division, League of California Cities and a County representative designated by the Director, RDMD. Project nominations from all sources are reviewed by RDMD staff and submitted to CEFCAC for project recommendations and priorities. CEFCAC recommendations are utilized by RDMD in preparing the annual Flood Control District budget request.

Flood Control District's revenue comes mainly from property taxes. Under the provisions of Sections 97 and 98 of the Revenue and Taxation Code, the amount of Flood Control District revenue derived from property taxes is based on the average percentage received during the three years prior to the passage of Proposition 13, plus a proportionate share of the subsequent tax base growth. Subsequent to the passage of Proposition 13, State Special District augmentation funds have also been received.

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LOCAL DRAINAGE PROGRAM

The storm drains are normally smaller facilities which collect drainage from local streets. In new developments, local drainage facilities are constructed by developers in accordance with Master Plans of Drainage Facilities. However, in many older parts of Orange County, local systems were not built due to lack of major systems to accept their discharge. Limited funding from the County's General Fund or the Road Fund is used to implement local storm drains.

Future Prospects

As pavement replaces soil in the Santa Ana River watershed and other South County watershed areas, storm runoff is expected to increase. When stream flows exceed channel capacity, rivers overflow their banks onto their floodplain. Primary options to reduce flood losses revolve around the control of development in the floodplain, land management throughout the watershed to reduce peak discharges via engineering measures for controlling water.

The completion of the Santa Ana River Main Stem Project (including Santiago Creek) along with improvements to local and regional OCFCD facilities, will provide Orange County with many flood protection safeguards. However, long-term protection will be possible only when additional funding becomes available for completing the regional OCFCD facilities and its many other deficient facilities.

The County's local drainage basins are also subject to flooding. The County Flood Control District manages an annual program of flood channel and storm drain projects to ensure the drainage capacity needs of urban development in the South County area are met and to upgrade existing facilities for more effective flood protection. In addition, the ongoing implementation of flood plain development restrictions (e.g., FP-2 zoning) and watershed improvement measures improve flood protection in the more immediate future.

TRI-COUNTY SYSTEM

The U.S. Army Corps of Engineers in 1975 recommended the Santa Ana River Main Stem Project over four other options as the preferred means of providing main stream physical control over Santa Ana River flood waters. (See Figure V-1).

Under this plan, the existing Prado Dam will be modified by raising it 30 feet, constructing a new outlet to more than triple its release volume, and raising the spillway 20 feet. New levees will be built to protect existing development. The project will require more than 1,600 acres according to location of the proposed new taking line that will accommodate a 190-year flood. The improvements will add an additional 3,500 acre-feet to the groundwater supply and will be able to release up to 30,000 cubic feet per second (CFS) during flooding, up from the existing 9,200 CFS.

The Seven Oaks Dam, completed in 1999, located in the San Bernardino National Forest

In advance of the 1997-98 winter storms, County workers laid out 130,000 sandbags-100,000 more bags than in most years, not including the 25,000 bags handed out to the public.

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is intended to handle a standard project flood peak of up to 82,000 CFS. Covering 780 acres with a capacity of 160,000 acre-feet of water, this dam will discharge a maximum of 6,900 CFS into the Santa Ana River.

Improvements to the Santa Ana River between Prado Dam and the Pacific Ocean began in early 1990's. The Santa Ana River Channel has been widened and strengthened from the ocean to Weir Canyon Road. The channel improvements downstream of Prado Dam in conjunction with the fully constructed Seven Oaks Dam increased flood protection and led to the removal of the Santa Ana River FEMA 100-year Flood Insurance Rate Map in Orange County.

REGIONAL SYSTEM

As a result of the growing population and development in Orange County, a number of flood control channels are deficient. Increased urban runoff from roads, parking lots, sidewalks, and building roofs contribute to the problem of increased downstream flows. The Flood Control District closely monitors the County's channels and levees and continues with annual maintenance and improvement projects and all of its facilities in order to maximize flow capacity.

Budget reductions resulting from the passage of Proposition 13, diversion of OCFCD funds towards settling the County's bankruptcy, in 1994, and supporting watershed and coastal resources division may delay many of the scheduled flood control improvements.

Sources for alternative funding include formation of special assessment districts for flood channel improvements. Funds would be generated to pay for the needed improvements by the assessment district and the residents would reimburse the borrowed funds in periodic assessments to the County.

In addition, flood control deficiencies are compounded in existing urban developments when new development upstream contributes to downstream flows. Runoff flows from development may be reduced by incorporating structural design improvements as part of the development.

GOALS, OBJECTIVES AND POLICIES: *Flood Control System*

Because flood protection in Orange County is regional and local in nature, this component addresses both overall and specific project concerns through an integrated strategy of goals, objectives and policies.

Goal and Objectives

Goal 1

Provide effective and efficient flood protection throughout Orange County.

- ***Objectives***

- 1.1 To implement the improvements for the Santa Ana River Mainstem Project (including Santiago Creek).

- 1.2 To develop and enhance

El Nino hit Orange County hard on December 6, 1997. On that day, Orange County experienced the highest rainfall in more than 40 or 50 years.

CHAPTER V. PUBLIC SERVICES & FACILITIES ELEMENT



intergovernmental relations for flood protection programs in Orange County.

- 1.3 To implement flood control facilities which protect both existing and proposed development.
- 1.4 Removal of FEMA Floodplains

Policies

1. SANTA ANA RIVER MAINSTEM PROJECT

To continue to pursue approval of the Plan and the construction of proposed facilities.

2. SYSTEM PHASING

To phase improvements to Flood Control District facilities consistent with funding capabilities:

- a) To implement improvements consistent with the time frame of the Santa Ana River Mainstem Project which also includes the Santiago Creek for equivalent capacities;

- b) To provide 100-year flood conveying capability to all flood control district facilities to enable protection for residences, businesses, and flood-proof structures; and
- c) To complete links in the flood control system that have not been provided by new development.

3. INTERGOVERNMENTAL COORDINATION

To encourage and enhance coordination between the Tri-County agencies and the State/Federal agencies for optimum flood prevention programs.

IMPLEMENTATION PROGRAMS: *Flood Control System*

The major factor to reducing Orange County's flood damage potential is the Santa Ana River Mainstem Project (including Santiago Creek). Because the river's watershed encompasses three counties, increased cooperation and coordination of the flood control agencies in the counties is imperative. The ongoing flood

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control district projects are crucial for efficient water runoff discharge.

1. INTERGOVERNMENTAL COORDINATION

Action:

Continue to develop intergovernmental relations toward achieving flood protection goals and objectives.

Discussion:

The Orange County Flood Control District (OCFCD) currently cooperates with various levels of government including federal, state, and local agencies. For instance, local projects are analyzed and prioritized by various agencies for budget and implementation purposes requiring effective agency coordination.

In addition, the primary regional project, the Santa Ana River Mainstem Project, is dependent upon OCFCD coordination with the U.S. Army Corps of Engineers for project development and implementation. Cooperation among affected counties (Riverside, San Bernardino, and Orange Counties) will also be important for project phasing and implementation. Continued and expanded cooperation among agencies will provide a coordinated effort toward achieving flood protection funding, phasing, and implementation goals and objectives.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agency: RDMD

Source of Funds: Various funding sources

2. SANTA ANA RIVER MAINSTEM FEDERAL PROJECT

Action:

Expedite to the greatest extent feasible the implementation of the Santa Ana River Mainstem Project as an integral flood control management program.

Discussion:

The Santa Ana River Mainstem Project is a comprehensive flood control program focusing on improvements along the Santa Ana River beginning at its headwaters in San Bernardino County to its ocean mouth in Orange County. The Santa Ana River Mainstem Project was approved by the federal government in 1980 and funding authorized in 1986.

Features of the plan include: construction of the Seven Oaks Dam in San Bernardino County, improvement to Prado Dam in Riverside County, and channel improvements to the river and Santiago Creek in Orange County. Construction of the project began in 1990 and is currently completed through Weir Canyon Road. The Seven Oaks Dam embankment and outlet gates were fully operational in late 1999.

New or Existing Program: Existing

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Implementation Schedule: Ongoing

Responsible Agencies:

- U.S. Army Corps of Engineers
- Orange County Flood Control District
- Riverside County Flood Control District
- San Bernardino County Flood Control District

Source of Funds: Various funding sources

3. **ORANGE COUNTY FLOOD CONTROL DISTRICT SYSTEM**

Action:

Continue to provide efficient and effective flood control facility conveyance to enable flood control protection for all Orange County residents and businesses.

Discussion:

The Orange County Flood Control District is empowered to construct and maintain flood control works for water conservation and to prevent or minimize loss of life and property caused by flooding. The Resources and Development Management Department (RDMD) is responsible for implementing the Flood Control District's program which includes the design, construction, operation, and maintenance of regional flood control facilities.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- Orange County Flood Control District
- RDMD

Source of Funds: Various funding sources

WASTE MANAGEMENT SYSTEM

Introduction

The Orange County Board of Supervisors is responsible for the County's solid waste management system. This includes providing landfill disposal facilities and household hazardous waste collection centers, establishing County solid waste management policy, enforcing County solid waste regulations, and providing solid waste planning.

The Integrated Waste Management Department (IWMD) administers the County of Orange solid waste management system on behalf of the Board of Supervisors. The Board and IWMD are assisted by an 18-member Waste Management Commission (WMC) that advises the Board on matters relating to solid waste management, and is designated as the Local Task Force for Countywide integrated solid waste planning, pursuant to the Integrated Waste Management Act of 1989 (AB 939). IWMD operates the County's landfills and administers solid waste collection services in the unincorporated areas. IWMD also performs Countywide waste management planning.

**Americans
discard 4
million tons
of office
paper every
year –
enough to
build a 12
foot high
wall of paper
from New
York to
California.**

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The city councils of the 34 cities within Orange County are responsible for establishing city solid waste management policy and enacting ordinances for collection, storage, disposal and recycling of solid waste within their respective jurisdictions. Cities and sanitary districts provide solid waste collection services for their jurisdictions.

The private sector operates five transfer stations/material recovery facilities. These facilities are located in Anaheim, Huntington Beach, Irvine, Orange, and Stanton. The private sector also operates seven permitted greenwaste facilities located throughout the County.

The California Waste Management Board was created by the state in 1972. The state board provided direction and funding.

This law also established the local solid waste enforcement agencies (LEA). Assembly Bill 939 (AB 939), the California Integrated Waste

Management Act of 1989, superceded previous legislation and created the California Integrated Waste Management Board (CIWMB) to oversee the State's solid waste management program. AB 939 requires that local jurisdictions reduce their waste going to landfills by 50 percent by the year 2000 onward.

In addition to the CIWMB, the state also regulates landfills through the state and regional air and water quality boards. The Santa Ana and San Diego Regional Water Quality Control Boards (RWQCB), under the auspices of the State Water Resources Control Board, regulate landfill operation and closure impacts on ground and surface water quality. The South Coast Air Quality Management District regulates air quality at the landfills.

The role of the federal government in solid waste management is essentially limited to enforcement oversight of federal laws, which are implemented by the states. These laws include the Resource Conservation and

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Recovery Act of 1976, the Clean Water Act, the Clean Air Act, and the various provisions regarding hazardous wastes and other regulatory statutes.

County Solid Waste Management System

The System consists of three active landfills (see Figure V-2), 20 former refuse disposal stations and a regional Household Hazardous Waste Collection Program. Waste disposal is provided countywide at the three landfills. The County is roughly divided into three waste shed areas:

- 1) North Area-Olinda Alpha Landfill near the City of Brea;
- 2) Central Area-Frank R. Bowerman Landfill located near the City of Irvine; and
- 3) South Area- Prima Deshecha Landfill in the City of San Juan Capistrano, City of San Clemente, and unincorporated County.

IWMD also owns one landfill in closure, Santiago Canyon Landfill, which is presently

going through the final closure process. Operation and management of the active landfills includes acceptance and disposal of non-hazardous municipal solid waste in accordance with state and federal solid waste disposal regulations.

IWMD also provides ongoing maintenance, monitoring, and management of 20 former refuse disposal stations that were owned and/or operated by the County of Orange. The Coyote Canyon Landfill, closed in 1990, is the largest landfill in California to be closed under new closure/post-closure regulations. The other former refuse disposal facilities were closed between 1950 and 1976 under regulations in place at the time.

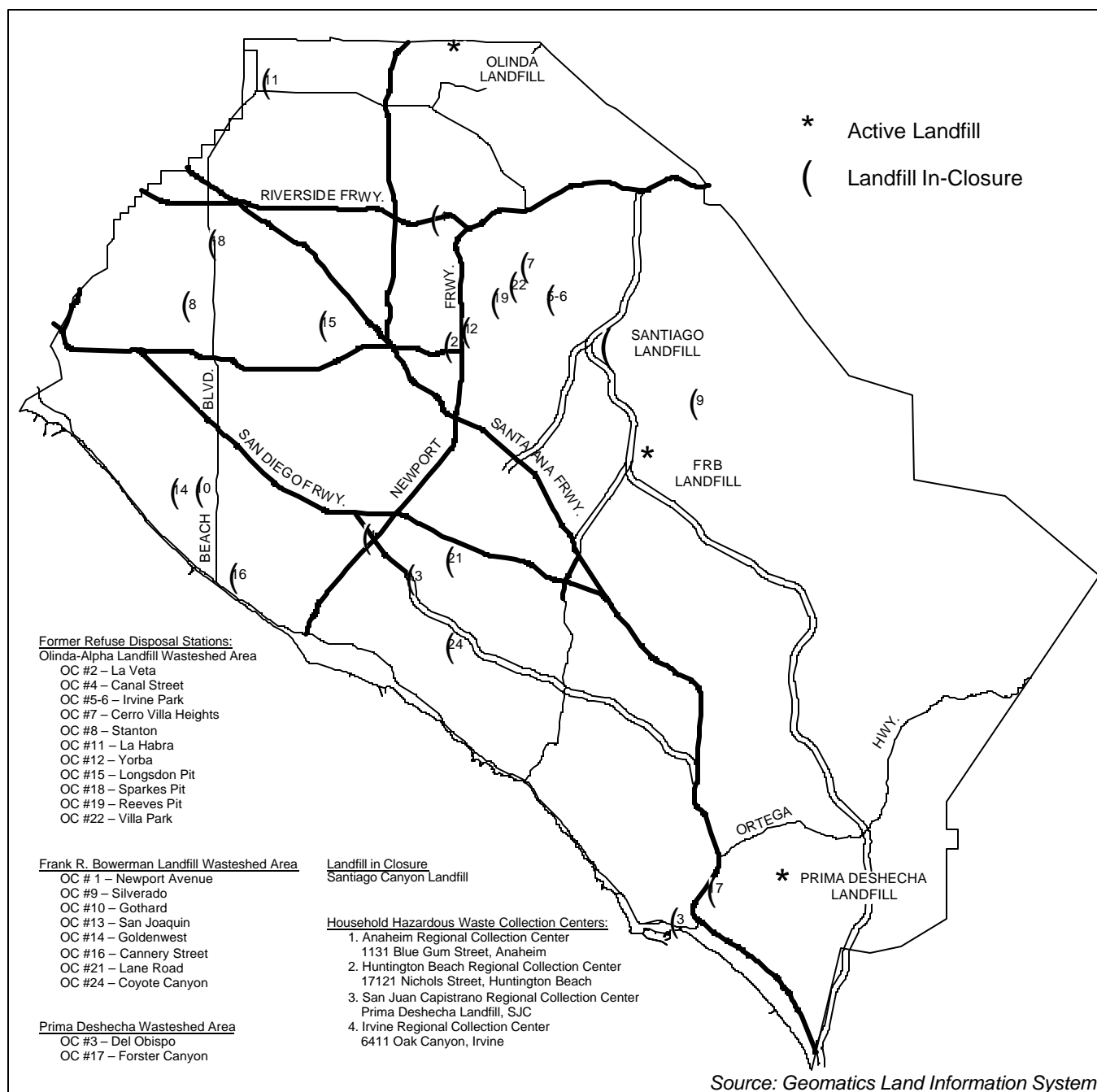
The following is a description of the active landfills:

OLINDA ALPHA LANDFILL

The Olinda Alpha Landfill is a Class III municipal solid waste landfill. It is owned and operated by the County. The Olinda Alpha Landfill initially began operations in 1960 in Olinda Canyon and was expanded into Olinda Alpha Canyon in 1981.

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Figure V-2



COUNTY OPERATED SOLID WASTE FACILITIES

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The Olinda Alpha Landfill is located in an unincorporated area of northeast Orange County, comprising approximately 565 acres adjacent to the City of Brea, immediately south of the Los Angeles County line. The Olinda Alpha Landfill is the only landfill in Orange County that accepts tires. The site has a network of environmental control systems designed to protect the areas surrounding the landfill and prevent any potential impacts to those areas, including a ground water monitoring and treatment system, and a landfill gas monitoring, collection and control system. The site also has a privately operated electric generation plant, which uses landfill gas resulting from waste decomposition at the landfill to generate electricity.

FRANK R. BOWERMAN “FRB” LANDFILL

The FRB landfill is a Class III municipal

solid waste landfill that accepts only non-hazardous waste from commercial haulers. It is owned and operated by the County and is located in the Santa Ana Mountains near the City of Irvine.

The landfill consists of 725 acres of which approximately 341 acres are currently permitted for waste disposal. The FRB landfill opened in March 1990. It has a composite liner consisting of a flexible membrane lining over clay. In future phases the side slopes will be lined with a geosynthetic clay liner and composite liner or other engineered alternatives approved by the regulatory agencies.

The FRB Landfill has a network of environmental control systems to protect the areas surrounding the landfill and prevent any potential impacts to those areas, including a ground water monitoring system, a leachate collection and recovery system, and a landfill gas monitoring and control system.

PRIMA DESHECHA (“PRIMA”) LANDFILL

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“Stop & Swap” is a unique program that allows you to drop off household yard and car maintenance products you no longer need, and pick up products you can use, such as paint, car supplies, pesticides, weed killers, cleaning products and more!

The Prima Landfill is a Class III municipal solid waste landfill located within the Cities of San Juan Capistrano and San Clemente and unincorporated Orange County. The 1530-acre site is situated approximately three miles east of the intersection of the San Diego Freeway and Ortega Highway. It is the only landfill in Orange County that accepts a limited amount of non-hazardous bio-solids.

The Prima Landfill has a network of environmental control systems designed to protect the areas surrounding the landfill and prevent any potential impacts to those areas, including a groundwater monitoring system, a leachate collection and recovery system, a groundwater extraction system, and a landfill gas monitoring and control system.

SANTIAGO CANYON “SANTIAGO” LANDFILL

The Santiago Landfill is a Class III municipal solid waste landfill operated by IWMD on land formerly leased from The Irvine Company. IWMD has operated the landfill since it opened in 1967. In October 2002, the landfill property was conveyed to the County. The Santiago Landfill is located on a 165-acre site in east Orange County, north of Loma Ridge in the Santa Ana Mountain foothills and adjacent to Irvine Lake to the west.

Approximately 130 acres are permitted for waste disposal. The facility has not accepted waste since 1993, and is in final closure, which is anticipated to be complete by 2004. Santiago Landfill has a monitoring

network, a groundwater treatment system, and a landfill gas monitoring and control system.

In addition to accepting waste generated within Orange County, the County contracts for the disposal of solid waste originating outside Orange County provided certain conditions set forth in the Codified Ordinances of Orange County for Sewage and Solid Waste Disposal are satisfied. The landfill system provides or has the potential to provide disposal capacity for a number of neighboring jurisdictions, including the counties and cities of Los Angeles, San Diego, Riverside and San Bernardino.

Landfill Capacity

A summary of the existing capacities for the four landfills is shown on Table V-1.

Santiago Canyon Landfill ceased accepting waste in 1993.

Waste Importation From Outside Of Orange County

Until 1995, use of the landfills was restricted to waste generated in Orange County. In August 1995, the Orange County Board of Supervisors amended the Codified ordinances of the County of Orange relating to sewage and solid waste disposal to allow the importation of waste from outside the County to assist with Bankruptcy recovery. Waste disposal agreements (WDAs) have

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TABLE V-1
ORANGE COUNTY LANDFILL CAPACITY DATA (Through June 30, 2004)

LANDFILL NAME	<u>Permitted Tonnage</u>		Permitted Airspace (MCY)	Remaining Airspace as of 6/30/04 (MCY)
	Daily Maximum	Daily Average		
Frank R. Bowerman	8,500	7,785	127.0	79.90
Olinda Alpha	8,000	7,000	123.1	43.57
Prima Deschecha	4,000	4,000	172.9	148.94
TOTALS	20,500	18,785	423	272.41

been negotiated for the importation of waste generated outside Orange County. The agreements stipulated that waste had to be imported in transfer vehicles to reduce traffic impacts. Approximately 816,000 tons of refuse per year is committed for delivery to Orange County landfills.

Memoranda of Understanding between the County and the cities of Brea, Irvine, and San Juan Capistrano were developed to provide host fees to offset environmental impacts to the cities due to importation.

Household Hazardous Waste Collection Program

IWMD also manages the Household Hazardous Waste (HHW) Collection Program. The program consists of regional HHW collection centers (HHWCC) strategically located throughout Orange County. This program keeps HHW out of

the landfills and provides a place for Orange County residents to safely and conveniently dispose of and/or recycle household hazardous waste products. Some of the more common HHW products accepted at the centers are used motor oil, latex paint, antifreeze, batteries, and pesticides.

GOALS AND POLICIES: Waste Management Goal

- *Maintain a competitive rate for rate disposal in Orange County,*
- Given the charge of providing for Orange County's waste disposal needs, IWMD implements operational and administrative strategies to manage the County's landfill system in a manner that provides for a competitive disposal rate for Orange County residents.

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- *Protect water, air and habitat in the management of the Orange County disposal system*

Committed to protecting the environment, IWMD constructs, operates and maintains environmental systems to protect water, air and habitat. These systems include: landfill gas monitoring, collection and reuse; ground water and leachate monitoring, extracting and treatment; and participation in, and compliance with, the Natural Community Conservation Plan to establish and preserve valuable habitat.

- *Financially support the County of Orange's bankruptcy recovery plan*

IWMD supports the County's bankruptcy recovery plan through revenue generated from the importation of waste from jurisdictions outside Orange County. IWMD has entered into long-term agreements with waste haulers obligating them to deliver a minimum amount of waste annually to County of Orange landfills. The importation waste disposal proceeds, less department operating and administrative expenses, are transferred to the County General Fund to pay the County's bankruptcy debt obligations.

Policies

1. LAND USE COMPATIBILITY

To plan solid waste facilities in a manner compatible with surrounding

land uses and to review planned land uses adjacent to landfills for their compatibility with landfill operations.

2. COUNTY SOLID WASTE MANAGEMENT PLAN

To support and implement the adopted Solid Waste Management Plan to achieve waste management objectives.

3. SOLID WASTE RECYCLING AND REUSE

To promote the utilization of waste recycling and reuse measures which extend the operating life of existing solid waste facilities.

IMPLEMENTATION PROGRAMS: Waste Management

The future of solid waste management in Orange County will involve the efficient use of existing landfills, ongoing implementation of recycling and waste reduction programs, and securing future disposal capacity. Although city and county recycling and waste reduction programs have extended the life of Orange County's landfill system, Orange County residents must be assured that they will have environmentally safe and cost-effective disposal for the new millennium.

1. COUNTYWIDE INTEGRATED WASTE MANAGEMENT PLAN (CIWMP)

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Action:

Continue to implement the CIWMP

Discussion:

All counties are required to develop and implement a CIWMP. The CIWMP includes a Siting Element (SE) and a Summary Plan (SP). The SE demonstrates that the County has at least 15 years of disposal capacity for waste that cannot be diverted from landfill and it also sets forth a process and criteria for siting new landfills. The SP lists the programs each jurisdiction will implement to meet AB 939 mandates and documents that the mandate will be met on a countywide basis. The County of Orange CIWMP was adopted by the Board of Supervisors and approved by the State in 1996. The adopted CIWMP is administered by IWMD.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agency: IWMD

Source of Funds: IWMD Enterprise Fund

2. COORDINATION OF LAND USE/SOLID WASTE PLANNING

Action:

Continue to designate future landfill sites and/or expansion of existing facilities as part of the overall land use planning process and protect existing facilities from adjacent incompatible land uses as required by state law.

Discussion:

The interface between existing and proposed landfills and surrounding land uses as is a key concern as Orange County becomes more urbanized.

Comprehensive land use planning is necessary to support the potential development of new sites and to avoid premature closing of an operating

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"The future of Orange County's water is conservation, water purification and reuse, water transfers, and groundwater storage."

Orange County
Water District

landfill. This program responds to local and state law requirements by continuing to integrate solid waste management into the land use planning process. The CIWMP process described above provides criteria and guidelines to ensure that local as well as state and federal requirements for siting solid waste facilities are met.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: IWMD

Source of Funds: IWMD Enterprise Fund

3. RESOURCE CONSERVATION PROGRAMS

Action:

Continue to expand resource recovery programs at the landfills; review the development of new technologies for resource conservation; and promote recycling or reuse of materials that would otherwise become waste.

Discussion:

Landfill gas is a byproduct of the decay of organic waste in the landfills. The County initiated partnerships with private sector companies to utilize the methane gas component in landfill gas for energy conservation, in the form of electricity or liquefied natural gas (LNG). In addition, the long-term planning process to ensure future disposal

capacity includes examination of a wide range of new conversion technologies including gasification (a thermo-chemical process) and other forms of carbon-based recycling to better manage organic wastes.

New or Existing: Existing

Implementation Schedule: Ongoing

Responsible Agencies: IWMD

Source of Funds: IWMD Enterprise Fund

WATER SYSTEM

Introduction

Orange County consumes approximately 160 billion gallons (500,000 acre feet) of water annually. Approximately 70 percent of this water is imported into Southern California via the facilities of the Metropolitan Water District of Southern California (MWD).

MWD supplies are delivered by two principle facilities: (1) the Colorado River Aqueduct; and (2) the California Aqueduct. The second major water supply source for Orange County is the groundwater basin which primarily underlies the northern half of the County. The groundwater supply is replenished by direct rainfall, rainfall within the Santa Ana River watershed and imported water purchased from MWD.

The highly complex water distribution system required to meet Orange County's

needs is managed by several independent agencies. MWD, the primary water importer, supplies water to six counties (Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura). The agency membership consists of 21 entities, including 14 cities, 12 metropolitan water districts, and one county water authority (San Diego).

For Orange County, imported MWD water is purchased and distributed by five separate agencies. Three of the five MWD member agencies are the cities of Anaheim, Fullerton, and Santa Ana. These cities were part of the original 13 cities from Los Angeles and Orange Counties that joined together to create MWD in 1928 in order to build the Colorado River Aqueduct.

In order to consolidate wholesale purchases of water from MWD, other Orange County cities joined together to form an organization through which MWD water could be purchased. Thus, the final two Orange County MWD member agencies were formed: the Coastal Municipal Water District (Coastal), formed in 1941, representing the cities of Costa Mesa, Newport Beach, Laguna Beach and the coastline from Newport Beach to San Clemente; and the Municipal Water District of Orange County (MWDOC), formed in 1951, representing almost all other portions (90 percent) of Orange County. In 1998, MWDOC and Coastal agreed to initiate a phased consolidation process to unify most of the County's wholesale water activities. Together these five MWD member agencies (MWDOC, Coastal, Anaheim, Fullerton and

Santa Ana) wholesale imported water to all Orange County cities, private companies and local independent and dependent water districts for storage and direct distribution to their residential and business customers.

Description of County Water System

Past analysis provided by water planners assumed that there was enough water in California to serve all the needs of the state far into the future. The only perceived problem was a shortage of water because of the geographical distribution of the state's water supplies.

Almost 50 percent of the State's water runoff occurs north of Sacramento, while 50 percent of the water needs occurs south of Sacramento, primarily in the San Francisco-Oakland and San Jose area, the San Joaquin Valley, and southern California.

California's geographical water supply imbalance is further complicated by the seasonal distribution of rainfall and its corresponding runoff. More precipitation and runoff occurs in the winter and spring, while the greater need occurs in the summer. Some years are very dry, while others are very wet which further complicates the water need and supply problems.

Because of California's precipitation and population distribution, it has been necessary, after developing local supplies, to build major water storage and distribution systems. These systems include:

**" 'W-A-T-E-R'
meant that
wonderful
cool
something....
flowing over
my hand."**

Helen Keller

CHAPTER V. PUBLIC SERVICES & FACILITIES ELEMENT

Southern California has reduced its need for imported water by more than 700,000 acre-feet each year.

- The Hetch-Hetchy Aqueduct, which supplies water to the City of San Francisco and portions of the south San Francisco peninsula and Santa Clara Valley;
- The Mokelumne Aqueduct, supplying water to the Oakland and east San Francisco area;
- The Federal Central Valley Project, which primarily supplies water to northern and central California agricultural areas;
- The Los Angeles Aqueducts (Owens - Mono), supply water to the City of Los Angeles;
- The Colorado River Aqueduct, supplying water to the southern California coastal plain; and
- The State Water Project, which supplements water supplies to northern, central, and southern California.

The population growth and resulting water demand in urban areas has also brought forward two additional concerns for the future: 1) impacts to areas of origin; and 2) the environment. The Sacramento-San Joaquin Delta is the transfer point for water entering the state water project. Endangered species issues and land management practices triggered formation of the Cal-Fed Study Process to "fix" the Delta. Stakeholder concerns expressed in the Cal-Fed Process have added the need for state assurances that areas of origin of state

waters do not suffer economic or environmental impacts.

Because of projected growth and the anticipated reductions in Colorado River entitlements, the County is dependent on improvements to local and regional delivery systems. (Note: the Water Resources section of the Resources Element provides additional information regarding long-term water supply and demand.) Improvements in the capacity of local facilities, including reservoirs and regional transmission lines, are also anticipated to meet Orange County's needs through the year 2050. The general relationship of these local facilities to the regional and statewide system is discussed below.

Figure V-3 depicts the major state and regional water facilities in California. The systems of particular significance to Orange County are described below:

REGIONAL AND STATEWIDE WATER SYSTEMS

Regional System

- Owens-Mono Aqueducts: The first system built to deliver water to the coastal plain from another area was constructed by the City of Los Angeles. This system, known as the first Los Angeles Aqueduct, was built in the early 1900s, and expanded to include a second aqueduct in the early 1970s.

These aqueducts import water to Los

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Angeles from the Owens Valley and the Mono Basin. The water imported through these aqueducts originates primarily from the snowpack on the eastern slopes of the Sierra Nevada Mountains. Environmental judgements have reduced the deliveries to Los Angeles from the system and forced additional purchases of MWD water.

State System

- Colorado River Aqueduct: The Colorado River Project (CRP) was the second major water delivery system built to serve the coastal plain. This system, owned and operated by MWD, was built during the 1930s, and began operation in 1941.

The project begins at Lake Havasu on the Colorado River, and ends at its terminal reservoir, Lake Mathews in Riverside County. From there, the water enters MWD's distribution system and is delivered throughout much of the coastal plain. MWD, at present, is entitled by contract with the federal government to divert 550,000 acre-feet (af) per year from the Colorado River and an additional 662,000 af per year in designated "surplus" water years.

- State Water Project: The State Water Project (SWP) was authorized by the Burns-Porter Act in 1959 and approved by the voters in 1960. This Act authorized the development and diversion of water from the Feather

River complex through a Sacramento-San Joaquin Delta facility into an aqueduct to be delivered south to various water agencies. Contracts were signed with 31 agencies to deliver a dependable annual supply of 4.23 million acre-feet (maf) in all but "critical dry years."

In critical years, the project will be capable of delivering 3.6 maf with agriculture taking a 50 percent shortage in such a year. This legislation authorized the initial storage, conveyance, pumping, and energy facilities for the project. The Delta Protection Act, also passed in 1959, provides protection to the Delta's unique environment.

The SWP stores water in Lake Oroville on the Feather River in northern California, about 100 miles north of Sacramento. Water is released from Lake Oroville to flow down the natural channels of the Feather and Sacramento Rivers to the Sacramento-San Joaquin Delta.

The Sacramento-San Joaquin Delta is the hub of California's water wheel. The Delta is formed by the convergence (or adjoining) of the Sacramento, San Joaquin, and other smaller rivers. The Delta is located about 60 miles northeast of San Francisco. About half of the water developed by the SWP

One acre-foot of water is about 326,000 gallons, and can be visualized as a football field one-foot deep in water.

Figure V-3



CALIFORNIA WATER SYSTEM FACILITIES



comes from releases from Lake Oroville and the other half comes from other Delta inflow.

The State Water Project export pumps are located in the southern Delta. The water for exportation travels primarily through Delta channels from north to south. The Delta Pumping Plant then lifts the water into the Governor Edmund G. Brown California Aqueduct for storage in San Luis Reservoir. The water is distributed after further pumping to the State Water Project contractors south of the Delta.

- **Central Valley Project:** The United States Bureau of Reclamation Central Valley Project (CVP) utilizes the Delta for transfer of Sacramento River flows regulated by upstream storage in Lake Shasta to Delta-Mendota, Contra Costa Canal, San Luis, and San Felipe divisions' contractors south of the Delta. The CVP has a maximum pumping

capacity from the Delta of 4,600 cubic feet per second (cfs). The SWP Delta pump facilities also deliver water to the CVP through the joint state-federal San Luis facilities.

Local System

Before water importation from other areas of the State became necessary, the people in the coastal plain of southern California nearly depleted all locally available water supplies. Only when local supplies could no longer economically meet local water demand did people turn to other source areas. Local water supplies come from three sources: groundwater, surface water captured in reservoirs, and reclaimed water. Today, these local supplies only provide enough water to serve about one-third of the current needs. The existing and planned groundwater facilities for Orange County are indicated Figure V-4.

The following discussion describes the

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An acre-foot provides the needs of two typical Southern California families in and around their homes for one year.

functions of the various independent special districts involved in the water distribution system:

- Municipal Water Districts: The main function of a municipal water district is to manage large basins and maintain a water delivery system. These districts are primarily wholesale water agencies, selling water to contracting independent and dependent special districts, cities, and other agencies.
- California Water Districts: These districts were initially created by landowners to serve areas that were predominantly agricultural. Their powers also include domestic water service and the collection and disposal of sewage. Being formed by landowners, their Board of Directors memberships vary from five to eleven directors. Voting was originally based on one vote for each specified amount of assessed valuation. However, since urbanization, most have converted to a popular vote system.
- County Water Districts: These districts were created primarily to provide domestic water service to urban and suburban areas. They are formed by the registered voters of the area. Their Boards of Directors memberships vary from five to seven directors who are elected by popular vote and voting is based on a one person/one vote system.
- Irrigation Districts: The basic purpose

of these districts is to furnish water for agricultural uses. They are empowered to supply domestic water to local residents. Their governing body is composed of three to five directors elected at large or by divisions within the district.

- Orange County Water District The responsibilities of this district include: management of the groundwater basin; sale of groundwater for domestic use; operation of a wastewater reclamation plant; and the restoration and maintenance of the groundwater supply. The ten member Board of Directors consists of seven elected by division and three appointed by the cities of Santa Ana, Fullerton, and Anaheim.

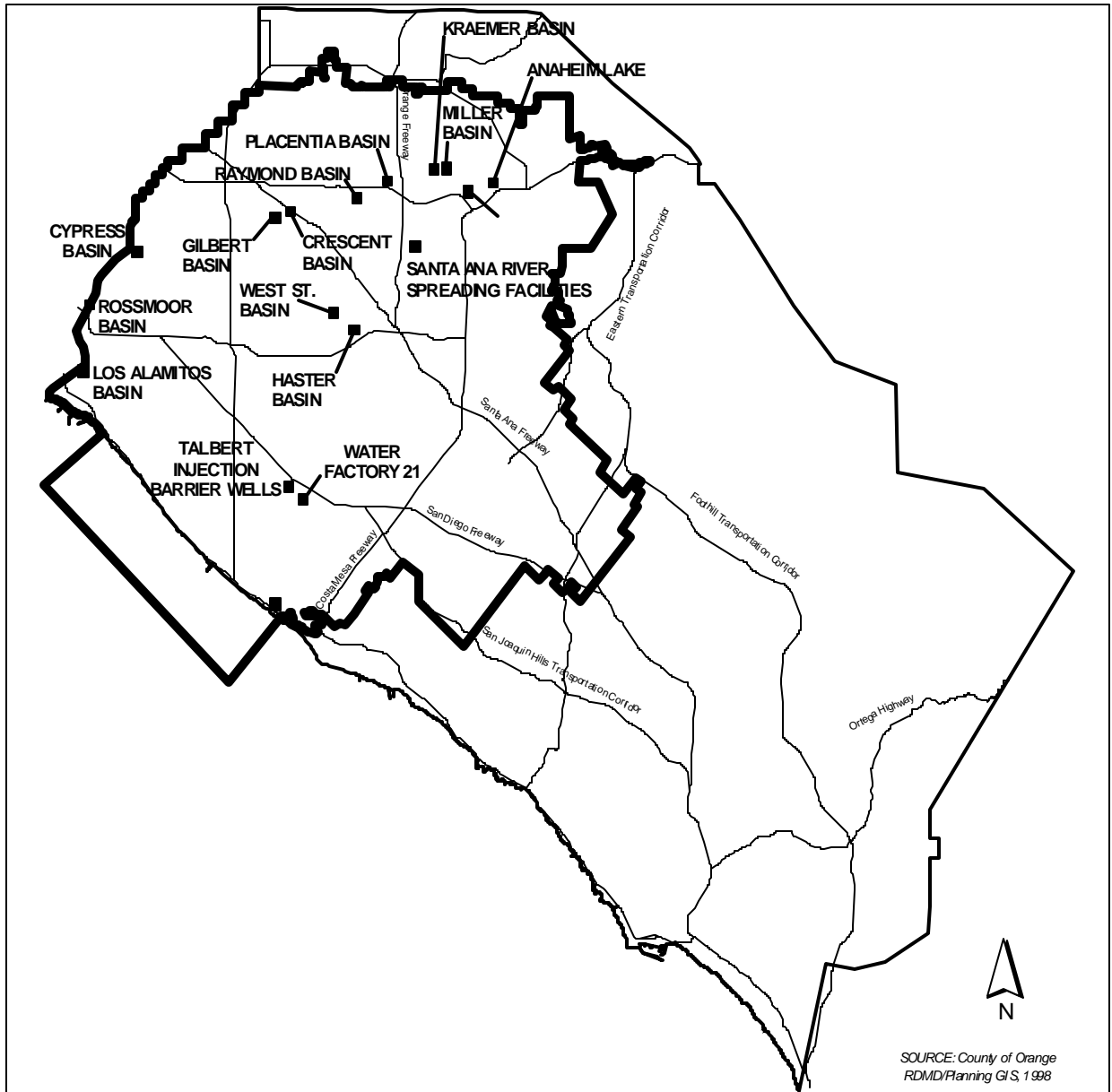
Future Prospects

A discussion of existing and projected water system needs is presented in the following two sections. These two sections are generalized presentations of information compiled from local water agencies. Specific facility needs and improvements are reviewed on an ongoing basis rather than identified in this text. Table V-2 illustrates the scope and nature of planned facilities for the State/regional and local systems.

State/Regional System

Major water conveyance and storage facilities are required for State Water System Project (SWP) in order to meet future

Figure V-4



ORANGE COUNTY GROUNDWATER FACILITIES

MWD is building the Eastside Reservoir Project near Hemet. It will double the Southland's, surface reservoir capacity with approximately 800,000 acre feet and will take up to four years to fill.

demands placed on that system. Key among these SWP facilities is a through Delta conveyance facility to transfer high quality water from the delta to the California Aqueduct. Combined with new off-stream storage facilities above and below the Delta, water would be available to Orange County regardless of seasonal environmental constraints.

Improvements to the CRP are focused on storage options due to the reduction of California's entitlement to Colorado River water. An associated facility program is the proposed improvements to the Imperial Valley Irrigation District's system (e.g., lining canals). These physical improvements can enhance utilization of California's existing CRP allocation.

Additional regional improvements required by existing and future County demands include the Santa Ana River Mainstem Project for the Santa Ana River watershed. Although primarily a flood control project, the physical improvements to Prado Dam included in the project increase the water storage opportunities for Orange County Water District. MWD's Eastside Reservoir in western Riverside County will provide regional storage benefits that also improve Orange County water reliability.

Local System

The majority of the necessary large-scale improvements within Orange County are projects to improve existing storage reservoirs or build additional storage

facilities in south Orange County. The local water conveyance system will be implemented in conjunction with development phasing to meet the delivery demands in Orange County.

A major new project for supplementing water supply is the Groundwater Replenishment System Project being planned by the OCWD and the Orange County Sanitation District (OCSD). The project is anticipated to be operational in 2003 and will add 100,000 af a year to the groundwater basin in 2010.

GOALS, OBJECTIVES AND POLICIES : *Water System*

Goal 1

Encourage the planning and development of a water conveyance and distribution system to meet the County's future demand.

• Objectives

- 1.1 To achieve desired water system service levels through the coordination of land use and water system planning.
- 1.2 To implement state, regional, and local facility plans for water delivery to Orange County.
- 1.3 To increase storage and delivery capacity for water supplies in Orange County.

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**TABLE V-2
PLANNED WATER SYSTEM IMPROVEMENTS**

State/Regional System	
<u>Project</u>	<u>Implementation</u>
1. State Water Project:	
Delta Transfer Facility	Long-term
Off-Stream/Reservoirs	Near-term and Long-term
2. Imperial Valley Improvements (CRP):	Near-term and Long-term
3. Santa Ana River Mainstem Project:	Near-term
Local System	
<u>Project</u>	<u>Implementation</u>
1. Water District Distribution Systems:	Ongoing
2. Additional South County Storage Projects:	Long-term
3. Improve Existing Reservoirs:	Near-term
4. Groundwater Replenishment System:	Near-term

The Eastside Reservoir will provide the Southland with a six month emergency supply of water.

1. SYSTEM CAPACITY AND PHASING

To ensure the adequacy of water system capacity and phasing, in consultation with the service providing agency(ies), in order to serve existing and future development as defined by the General Plan.

2. WATER DELIVERY SYSTEM

To support water facility planning and development efforts for Orange County water supplies conducted by local and regional water agencies.

3. INTERGOVERNMENTAL COORDINATION

To actively encourage opportunities for increased coordination between the County and the water agencies through cooperative water facility planning and implementation efforts.

IMPLEMENTATION PROGRAMS: Water System

Because the County must rely heavily on imported water supplies, the implementation programs within this section are directed towards efficient use and maintenance of existing local water facilities and support of the necessary physical improvements to the state, regional, and local water system necessary for meeting Orange County's existing and future demands.

In addition, the multitude of water purveyors involved in Orange County's water system

requires increased intergovernmental coordination and cooperation.

1. INTERGOVERNMENTAL COORDINATION

Action:

Continue and expand existing intergovernmental activities toward achieving County water system goals and objectives.

Discussion:

Increased coordination on the part of the County and local/ regional water agencies serves to ensure effective communication and cooperation on water system capacity issues. On July 15, 1983, the Board of Supervisors authorized regular liaison with the water agencies of Orange County towards achieving this end.

In addition to the County/Water Agency liaison program, ongoing coordination with the federal and state government on water resource planning and implementation programs is essential. This is particularly important at the state level, since physical improvements to water conveyance and storage facilities in northern and central California (e.g., Delta Transfer facilities) are critical to the County's water system. Such activities as legislative support and intergovernmental planning and management efforts can thus increase the dependability and adequacy of the

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County's physical delivery system.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: CEO and RDMD

Source of Funds: County General Fund

2. COUNTY WATER PLAN

Action:

Continue County Water Plan work effort and related activities.

Discussion:

Planning for Orange County's future water needs is part of a multiphase study. The objective is to ensure to the maximum extent possible an adequate, dependable water supply for all reasonable uses. Included within the scope of this study is an ongoing assessment of regional and local water

facility needs.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- Water Agencies
- CEO and RDMD

Source of Funds:

- County General Fund
- Water Agencies
- Federal Agencies

3. GROWTH MANAGEMENT PROGRAM - WATER SYSTEM

Action:

Continue existing activities to require District concurrence with development proposals.

Discussion:

Presently, the County requires will-serve letters from water purveyors prior to

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With hardware improvements, a family can save 70,000 gallons of water yearly, which translates to a savings of about \$150.00 per year on your water

approval or extension of approval of tentative tract maps. This provides assurance that the District is capable of coordinating delivery through construction of necessary facilities. However, these letters are usually conditional upon funding or implementation actions of the project proponent. Project implementation phasing is dependent upon the status of facility planning and ongoing negotiations between the project proponents and the service agency.

The County of Orange General Plan Land Use Element provides for the phasing of development consistent with the adequacy of public services and facilities (Policy 2: Phased Development). In the case of water delivery facilities, the absolute necessity of water service to development will ensure adequate incremental water capacity. However, the County should be apprised of the status of ongoing planning, agreements, and delivery phasing as it ultimately may determine the phasing of development and the need for other support services.

Where discrepancies are found between proposed development activity portrayed in Annual Monitoring Reports (AMRs) and service delivery planning documents, further information will be requested in subsequent AMRs or, if necessary, in development processing documentation.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: CEO and RDMD

Source of Funds: County General Fund

WASTEWATER SYSTEM

Introduction

Orange County is supported by many complex infrastructure systems, one of which is wastewater collection, treatment and disposal facilities. The County's past ability to expand treatment capacities in an incremental fashion, as well as to construct new facilities where needed, has facilitated its rapid growth.

Insufficiencies in wastewater treatment capacity could seriously affect the County's ability to accommodate forecasted growth levels while it is concurrently striving to attain water quality goals. In the future, a major roadblock to achieving this balance may well lie in the ability of local governments and wastewater management agencies to finance the construction of sewage treatment and collection facilities. With cutbacks in both the federal share and amount of funding for such projects, this ability to accommodate expected growth through traditional funding sources could be curtailed.

Current Conditions

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The collection, treatment, and disposal of wastewater in Orange County is undertaken by special districts and local governments. In order to understand the County's system, it is essential to recognize the principal service agencies and physical systems within the County, as well as the administrative/ regulatory environment in which they operate.

COUNTY WASTEWATER AGENCIES

The Orange County Sanitation Districts collect and treat wastewater for the northern and central areas of Orange County. There are seven districts which presently serve 23 cities in the county, plus unincorporated areas within the Districts' boundaries. The Districts' facilities collect the sewage from the local cities, sanitary districts, County water districts, and sewer maintenance districts. Wastewater is then transported

through the Districts' trunk sewers to the two major treatment facilities jointly owned by the Districts in Fountain Valley.

In the South County, there are two joint powers agencies which coordinate the provision of sanitation service, the Aliso Water Management Agency (AWMA) serving the Aliso Creek/Laguna Canyon Watershed, and the South East Regional Reclamation Authority (SERRA) serving the San Juan Creek Watershed and southerly to the County border. The local entities participating in these two agencies are listed on Table V-3.

State and federal regulatory agencies have issued grants to promote consolidation of the member agencies to the greatest extent possible, thus centralizing the treatment processes and eliminating the existing short, shallow ocean outfalls. Many advantages result from modern regionalized facilities

TABLE V-3.
JOINT-POWERS WASTEWATER AGENCIES IN ORANGE COUNTY

A. AWMA Members:	B. SERRA Members:
1. City of Laguna Beach	1. City of San Juan Capistrano
2. El Toro Water District	2. Moulton-Niguel Water District
3. Emerald Bay Service District	3. Santa Margarita Water District
4. Los Alisos Water District	4. City of San Clemente
5. Moulton-Niguel Water District	5. South Coast Water District
6. South Coast Water District	

NOTE: This table is for informational purposes only and is not a part of this Element.

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- 1) Less land area is encumbered with the elimination of multiple treatment plant sites;
- 2) More effective treatment equipment results in less pollution emissions; and
- 3) A longer, deeper ocean outfall enhances the water quality of the near shore.

Member agencies also realize cost savings due to economies of scale which are passed on to the user.

SERRA is comprised of member agencies that maintain local wastewater collection systems. As the population of the South County grew, so the sewage collection system grew, and agencies began sharing facilities, and making interconnections to improve efficiency. A final link in the early consolidation process occurred in 1970 when San Juan Capistrano agreed to accept wastewater from the Moulton Niguel and Santa Margarita Water Districts for treatment

in San Juan Capistrano's wastewater treatment plant.

With the various local systems interconnected, formation of a cooperative regional agency was logical, and SERRA was formed in 1970 as a joint powers agency. SERRA now owns and operates a large regional treatment facility in Dana Point and a single ocean outfall which serves all member agencies. SERRA is also contract operator for a jointly owned MNWD/SMWD Plant. SMWD and the City of San Clemente operate additional plants that feed into the system.

AWMA is also comprised of member agencies that maintain their own local wastewater collection systems. AWMA was formed in 1972 along similar lines as SERRA. Both agencies are currently administered by a joint, administrative staff. AWMA currently owns and operates two regional treatment plants in Laguna Niguel along with associated sludge and effluent transmission

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mains. AWMA also owns and operates a single ocean outfall for the benefit of all of its members. LAWD and ETWD operate additional plants which contribute effluent and/or solids to the system.

In 1991, area wastewater agencies formed a new joint powers agency to coordinate regional reclaimed water planning and permitting. The South Orange County Reclamation Authority (SOCRA) serves the recycled water needs for its member agencies by assisting in master planning for regional reclaimed water planning and permitting as well as regional recycled water facilities and interconnections between agencies. It also holds the master reclaimed water permits from the State Water Resources Control Boards (Region 8 and Region 9). The individual Member Agencies operate and maintain their own recycled water production and distribution facilities.

LOCAL SEWER SERVICE

Sewer hook-up, collection, and maintenance of smaller sewer lines in north and central Orange County are provided by sanitary districts, cities, and sewer maintenance districts. South Orange County receives a similar service from Irvine Ranch Water District, or the respective member agencies of AWMA or SERRA.

Collection is performed separately from treatment and disposal because smaller entities such as cities and sanitary or water districts are better able to provide the individual sewer permit and sewer hookup

functions. Treatment and disposal is best provided on a larger scale to eliminate the need for separate costly treatment and disposal facilities.

Cities, sanitary districts and water districts have the statutory authority to provide sewer service. The cities' governing bodies are their city councils; the sanitary and water districts' governing bodies are independent boards of directors. Authority for sewer services in unincorporated areas not served by sanitary or water districts rests with the Board of Supervisors.

The funding for sewer services is provided by property taxes, augmentation funds, user fees, or investment income from reserves.

Future Prospects

Recent trends in wastewater management include:

- 1) Upgrading the region's treatment levels to secondary, and in some cases tertiary, treatment to meet federal and state discharge effluent requirements;
- 2) Prohibition on the ocean disposal of sewage sludge;
- 3) Increased emphasis in the urban coastal plain on treating wastewater nearer to its source through the development of upstream reclamation plants, and on reuse of reclaimed water for groundwater replenishment, industrial use, and landscape irrigation; and

The Orange County Sanitation District is the third largest wastewater treatment facility west of the Mississippi River.



- 4) Treatment plant capacity expansions to serve additional population growth.

Most recently, there have been major reductions in federal grant funds available for assisting local governments in the upgrading and expansion of sewage treatment facilities. These reductions could jeopardize future upgrading or expansion of facilities unless increased local funding can be generated in the form of bonds, special assessment district taxes, or other funding mechanisms.

Most wastewater management agencies have long-range plans which address needed plant expansion/upgrading, based on anticipated population growth within their service areas.

However, with reductions in federal and state construction grants programs, and uncertainties surrounding local financing mechanisms, the future funding of some planned expansions remains uncertain.

In regard to countywide wastewater capacity, the long-range implications of system demands and capacity issues have been the subject of several County studies. In 1966, the County completed a comprehensive wastewater master plan which addressed the countywide needs through the year 2000. In addition, the 1980-81 County Grand Jury recommended, and the Board of Supervisors concurred with, the concept of a County Water Plan for both water and wastewater systems. In 1999, the OCS&D completed a comprehensive planning effort to outline future projects and priorities for meeting anticipated demand.

To date, the County Water Plan effort has focused on water supply issues. However, in response to the Grand Jury recommendations and the outdated information in the 1966 wastewater study, a County Wastewater Study is included as an implementation program. The objective of this study is to synthesize and update existing wastewater plans/studies in order to provide a useful resource documentation on

countywide wastewater issues.

GOALS, OBJECTIVES AND POLICIES: *Wastewater System*

In response to the above issues, this component describes a goal and policies which consider:

- 1) Countywide wastewater needs;
- 2) Intergovernmental service arrangements; and
- 3) Facility/development phasing objectives.

The implementation programs serve to bridge the wastewater system goals to County actions.

Goal 1

Support the planning and development of a wastewater system to meet both the County's demand and attain water quality goals.

• *Objectives*

- 1.1 To maintain wastewater system service levels through the coordination of land use and wastewater system planning.
- 1.2 To implement wastewater agency facility and water quality plans for Orange County.

Policies

1. *WATER QUALITY*

To protect quality in both delivery systems and groundwater basins through effective wastewater system management.

2. *INTERGOVERNMENTAL COORDINATION*

To actively encourage opportunities for increased coordination between the County and wastewater agencies through cooperative wastewater studies, planning, and facility implementation efforts.

3. *SYSTEM CAPACITY AND PHASING*

To ensure the adequacy of wastewater system capacity and phasing in consultation with the service providing agency(ies) in order to serve existing and future development as defined by the General Plan.

**Orange County
Sanitation
District
generates a
daily average
of 8,600 kw of
energy from
burning
methane gas,
a by-product of
the
wastewater
treatment
process.**

IMPLEMENTATION PROGRAMS: *Wastewater System*

The Wastewater System Component provides programs for wastewater treatment and collection activities in order to meet both existing and projected needs. These programs provide a framework for implementing wastewater system policies and recognizing ongoing activities.

1. *INTERGOVERNMENTAL COORDINATION*

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Action:

Continue and expand existing intergovernmental activities toward achieving County wastewater system goals and objectives.

Discussion:

Increased coordination on the part of the County and wastewater agencies serves to ensure effective communication and cooperation on wastewater issues.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: CEO and RDMD

Source of Funds: County General Fund

2. COUNTY WASTEWATER STUDY

Action:

Develop a County Wastewater Study in cooperation with local wastewater agencies.

Discussion:

The authorization for the County Water Plan work effort included a wastewater component. While water needs have

taken precedence to date, wastewater issues are also recognized as increasingly important. The intent of this study would be to ensure, to the extent possible, adequate and dependable wastewater capacities for planned land uses. Included within the scope of this study would be the collection and review of Wastewater Agency planning documents, and an assessment of regional and local wastewater facility needs and capabilities.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- CEO and RDMD
- Wastewater Agencies

Source of Funds: County General Fund



TRANSPORTATION SYSTEM

Introduction

Orange County has an integrated transportation system that consists of a blend of transportation modes intended to satisfy the needs of a population that has a lifestyle typified by a high degree of mobility. The demand for movement of people, goods, and services is met by private and public means with the service emphasis on maximum efficiency, convenience, economy, safety, and comfort.

Transportation facilities which respond to the needs of Orange County citizens include state freeways and highways, local arterial highways, bikeways, transit, rail (freight and commuter), and aviation (military, commercial, and general aviation).

The County of Orange is not directly responsible for the planning and

implementation of all of the various facilities mentioned above but is affected by and cooperates with various federal, state, regional, local and countywide agencies including: Federal Highway Administration State of California Department of Transportation (CalTrans), Southern California Association of Governments, South Coast Air Quality Management Districts, Orange County Transportation Authority, and various municipalities. The County of Orange routinely interacts with agencies that develop freeways and provide transit service in order to assist and support them in their planning and implementation efforts.

Current Conditions

The majority of travel trips in Orange County are made by automobile, using the extensive network of freeways and arterial highways.

Transit service is also an important mode of transportation in the more urban areas of the

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County. Transit provides mobility to many individuals in the County who depend on it for traveling to work and school, and for other important travel needs. A small fraction of the trips are made utilizing other modes of transportation such as air, inter-city rail, bicycling and walking.

The current transportation conditions are directly related to a combination of economic events and social changes that have occurred over the last four decades. Orange County has grown from a collection of small cities with an agrarian economic base to an area with various centers of economic activity and a large and affluent population. The rapid growth in employment and population has increased the number of trips made on the freeway and arterial highway systems. This intense travel demand has impacted levels of service on significant portions of the system, causing severe congestion and low travel speeds during peak hours.

Freeway and Transportation Corridor

System

The development of the freeway and transportation corridor system in Orange County has provided superior mobility and convenience to the majority of the County's residents. This system has supported the dominance of the automobile as a mode of travel within the region for the present and the foreseeable future. It also serves as the guideway for the County's mass transit system (i.e., bus) and links the rail and air facilities within the county. It is critical that this system be able to serve both its primary mission of automobile travel and to support the other transportation facility systems.

From 1994-1999 Orange County has experienced a significant growth in the construction of freeways and transportation corridors. Some of the significant facilities completed include SR 73, SR 241, and SR 261. Other major improvements were also completed on I-5, SR 91 and SR 57. Ongoing improvements are occurring on SR 22, SR 57, SR 55, and I-5.

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Arterial Highways

The arterial highway system is intended to support and serve existing and adopted land uses within both incorporated and unincorporated areas of the County. It is designed to be part of a balanced transportation system. The arterial system provides for both the through movement of traffic and as a collector for travel between freeways and other arterial highways.

Smart streets, major and primary arterial highways are intended to handle the bulk of intra-regional traffic. They complement both the freeway system and the local street network. Secondary arterials and collectors serve as facilities funneling traffic from local streets to the primary, and Smart Streets arterial system.

As congestion continues to increase on the freeway system, more drivers utilize the arterial system, particularly those parallel to freeways, or those arterials serving the same trip destination as the freeways. Consequently, some parallel arterials, particularly the north/south ones, are becoming increasingly congested. This situation is of special concern on those arterials which provide access to the freeway system.

Portions of the County's highway system have neither been improved to their ultimate classifications, nor have been constructed. Reasons for this situation include:

- 1) Surrounding areas remain undeveloped;

- 2) Public funding is unavailable; and
- 3) Need for the road has not yet been established.

Such situations have diminished the efficiency and effectiveness of the system because the burden of servicing additional travel demand is placed on other links of the network. Accordingly, this results in increased travel times and distances.

Transit Service

Transit service in Orange County is provided by a number of public transit agencies and private carriers. Regional service is provided by the Southern California Rapid Transit District (which links Orange and Los Angeles Counties) and by AMTRAK. In addition, regional bus service is provided by Greyhound serving San Diego, Orange, and Los Angeles Counties. Orange County Transportation Authority (OCTA) provides public transit service within Orange County and to adjacent sections of Los Angeles and Riverside Counties. The vast majority of all transit trips in Orange County are carried on OCTA buses. Additional local service is provided by the Laguna Beach Municipal Transit Lines.

OCTA provides a wide variety of public transportation services tailored to the needs of county residents, including local fixed route, freeway express, and ridesharing. The service structure includes over 53 routes covering about 2,000 miles of streets, bringing regularly scheduled buses within one-half mile of 95 percent of the residents in

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“The airport runway is the most important Main Street in any town.”

Norm Crabtree

the County. In addition, OCTA’s door-to-door services are available throughout the County. OCTA programs encourage greater efficiencies in travel in all aspects, with carpool matching and promotional programs, involvement in commuter rail programs, and other traffic management efforts.

OCTA serves the mobility needs of the resident population for which the automobile is not available. The District's clientele includes the elderly, the handicapped, the poor, the young, and other residents for which automobile travel is not available. The OCTA is a major transportation provider for the workforce. Over 40 percent (15 million) of the annual ridership uses transit to work.

The County does not have direct jurisdiction over the Orange County Transportation Authority. The County does, however, recognize that its decisions relating to the planning and development of land uses and the arterial highway system significantly affect the efficiency of the transit system. The County's objective in the area of transit service is to encourage land use development in a manner that will facilitate transit operation and alleviate highway congestion, energy consumption, and air quality problems.

Air Travel - John Wayne Airport

John Wayne Airport (JWA) is the only commercial service airport in Orange County.

JWA is served by six commercial air carriers and three commuter airlines. JWA also serves as the home base for more than 970

personal and business ("general aviation") aircraft.

John Wayne Airport is approximately 504 acres in size. This consists of 444 acres of primary airport area (that property lying between the Corona del Mar and San Diego Freeways); 33 acres of clear zone lying south of the Corona del Mar Freeway; and 11 acres lying north of the San Diego Freeway.

A majority of the area surrounding the airport is within the cities of Newport Beach, Costa Mesa, Santa Ana, Tustin, and Irvine. The remainder consists of the unincorporated community of Santa Ana Heights that is approximately 300 acres within the County of Orange.

John Wayne Airport has two parallel runways: one is 5,700 feet long, and a shorter runway serving general aviation is 2,900 feet long. These runways are oriented almost north/south. The prevailing winds in the area are from the ocean. Consequently, almost 98 percent of the landings and takeoffs at JWA are conducted in a southerly direction (into the winds).

Unfortunately, many residences lie under or near the departure flight paths.

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In 1960, there were 12,441 passengers enplaned at JWA. In 1970, the total exceeded 871,350. The demand for air service continued to increase, and by the late 1970s, it exceeded 2.5 million. It has remained around this number since that time--not because the demand has leveled off, but because the number of commercial air carrier flights has been frozen at 41. It is estimated that the current level of demand for service exceeds 7.0 million. Those passengers not served at John Wayne obtained air service from airports outside the County. Estimates for the year 2000 indicate that almost 20 million total passengers will be generated by the population of the County.

Also, within Orange County, there are more than 2,600 aircraft registered to personal and corporate owners; yet there is only one other airport for these type of aircraft within the County--Fullerton Municipal which has 590 aircraft based on its premises. No other

general aviation aircraft are located at airports inside the County.

The pressure for increased capacity at John Wayne Airport to better serve the air transportation needs of the County's citizens has been manifest, but it has been countered by pressures to relieve or curtail the environmental consequences of the airport's operation. Aircraft noise, aircraft related air pollution, traffic congestion, parking congestion, and incompatible adjacent land uses have long been issues of concern.

Future Prospects

SYSTEM SERVICE LEVELS

Surface transportation problems in Orange County stem primarily from the inadequate capacity of the freeway system to serve peak hour travel demands. Problems associated with excessive travel demand and the

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resultant congestion on Orange County's freeways and arterial highways include decreased average speeds, increased commuting time, increased emissions of air pollutants, and increased per mile fuel consumption.

In order to evaluate the freeway and arterial highways needed to serve current and future traffic, certain criteria are used regarding roadway capacities. The concept of capacity and the relationship between capacity and travel demand is expressed by means of levels of service. These recognize that while there is an absolute limit to the amount of traffic that can travel through a given corridor (the "capacity") at any given time, conditions rapidly deteriorate as traffic approaches that level. Congested conditions are experienced at 90 percent or more of the appropriate capacity figure. There is general instability in the traffic flow and small disruptions can cause considerable fluctuations in speeds and delay.

Levels of Service are, in increasing order of congestion, defined as "A" through "F". Beyond Level of Service "E", capacity has been exceeded, and arriving traffic will exceed the ability of a given freeway or street to process it efficiently. A description of the meaning of the six Levels of Service (LOS) follows:

Level of Service Description

- A No physical restriction on operating

speed.

- B Stable flow with few restrictions on operating speed.
- C Stable flow, higher volume, and more restrictions on speed and lane changing.
- D Approaching unstable flow, little freedom to maneuver.
- E Unstable flow, lower operating speeds than LOS D, some momentary stoppages.
- F Force flow operations at low speeds, where the highway acts as a storage area and there are many stoppages.

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The objective of the County when planning the arterial system is to use LOS "C" for link capacities. (A link is the portion of the roadway between two intersections.) The level of service at intersections will invariably be lower since intersection capacities usually control overall roadway capacities. It is, however, a County objective to maintain LOS "D" through intersections.

The year 2000 and beyond will see a significant increase in highway capacity in Orange County. Three new major transportation facilities have been constructed and open to traffic. These are the San Joaquin Hills Transportation Corridor (SR-73), the Foothill Transportation Corridor (SR-241), and the Eastern Transportation Corridor (SR-261, SR-241, and SR-133).

In addition, significant highway improvements have been completed at two

critical locations: 1) the I-405/I-5 confluence "El Toro Y", and 2) at the I-5, SR-22 and SR-57 confluence; the so-called "Orange Crush". Capacity enhancement has also occurred on the I-5 and SR-55. The SR-91 from the SR-55 to the Riverside County line also includes a toll facility, and north of SR-91 on the SR-55 carpool lanes have been added. In addition, all freeways in Orange County will include carpool lanes.

Collectively, the significant increase in highway capacity has improved traffic conditions Countywide, and improved traffic conditions are expected on Orange County freeways beginning in the year 2000 and beyond.

FUTURE TRANSIT PROGRAMS

OCTA's role in providing mobility to County residents for whom the automobile is not available will continue to grow in the future as the County's population grows and land-use and economic patterns shift.

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The OCTA currently operates from revenues obtained from local, state, and federal grant sources as well as revenues collected from passenger fares. The chief issue concerning public transportation needs in the future likely will be financial--how to maintain service levels and affordable fares for the "transit dependent" community in an era of diminishing financial resources for transit.

The OCTA anticipates the emergence of commuting as a second major role for transit in the next two decades. Studies of traffic conditions on County freeways demonstrate that congestion and slow speeds will affect growing numbers of commuters during peak periods every day in future. The OCTA has identified a future need for major transit investments which can offer commuters alternative, faster ways to travel in more efficient transit and carpool vehicles than can be offered on the freeways in general

purpose traffic lanes.

The OCTA has drawn upon its responsibilities for transit and ridesharing, and has assisted in the development of exclusive high-occupancy vehicle lanes to express transit riders and carpools around regularly congested freeway bottlenecks to work. Working with CalTrans and the County of Orange, these lanes have generally been retro-fitted within existing freeway rights-of-way.

Ultimately, the OCTA foresees the possible need for higher capacity rail transit systems, involving the conversion of busways, triggered by heavy usage of freeway high occupancy vehicle (HOV) lanes and intensification of development within the County's employment centers.

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AIR TRANSPORTATION

The regional airport system in Southern California is currently being examined by many communities and agencies. The Southern California area has the largest regional airport system in the world and is served by more commercial airports than any other metropolitan area in the United States. Six commercial airports currently serve the region's aviation demand: Los Angeles International (LAX), Ontario International (ONT), John Wayne/Orange County (SNA), Burbank/Glendale/Pasadena (BUR), Long Beach (LGB), and Palm Springs (PSP).

The greatest population growth in the five county Southern California region during the next two decades is projected to occur in the Inland Empire Counties of Riverside and San Bernardino and in the northern Los Angeles County. The Inland Empire also has a wealth of existing and potential commercial aviation facilities. In addition to the newly improved and expanded Ontario International Airport, airports are proposed for the former March Air Force Base in Riverside County (March GlobalPort), the former Norton Air Force Base in San Bernardino (San Bernardino International Airport), and the former George Air Force Base in Victorville (Southern California Logistics Airport). Planning for another major regional commercial airport is underway for the existing Palmdale Regional Airport by the Los Angeles World Airports (LAWA).

These proposed airports and Ontario are well located to serve future Southern California aviation needs. The Ontario Airport already serves a great number of passengers from Orange County due to its location and proximity to Orange County communities. The recently expanded Ontario Airport offers improved air transportation service to its market area and is expected to address a much larger portion of the regional aviation demand in the future. In addition to passengers, Inland Empire airports are well positioned to absorb the regional air cargo demand.

Because of the regional nature of air transportation services, the County of Orange supports satisfying regional demands at these other airports, as well as by continuing operations at John Wayne Airport. The County shall support and encourage regional planning agencies to focus their efforts on establishing new and improving existing transportation links between population centers in the Southern California region and these other airports.

It is sound public policy, considering regional concerns and regional public welfare, to direct Southern California's future growth in air traffic passenger and cargo services for its existing and anticipated population to areas where the greatest growth is expected to occur, and where neighboring communities are generally supportive of new or expanded airport facilities.

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Implementation Issues

The County Board of Supervisors in considering potential funding sources has directed that the CEO develop a Comprehensive Public Facilities Financing Program. The Program is intended to integrate intermediate and long-term funding requirements and revenue sources for the construction, operation, and maintenance of County public facilities into a comprehensive program which will enable the County to meet its future needs in the most cost-effective and resource-conserving manner.

Funding options under consideration for transportation facilities, in addition to Road Fund Revenue, include developer fees, Assessment District financing, Mello-Roos Community Facilities District financing, other County funds, and increased motor vehicle fuel sales tax and private resources.

Local Funding Sources

Major Thoroughfare and Bridge Fee Programs

A number of major thoroughfare and bridge fee programs have been approved by the Board of Supervisors for the unincorporated areas of Orange County. Road fee programs are developed based on the assumption that those who will benefit from the road should pay for their fair share of the costs of the road construction. An area of benefit (AOB)

is a specified area wherein it has been determined that the real property located therein will benefit from the construction of a major thoroughfare or bridge project.

Authority for establishing major thoroughfare and bridge fees may be found in the Government Code (Subdivision Map Act) Section 66484 and Orange County Codified Ordinances Section 7-9-316, as follows:

"A subdivider, as a condition of approval of a final or parcel map, or a building permit applicant, as a condition of issuance of a building permit, shall pay a fee as hereinafter established to defray the costs of constructing bridges over waterways, railways, freeways and canyons, or constructing major thoroughfares."

**"There's
nothing like
an airport for
bringing you
down to
earth."**

Richard Gordon

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**TABLE V-4
TRANSPORTATION SYSTEM IMPROVEMENTS**

<u>Recently Completed Facilities</u>	
San Joaquin Hills Corridor (SR-71)	4 - 6 lane facility
Foothill Transportation Corridor (SR-241)	4 - 6 lane facility
Eastern Transportation Corridor (SR-261)	4 - 6 lane facility
<u>Improvements to Existing Facilities</u>	
San Diego Freeway (I-405)	Widen from 8 lanes to 10 lanes (limits from San Gabriel (I-605) to Santa Ana I-5 Freeways)
Santa Ana Freeway (I-5)	Widen from 6 lanes to 8 lanes (limits from San Gabriel (I-605) to San Diego (I-405) Freeways)
Newport Freeway (SR-55)	Widen from 6 lanes to 8 lanes (limits from Riverside (SR-91) to San Diego (I-405) Freeways)

The term 'major thoroughfare' means those roads designated as transportation corridors, major, primary, secondary, or commuter highways on the County's Circulation Plan found in the Transportation Element of the General Plan.

Benefit Assessments

Benefit assessments are a funding mechanism whereby costs associated with an improvement, which benefits and increases the value of properties within the

designated assessment areas are imposed as liens against the benefited property. Authorization for these assessments is contained in a variety of statutes and generally permits the maintenance of improvements as well as their construction.

The Mello-Roos Community Facilities Act provides an alternative funding method to finance the construction and/or rehabilitation of infrastructure and facilities by the imposition of a "special advancement and/or contribution of funds by the local agency

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and issuance of bonds secured by the special tax."

Mello-Roos is adaptable to project phasing and can be used as an alternative to, or in combination with, other funding methods.

Other

Additional sources of revenue can be generated through direct user fees (e.g., increased sales tax on motor fuel, increased transit fares).

Phasing

One of the first objectives of the PSF Element is to provide a framework which identifies and provides expanded coordination and planning of public services and facilities. The goal is to achieve a plan which will insure the proper phasing of public facilities. Phasing is particularly important in the area of transportation because of the substantial capital investment costs involved in the construction, operation, and maintenance of transportation facilities. The emphasis of phasing efforts, however, should be on providing facilities to meet demand, even though funding will continue to be a constraint on the ability to do so.

Transportation system management efforts includes phasing as a tool especially in the areas of traffic signal coordination, road widening, and re-striping. On a regional level, the linking of transportation facilities with new development projects is an example of the phasing of transportation

facilities to the needs of County residents.

GOALS, OBJECTIVES AND POLICIES: *Transportation System*

This component provides an integrated strategy for implementing the necessary transportation system improvements in the County and identifies programs to reduce the demands on the transportation system until improvements can be made.

Much cooperation among the County, public agencies, and private firms is required to ensure that all of the pieces of the County's transportation system fit together and function efficiently. Consequently, policies and programs for increased intergovernmental and public/private cooperation are also included in this component.

Goals and Objectives

Goal 1

Develop an integrated transportation system consisting of a blend of transportation modes capable of meeting the need to move people and goods by private and public means with maximum efficiency, convenience, economy, safety and comfort; and develop a system that is consistent with other goals and values of the county and the region.

- **Objectives**

- 1.1 To achieve a safe, balanced and coordinated transportation system which allows for efficient, comfortable, and convenient travel through and within the County and the region by a combination of transportation modes.
- 1.2 To maintain Level of Service "C" on links and "D" at arterial highway intersections throughout the unincorporated areas of the County.

Goal 2

Encourage the funding and development of a transportation system to meet the county's future travel demand.

- **Objective**

- 2.1 To achieve target transportation system service levels through the land development process, public and private funding programs and transportation system management.

Policies

1. PHASING AND FINANCING

To implement the arterial highway system in a manner that supports the implementation of the overall land use development policies and the transportation needs of County residents and is consistent with the funding capabilities of the County and its land

use policies.

2. SYSTEM PROGRAMMING AND FUNDING

To make maximum use of available funding sources, including federal, state and local as well as support increases in such sources and require private participation in assessment/fee and other programs established by the Board of Supervisors in order to implement necessary facilities.

3. TRANSPORTATION SYSTEM MANAGEMENT

To develop, implement, and support transportation system management techniques and programs, and other capital improvements to the arterial highway system which would provide additional traffic capacity, efficiency and safety, promote maximum utilization of the existing system and reduce peak period traffic congestion.

4. LAND USE COORDINATION

To provide an arterial highway system which is consistent and coordinated with the existing and adopted land use policies of the County.



IMPLEMENTATION

PROGRAMS: *Transportation System*

The achievement of transportation system goals will be extremely difficult as costs continue to rise and revenues remain limited. The implementation programs discussed below focus on the achievement of goals through increased coordination and facility management and phasing efforts.

1. INTERGOVERNMENTAL COORDINATION

Action:

Continue and expand intergovernmental efforts towards achieving transportation system goals.

Discussion:

The County currently cooperates with various levels of government including the federal, state, regional and countywide agencies mentioned earlier

in the chapter. In addition, the County interacts with OCTA and local agencies in order to assure consistency between County unincorporated and city roads and highways.

Continued and expanded cooperation will be essential for a coordinated effort in achieving transportation goals. Particularly the coordination of funding, needs assessment, development phasing, and facilities management opportunities. Interaction will be necessary to discuss issues such as standard levels of service, fee programs, and standard levels of maintenance.

In addition, future growth will make intra-county relations necessary as population and employment growth within Orange County continues and population and housing in surrounding counties increases.

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Existing or New Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- RDMD
- Affected cities
- Orange County Transportation Authority (OCTA)
- TCA
- CalTrans

Source of Funds:

- Orange County Road Fund
- Various funding sources
- Measure M funds

2. LAND USE DEVELOPMENT REVIEW

Action:

Continue to review all land use proposals prior to their consideration by approving authority in order to evaluate the impact of the project on the arterial highway system and to assure that adequate transportation facilities will be available or programmed for construction with determined funding sources.

Discussion:

The Land Use Element (LUE) of the General Plan sets forth phased development implementation policy to ensure that development coincides with the adequacy of public services and facilities. The Growth Management Program implements the phased development and land use/ transportation integration policies of the

LUE through a requirement that developers of major projects submit annual reports projecting deficiencies in infrastructure and stating mitigation measures.

All major development proposals will be reviewed on the basis of the infrastructure analysis contained in their Annual Monitoring Reports. Projects which would create infrastructure imbalances or deteriorate service capabilities will be recommended for modification or deferral until further information is presented to indicate that imbalances have or will be corrected.

Existing or New Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: RDMD

Source of Funds: County General Fund (Developer Processing Fees)

3. FINANCING AND PHASING PROGRAMS

Action:

Continue to maximize use of available federal, state, local and private funding sources. Support efforts to increase existing funding sources (e.g., fuel tax) to reasonable levels and continue to formulate new funding mechanisms to implement necessary transportation facilities.

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Discussion:

The County of Orange is responsible for the construction and maintenance of all public streets and highways in the unincorporated area except for designated state routes. The County's Road Program provides the funding mechanism through which public streets and highways can be planned, designed, constructed, and maintained; it provides for right-of-way acquisition, major bridge design and construction.

The primary sources supporting the Road Fund include: Measure 'M', highway users taxes, vehicle code fines, interest on deposited funds, participation by other agencies and private interests, federal and state grants, planning and engineering services, and other revenue including Road Fee Program revenues. Revenues from assessment and community facility districts also provide a revenue source.

Presently, neither the state highway account (even under better than fair share distribution since the creation of a separate Orange County CalTrans District) nor the Orange County Road Fund have sufficient resources to build all planned freeways and local arterial highways. Additional resources will be necessary in order to phase transportation facility improvements consistent with planned and projected development. The County has initiated the development of several fee

programs for specific roads as one alternative to help narrow the gap between projected costs and revenues.

Road Fee programs are developed based on the assumption that those who will benefit from the road should pay their fair share of the costs of the road construction. Therefore, areas of benefit (AOB) are designated for each program. Costs are allocated to different parts of the AOB based on traffic generated or attracted by various land uses. In this manner, as equitable a distribution of costs as possible is accomplished. In addition, development and transportation facility phasing can be balanced.

Existing or New Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- RDMD
- Affected cities
- OCTA
- CalTrans
- TCA

Source of Funds: Various funding sources

4. TRANSPORTATION SYSTEM MANAGEMENT

Action:

Expand transportation system management efforts in the County.

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Discussion:

The County's Transportation System Management (TSM) efforts are appropriately concentrated on making the best use of the existing transportation system completing new facilities, and upgrading sub-standard facilities.

The County has spent a significant part of its TSM effort on traffic signal coordination. The County has a master signal controller which can monitor and modify timing on most County-owned signals to improve the operation of the roadways. Coordinated signals save energy, reduce pollution and minimize delay to drivers.

Coordination effectively increases roadway capacity by as much as 30 percent. In Orange County, the improvement is 5 to 10 percent. The County also engages in arterial highway re-stripping where this can help add capacity. Re-stripping includes creating

new lanes and improving intersection channelization.

In general, the focus of the TSM program in the County includes: inexpensive means of improving the system's person-carrying capacity through restriping or channelizing, improving signal coordination, and encouraging the use of high occupancy vehicles (carpooling, mass transit, etc.).

Existing or New Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- RDMD
- OCTA
- County Airport Division
- CalTrans
- Affected Cities
- TCA

Source of Funds: Various funding sources



COMMUNITY FACILITIES

ORANGE COUNTY FIRE AUTHORITY

Introduction

The Orange County Fire Authority (OCFA) provides regional fire protection, emergency medical services, and rescue services to the unincorporated areas of Orange County plus 22 cities. The OCFA also provides ARFF (aircraft, rescue, and firefighting) services at John Wayne Airport, forestry services, and hazardous material response for Orange County.

Resources are deployed based upon a regional service delivery system that assigns personnel and equipment to emergency incidents without regard to jurisdictional boundaries. The equipment used by the department has the versatility to respond to both urban and wildland emergency conditions.

In addition to these fire suppression and emergency services, the Orange County Fire Authority provides fire prevention services. These duties are the responsibility of the Fire Prevention Department and include regular inspections of public assemblies and hazardous materials and operations pursuant to the Uniform Fire Code. Fire prevention and public education programs include fire prevention education for all fifth grade students.

The OCFA receives property tax revenue, known as the Structural Fire Fund, as its primary source of funding. Cities who are not part of the Structural Fire Fund contribute funding through a "cash contract basis."

Prior to 1980, the administration of the Orange County Fire Department was provided on a contractual basis by the California Department of Forestry. Fire suppression operations were carried out by a combination of State firefighters and paid-

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call (volunteer) firefighters. The Department of Forestry is primarily a wildland fire-fighting agency. The rapid growth in the southern and eastern portions of Orange County had transformed the region from a predominately wildland area to an increasingly urban one.

In 1980, the Department of Forestry transferred its wildland firefighting duties to Orange County, and the responsibility for local fire protection created the Orange County Fire Department. The Orange County Fire Department provided structural and wildland fire protection and paramedic services to its entire service area. In 1995, the Orange County Fire Authority formed as a joint powers authority, which provides contract services to the County and its partner cities. The Department of Forestry maintains a contract with the County Fire Authority for wildland firefighting protection in State responsibility areas.

The Orange County Fire Authority (et. al) was one of the first agencies in Orange County to provide paramedic services. The California Department of Forestry, under contract to the County, began providing paramedic services in 1973 when a paramedic unit was installed in Laguna Hills.

Fire Protection in the Urban/Open Space Interface

The Orange County Fire Authority service

area includes many thousands of acres of wildlands subject to periodic fires that endanger nearby urban areas. Wildlands are described as those areas having grass, brush, and trees without significant numbers of structures.

In Southern California, wildlands are typically characterized by highly flammable vegetation. In a wildland fire, the Orange County Fire Authority is faced not only with the problem of burning vegetation but scattered structures in the rural areas.

Although the southern and eastern portions of Orange County are experiencing rapid urban development, the suppression of wildland fires is still a significant problem in those areas; in fact, it has been compounded by the encroachment of urban development into the foothill areas.

The developer of any subdivision located in or adjacent to a fire hazard area is required to provide appropriate wildland fire defense systems by means of firebreaks, fuel modification programs, access roads, and sufficient water supply, as well as special construction features, such as residential sprinkler systems and non-combustible roofing, as determined by the Fire Chief to be necessary to insure public health, safety, and welfare.

Current Conditions

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For a list of things to do to protect your home from wildfires, call OCFA Community Relations & Education at (714) 573-6200

In 2003, OCFA responded to approximately 175,589 telephone calls for service which resulted in 79,573 actual incidents. These incidents were handled by 60 fire stations and 5,944 incidents were located in the unincorporated area. Approximately 80 percent of all department responses are for emergency medical service calls. Fires constitute approximately five percent of all calls, hazardous conditions make up four percent, and all other calls, including service calls, account for the remaining 11 percent.

Guidelines for Determining Fire Station Locations

Several criteria are used to determine fire station locations because of the regional nature of services provided. However, the following general guidelines are considered:

Time and distance: How long it takes to get resources to various types of calls. These standards are normally expressed as response times and given in minutes. There are three sub-components: 1) dispatch time; 2) turnout time and 3) driving time.

Dispatch and turnout times are constant regardless of the type of call. They are currently calculated at 45 seconds to dispatch the call and one minute to receive the information, don safety equipment and prepare to respond (turnout time). Specialty equipment such as helicopters, dozers, hazardous materials, etc, will vary.

Driving time is a function of how fast and

how far the resources must travel. For example, a four-minute response time for basic life support equates to 2 miles traveling an average of 30 miles per hour. Response time equals 1 minute turnout time and 4 minutes of travel time for the first unit, as defined by NFPA1710 standards.

The only response time that is dictated by guidelines by other governmental agencies are those within the Emergency Medical Services. State guidelines are: Basic Life Support (BLS) within five minutes, and Advanced Life Support (ALS) within eight minutes to urban areas.

Staffing standards are normally expressed as a function of how many personnel are needed at a particular type of emergency. This is defined by the timeframe needed for various functions. For example, an EMS call requires three personnel minimum to provide basic life support. To perform advanced life support, four or more personnel (two of which are paramedics) are typically needed. To move that patient to a transport unit, additional personnel may be needed. These are minimum levels for routine calls. Structure fire responses mandate 4 personnel as the minimum national standard for entering a building. This standard, known as the two-in-two-out rule, became a requirement for fighter safety in January 2001 (NFPA1500, CCR Title 8, OSHA). A sustained interior attack on a structure fire requires twelve to fifteen firefighters.

Skills and Equipment standards are the most



objective and easiest to define. For an EMS call, EMT trained personnel are needed for basic life support and paramedics for advanced life support. On a fire or rescue call, truck companies carry the equipment and personnel necessary to perform technical rescues, ventilation, forcible entry, overhaul and salvage work, while engine companies are set up to complete initial rescue and fire suppression activities as their primary focus. Each unit carries some equipment to do the job of others but not enough to do it all.

The specific location of a fire station is determined by the close proximity of arterials. An ideal location would be adjacent to an arterial highway intersection where traffic signals can be controlled by optical pre-emption devices. The one acre flat buildable site must be appropriately zoned and located on a public street with two-way traffic and safe line of sight view. Stations are normally constructed on smaller distributor roads that are adjacent to collector/arterials.

Future Conditions

Residential, commercial, and industrial growth projected to occur in south and southeast Orange County will require the expansion of the Orange County Fire Authority's system of fire stations.

Several new fire stations will be required to meet these demands: (1) Fire Station No. 55 will be located north of Irvine off Portola Parkway, (2) Fire Station No. 56 will be located south of Ladera, near Ortega Highway, (3) Fire Station No. 20 will be located in Irvine, adjacent to Orange County's Great Park area, and (4) Fire Station No. 27 will be located in the area east of Irvine off Trabuco Road. Depending on planned growth and development of the Ortega Highway area, additional fire stations will be required. In addition, four fire stations are planned for reconstruction or relocation: (1) Fire Station No. 29 in Dana Point is planned for reconstruction in 2004, (2) Fire Station No. 38 in Irvine will be

relocated north of the El Toro base property near Musick Branch Jail, (3) Fire Station No. 19 in the City of Lake Forest is under reconstruction in 2004, and (4) Fire Station 39 in Laguna Niguel will also be torn down and reconstructed in 2005.

GOALS, OBJECTIVES AND POLICIES: *Orange County Fire Authority*

Goal 1

Provide a safe living environment ensuring adequate fire protection facilities and resources to prevent and minimize the loss of life and property from structural and wildland fire damages.

Goal 2

To provide an adequate level of paramedic service for emergency medical aid in order to minimize trauma of injury or illness to patients.

• *Objectives*

1. To achieve desired level of fire protection and paramedic service through coordinated land use and facility planning.
2. To develop comprehensive fire and paramedic facility planning to include phased capital improvements consistent with the County General Plan.
3. To establish capital improvement

programs including alternative funding mechanisms to assure the availability of the phased facility requirements.

Policies

1. *FACILITY SITING*

Fire/paramedic facilities shall be sited in locations so as to assure efficient fire rescue and paramedic response for the service area. General criteria for site selection shall include:

- a) Call response time: for 80 percent of the service area, first fire engine to reach the emergency scene within 5 minutes and paramedic to reach the scene within 8 minutes.
- b) Land use compatibility: stations shall be located in commercial or industrial, or open space zones in order to avoid the disturbance to residential areas wherever possible.
- c) Street access: stations shall be located adjacent to arterial highways with controlled traffic signalization.

2. *PHASED DEVELOPMENT*

Require phased development whereby land use proposals shall display the ability to provide adequate fire and paramedic services prior to project development. The service provision shall include station site acquisition, construction, equipment, and station

staffing. The level of service shall be established in accordance with the criteria identified in the above policy.

3. ***SITE DESIGN CRITERIA***

Require all land use proposals to implement adequate site design so as to maximize fire protection and prevention in order to minimize potential damages. The site design criteria shall be established to reflect the levels of protection needed for projects in various fire hazard areas.

Such criteria shall include consideration as to: structure type and density, emergency fire flow and fire hydrant distribution, street pattern and emergency fire access, fuel modification programs, automatic fire sprinkler systems, and other requirements as determined by the Fire Chief.

In accordance with the Insurance Services Office (ISO) suggested standards, ultimate fire protection rating shall be maintained by General Plan land use categories as follows: (1) ISO 3 for all urban developments including Residential (1C and 1B), Commercial (2A and 2B), Employment (3.0) and Public Facilities (4.0) which are within 5 miles from a fire station and less than 1000 feet from a hydrant; and (2) ISO 4 for Rural Residential (1A) which are within 5 miles from a fire station and less than 100 feet from a hydrant. For areas greater than 5 miles or 1000 feet,

the ISO suggested standard is 9.

4. ***SERVICE SYSTEM OPERATIONS***

Orange County Fire Authority shall continue to strengthen mutual and automatic aid agreements with Federal, State and Local fire departments to assure efficient service delivery. Feasible consolidation of service areas shall be encouraged to eliminate duplication and overlapping of services.

IMPLEMENTATION

PROGRAMS: *Orange County Fire Authority*

1. COORDINATED LAND USE DEVELOPMENT REVIEW

Action:

The Orange County Fire Authority and RDMD, shall review all land use proposals (General Plan Amendments, Zone Changes, Area Plans, Site Plans, and Subdivisions) prior to their consideration, to assure that adequate fire and paramedic facilities will be available or programmed for construction with determined funding sources.

Discussion:

Currently, the adequacy of fire and paramedic service for land use proposals is determined through the Environmental Impact Report (EIR), Fiscal Impact Report (FIR) and Annual Monitoring Report (AMR) review

Before an earthquake, know where and how to shut off electricity, gas and water at main switches and valves.

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processes. At the overall service level, the review is conducted by the Orange County Fire Authority and RDMD through the EIR review process. Based on EIR findings, mitigation measures are proposed to alleviate the identified deficiencies. A secured fire protection agreement between the developer and the Orange County Fire Authority is used to assign fair share costs to the project as mitigation measures where appropriate.

Concurrent with the EIR review process, major land use proposals may also be required to prepare and submit a FIR. The primary purpose of the FIR is to forecast the cost/revenue balances resulting from the proposal to facilitate the decision making process. OCFA identifies the timing, site, equipment, and station staffing requirements to serve the proposed project. Based on these analyses, OCFA develops appropriate recommendations, which are submitted to the decision-making bodies, prior to project approval, to assure the timely implementation of the needed facilities.

The Land Use Element of the General Plan sets forth a phased development implementation policy to ensure that development coincides with the adequacy of public services and facilities. The implementation of the policy is strengthened by the enactment of a growth management program i.e., the Annual Monitoring Reports (AMRs)

which are required to be prepared by development proponents of all Planned Communities. All major development proposals are reviewed on the basis of the infrastructure analysis contained in their Annual Monitoring Reports, and recommended modifications or additional actions/requirements are offered as part of the Development Monitoring Program Report's annual update.

The AMRs also provide a reference document for review of subsequent project approvals including subdivisions, area plans, site plans, and use permits. Where discrepancies are found between proposed development activity portrayed in AMRs and service delivery planning documents, further information is requested in subsequent AMRs or, if necessary, in related development processing documentation.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- RDMD
- Orange County Fire Authority

Source of Funds:

- County General Fund
- Structural Fire Fund Fees

2. FACILITY FEE PROGRAM

Action:

- a) Require developer participation in

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funding new fire stations in areas designated by the Board of Supervisors, which are not covered by Secure Fire Protection Agreements;

- b) Implement a facility fee program as one method of developer participation in funding new fire stations.

Discussion:

A facility fee program was proposed to assist in offsetting projected revenue shortfalls by providing needed future capital improvements to accommodate growth. Most major South County planned communities have been required to participate in the provision or extension of community facilities as conditions of planned community development approval.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: RDMD and OCFA

Source of Funds: Fire fees

3. SITE DESIGN REVIEW

Action:

The Orange County Fire Authority shall review all land use proposals including subdivisions, site plans, and use permits for adequate site design and implementation.

Discussion:

As a member of the Subdivision Committee, the Orange County Fire Authority reviews and imposes conditions on land use applications to assure that adequate site design is incorporated into the proposal in order to achieve maximum fire prevention and minimize extent of loss associated with fire incidence.

Developers are required to fulfill the conditions prior to or concurrent with the issuance of various permits. These conditions usually involve one or more of the following: water system plan, water supply, fuel modification plan and program, emergency fire access and automatic fire extinguishing system. In private communities, adequate design of emergency access roads is also required in order to allow entry of emergency fire equipment.

The importance of site design for fire retardation and prevention increases as more development is proposed in areas of high fire hazard in the foothills. Fire hazard areas are depicted in the Safety Element, which provides goals and policies to guide land use development in such areas. Additional design standards relating to the use of fire retardant construction materials should be developed to reduce fire incidence and fire suppression costs.

New or Existing Program: Existing

Implementation Schedule: Ongoing

**“Wear the
old coat and
buy the new
book.”**

Austin Phelps

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Responsible Agencies: County Fire Authority

Source of Funds: Fire fees

ORANGE COUNTY PUBLIC LIBRARY

Introduction

The Orange County Public Library provides library service to the unincorporated areas of Orange County plus the cities of Aliso Viejo, Brea, Costa Mesa, Cypress, Dana Point, Fountain Valley, Garden Grove, Irvine, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, La Habra, La Palma, Los Alamitos, Rancho Santa Margarita, San Clemente, San Juan Capistrano, Seal Beach, Stanton, Tustin, Villa Park, and Westminster.

The Orange County Public Library was created in 1919 in order to provide library service to the portions of the County not served by the municipal libraries and library districts in operation at that time. Service is provided through branch libraries. In addition, residents with an Orange County Public Library card are eligible, through the Santiago Library System, to check out materials at other public municipal libraries in Orange County. The Santiago Library System is comprised of the Orange County Public Library, six municipal libraries and two independently governed library districts within Orange County.

Current Conditions

The Orange County Public Library operates 33 branch library facilities. The total floor area of all branch libraries is 355,450 square feet. Storage, cataloging, technical support, and administrative functions are carried out at the library headquarters facility enabling the branch libraries to be fully devoted to providing direct library service to the patron. The total number of volumes owned by the Orange County Public Library is approximately 2.5 million. Annual circulation of all materials, including books, periodicals, pamphlets, audio and video recordings, graphics, maps, etc., is currently over 6,000,000 or 4.6 per capita.

After the passage of Proposition 13 in 1978, the Orange County Public Library relied on Special District Augmentation Funds to supplement revenue requirements due to the reduction of property taxes. At the same time, major planned communities were being approved in developing South Orange County, requiring new branch libraries to provide adequate services. However, subsequent property tax shift implemented in 1993 by the State legislature eliminated Special district Augmentation Funds and deprived the Orange County Public Library of some 35 percent of its funding, thereby requiring a major reorganization and reconsideration of expansion of services within the system.

Library Service Standards

Prior to 1966, the American Library

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Association published library standards for public libraries. Since that time, the Association has developed a planning process through which libraries set up standards appropriate to the local conditions and needs; design strategies to reach those standards; and inaugurate a planning cycle, which involves continuous monitoring of progress and regular adjustment of objectives as community conditions and needs change. This process is particularly useful in analyzing the library needs of an existing community. It is more difficult to apply this principle in planning for future libraries as it requires the projection of specific conditions and needs of future communities.

Because most residents in the Orange County Public Library service area are currently receiving library service (albeit overburdened in some areas), the primary focus is on planning for libraries to serve future communities. To this end, the Orange County Public Library has determined that a service standard of .2 square foot of library

facility per capita is feasible for the purpose of projecting the number and location of new libraries needed. This service standard is a modification of the old American Library Association standard of .33 square foot per capita. The Orange County Public Library has found that libraries with the .2 ratio are providing a satisfactory level of service. This service standard has been accepted by the Board of Supervisors as a planning guide.

The following two factors must be considered in addition to the service standard when projecting the amount of library space needed.

- a) Size requirements of libraries: Most Orange County Public Library branch libraries are planned to be 10,000 square feet in area to maximize cost effectiveness.
- b) Population distribution: The Orange County Public Library strives to locate library facilities within a three mile radius of the communities they serve.

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Expanded Facilities and Services

The need for an additional 83,000 square feet of library space to serve the Orange County Public Library population beyond the year 2000 was identified. Three new branches have been completed towards addressing that need.

The Heritage Park Branch Library, an 18,000 square foot regional library, was opened in 1988 to serve the residents of central and north Irvine.

In 1994, a 16,300 square foot branch library was opened to serve the residents of Rancho Santa Margarita.

In 1998, a 20,000 square foot branch library was opened to serve the growing community of Aliso Viejo. This library facility contains a 10,000 square foot wing which includes a large community meeting room and an attached café, the first time such a facility has been included in a branch of the Orange

County Public Library system.

A 13,000 square foot library to serve the community of Foothill Ranch opened in 2001.

A "Technology Branch," the first of its kind in the Orange County Public Library system, opened in Laguna Hills in 2002. Housed in a Community Center, this facility steps away from the traditional storage of books and other printed materials, and provides computer stations whereby patrons may access on-line data and view holdings of the Orange County Public Library system. Patrons are able to place electronic holds on books throughout the system and have the books and other items delivered to the Laguna Hills location for their convenience in retrieval.

Future Conditions

The 28,700 square feet of additional needed library space to serve Orange County Public

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Library population beyond the year 2000 translates into three new branch libraries.

A 7,000 square foot facility, serving the Lower Peters Canyon area of Irvine is scheduled to be built in 2010, but may well be opened prior to that date as the feasibility study of locating the facility in the Irvine Historic Park is underway.

GOAL, OBJECTIVES AND POLICIES: *Orange County Public Library*

Goal 1

Assure that an adequate level of library service is provided within the service area of the Orange County Public Library.

• Objectives

- 1.1 To achieve desired level of public library service through coordinated land use and facility planning.
- 1.2 To develop a comprehensive public library facility planning to include phased capital improvements consistent with the County's General Plan.

- 1.3 To establish implementation programs including alternative funding mechanisms to assure the availability of the phased facility requirements.

Policies

1. FACILITY SITING

Branch libraries shall be sited in central locations of the community to be served. Site selection criteria shall consider:

- a) A service standard of 0.2 square foot of library space per capita;
- b) Easy access, preferably on main thoroughfare;
- c) Adequate lot size to accommodate, at minimum, an average branch library size of 10,000 square feet, and provisions for parking;
- d) Located near a community center or neighborhood shopping area;
- e) Located within a three mile radius of the community served.

2. PHASED DEVELOPMENT

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“This paperback is very interesting but I find it will never replace a hardcover book-it makes a very poor doorstep.”

Require phased development whereby land use proposals shall display the availability of, or the ability to attain adequate public library service prior to project development. The service provision shall include a library site, construction, collection, furniture and equipment.

3. *INTER-SYSTEM COOPERATION*

Orange County Public Library shall continue to participate in the Santiago Library System to enable inter-library loan implementation among member libraries.

IMPLEMENTATION PROGRAMS: *Orange County Public Library*

Implementation programs are summarized in this section.

1. COORDINATED LAND USE DEVELOPMENT REVIEW

Action:

CEO, in coordination with the Orange County Public Library and RDMD, shall review all significant land use proposals prior to project approvals to assure that adequate public library facilities are available or programmed for construction with identified funding commitments.

Discussion:

Currently, the adequacy of the public library service for land use proposals is determined through the FIR and AMR review processes. Based on the analysis of these reports, recommendations are provided to the decision-making body in order to assure that balanced land use and infrastructure policy is achieved.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- CEO
- Orange County Public Library

Sources of Funds:

- County General Fund
- Public Library Fund

2. FACILITY FEE PROGRAM

Action:

- a) Require developer participation in funding new branch libraries in areas designated by the Board of Supervisors;
- b) Implement a facility fee program as a method of developer participation in funding new branch libraries.

Discussion:

The facility fee program was proposed to augment the projected revenue shortfalls for providing needed future libraries to accommodate growth. Most

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major South Orange County Planned Communities have been required to participate in the provision of branch libraries as conditions of Planned Community development approval.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: CEO and RDMD

Source of Funds: County General Fund

3. COMPREHENSIVE PUBLIC LIBRARY MASTER PLAN

Action:

Develop and update as needed a Comprehensive Library Master Plan to address short-range capital improvements and operation requirements.

Discussion:

Short-range and long-range public library needs are identified in the Master Plan of County Facilities (MPCF) and the Development Monitoring Program Report (DMP).

A Comprehensive Library Master Plan should be developed and maintained in order to assure that adequate service will be provided in a timely manner for both existing and future residents. The Library Master Plan should be updated regularly by the County Public Library staff with assistance from the CEO based on DMP and MPCF. The Library

Master Plan should identify long-range and short-range service operation needs of facilities and anticipated funding sources.

To facilitate short-range implementation, a five-year Capital Improvement Program should be included to indicate the amount, timing, availability, and means of funding of all new capital improvements as well as estimates of operating costs. The Master Plan would be reviewed and approved by the Board of Supervisors for General Plan consistency and regional needs allocations.

New or Existing Program: Expand existing program

Implementation Schedule: Expand ongoing efforts

Responsible Agencies:

- Orange County Public Library
- CEO
- RDMD

Source of Funds:

- Orange County Library
- County General Funds

ORANGE COUNTY SHERIFF-CORONER

Introduction

The Orange County Sheriff-Coroner Department (OCSD) provides police patrol

“The worth of a book is to be measured by what you can carry away from it.”

James Bryce

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and investigative services to the unincorporated areas of Orange County as well as contracting cities of Aliso Viejo, Dana Point, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, Mission Viejo, Rancho Santa Margarita, San Clemente, San Juan Capistrano, Stanton and Villa Park. The Department's patrol functions are both organized geographically and by service type into five divisions: North, South, and West Operations Divisions are geographically based, while the Airport and Harbor Patrol divisions are geared towards service type for the contracting entity receiving the services.

The North Operations Division is stationed in the Sheriff's permanent headquarters in the City of Santa Ana. The service territory of this division covers the unincorporated North County islands, Bolsa Chica, areas north of Brea and Yorba Linda, foothill areas east of Orange and north of Tustin, Irvine Coastal area north of Laguna Beach, the City of Villa Park, the communities of Midway City, Rossmoor, and Sunset Beach, and Orange County Transit Authority (OCTA)

Police services.

OCTA Police services provide police and security services for over 6,000 miles of bus routes and 3,000 stops as well as all operation centers, fixed facilities, railroad stops and right-of-ways.

The South Operations Division is headquartered at the Sheriff's Aliso Viejo substation. The service territory of this division covers generally the unincorporated areas east of Irvine and south of Laguna Beach including the unincorporated communities of Coto De Caza, Ladera Ranch, Las Flores, Trabuco Canyon, and wagon Wheel. Contract cities served with continuous patrol and investigative services include Aliso Viejo, Lake Forest, Laguna Hills, Mission Viejo, Laguna Niguel, Laguna Woods, Rancho Santa Margarita, San Juan Capistrano, Dana Point, and San Clemente.

The West Operations Division is located at the Sheriff's station in the City of Stanton. The service territory is the City of Stanton.

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The Airport Operations Division provides police services within the terminals, on the airfield and in airport parking areas and roadways in and around John Wayne Airport. This division also provides airborne law enforcement services for contract partners, unincorporated county areas, and other jurisdictions when available.

The Sheriff's Harbor Patrol Division provides police, fire and rescue services at all three County harbors: Dana Point, Newport Beach, and Sunset Beach. Deputies patrol waterways and associated land areas 24 hours a day providing law enforcement services. Deputies receive training as first responders to hazardous material incidents and educate the public on boating safety.

Current Conditions

The OCSd patrol duties include immediate response to emergencies, calls for service, directed enforcement, community policing motorcycle traffic enforcement, bicycle patrol and helicopter enforcement.

The Sheriff's Department is the lead law enforcement agency within the County. In addition to providing first responder patrol services, the department also provides county wide hazardous devices (bomb squad) services to all law enforcement agencies in Orange County. The department is taking advantage of grant opportunities to supplement the tools for front line law enforcement activities, and to offset costs associated with Homeland

Security responsibilities within the Sheriff's jurisdiction, as well as the County of Orange and the region. More information about the Sheriff's patrol functions can be found on the orange County Sheriff's website www.ocsd.org.

GOALS, OBJECTIVES AND POLICIES: *Orange County Sheriff- Coroner*

The Sheriff patrol service is funded by sales tax revenue generated by the Local Public Safety Protection and Improvement Act of 1993 (Proposition 172) and City contracts. Major planned communities have been approved in the developing South County where additional patrol units and an additional new permanent Sheriff substation are projected to be required to maintain service levels.

In view of the service planning and funding needs, this section provides strategies addressing the overall Sheriff-Coroner Department and project specific concerns.

Goal and Objective

Goal 1

Assure that adequate Sheriff patrol service is provided to ensure a safe living and working environment.

- ***Objective***

- 1.1 To maintain adequate levels of Sheriff patrol services through coordinated land use and facility

planning efforts.

Policies

1. LAND USE REVIEW

To continue to coordinate land use proposal reviews with the County Sheriff-Coroner Department to assure that Sheriff patrol service shall be adequately addressed.

2. SERVICE DELIVERY:

To maintain mutual aid agreements with incorporated cities to assure efficient service delivery for the County islands.

IMPLEMENTATION PROGRAMS: *Orange County Sheriff-Coroner*

Existing implementation programs are summarized below. These programs are relevant to both Sheriff patrol and fire protection. Detailed discussion of the programs is included in the Fire Section of this chapter.

1. COORDINATED LAND USE DEVELOPMENT REVIEW

Action:

CEO, in coordination with the Orange County Sheriff-Coroner Department and RDMD, shall review all major land use proposals prior to project approvals to ensure that adequate Sheriff service is available and/or can be extended.

Discussion:

Currently, the adequacy of Sheriff service for land use proposals is determined through the Environmental Impact Report (EIR), Fiscal Impact Report (FIR), and Annual Monitoring Report (AMR) review processes. Based on the analyses of these reports, mitigation measures may be recommended to the Board of Supervisors in order to assure that balanced land use and infrastructure/service policy are maintained.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- CEO
- RDMD
- Orange County Sheriff-Coroner Department

Source of Funds: County General Fund

2. MAJOR FACILITY PLANNING

Action:

The County Sheriff-Coroner Department, in coordination with the Facilities Planning Management Team,

shall continue to participate in annual updates to the Master Plan of County Facilities to ensure needed Sheriff facilities are adequately addressed and planned.

Discussion:

Future Sheriff facilities are projected in

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the Master Plan of County Facilities (MPCF). For the short-range needs, generally no more than five years, specific information regarding construction schedule, potential sites, and associated costs are included. For long-range projections, the report includes general locations and estimated costs of the future major facilities. While utilizing the Development Monitoring Program Report (DMP) as a primary data base and reference tool, the MPCF's main focus is on prioritizing short-range capital improvement requirements for the full range of County facilities.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- CEO
- Orange County Sheriff-Coroner
- Auditor-Controller

Source of Funds: County General Fund

LOCAL SPECIAL SERVICES DISTRICTS

Introduction

The purpose of Local Special Services Districts (LSSDs) is to provide local or municipal type government services not typically provided by counties in unincorporated communities. The types of

services a LSSD may provide include any extended service which the County is authorized by law to provide and does not provide to the same extent on a Countywide basis. LSSDs receive no financing from the County General Fund, and are financed by a state-allocated share of property tax revenues and annual supplemental assessment, if necessary.

The six LSSDs in Orange County are governed by the Board of Supervisors and administered by the Resources and Development Management Department. Services, described below, are provided either by RDMD or a private service provider.

The services which a LSSD is authorized to provide are determined at the time it is established. Many LSSDs do not provide all of the services they are authorized to provide, such as structural fire protection, library facilities, bridge maintenance and trash collection. The most common services provided by the LSSDs in Orange County are outlined below.

- **Local park development and maintenance:** Developers typically dedicate land for local parks and improve the same as required by the Local Park Code. LSSD funds are to be used to maintain the improved park on a continuous basis.
- **Street sweeping:** Regular sweeping of public residential streets is funded by one LSSD in Orange County.

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- County liaison services: LSSD funds defray a portion of the costs of County information services within LSSD communities.

The specific services provided by each LSSD within Orange County are listed below.

- Leisure World CSA No. 4: Maintenance of one developed local park; operation of one community center, landscape maintenance, street sweeping, street lighting, and County liaison services.
- North Tustin Landscape and Lighting Assessment District: Maintenance of two developed and one undeveloped local parks, landscape maintenance, and County liaison services.
- La Mirada CSA No. 13: Street Sweeping and Sewer Maintenance.
- La Habra CSA No. 20: Sewer maintenance.
- East Yorba Linda CSA No. 22: Maintenance of one developed local

park.

- Aliso Viejo CSA No. 25: Authorized currently to provide parks and recreation, landscape maintenance, street sweeping, and County liaison services; however, the CSA has not yet begun to provide these services. These services are currently provided by homeowners' associations and are funded through association fees. A condition of the formation of CSA No. 25, established in 1981, stated that no property tax revenue would be diverted to CSA No. 25.

Current Conditions

The County's Local Park Code requires subdividers of land for residential developments in the unincorporated areas to offer land for dedication and/or pay in-lieu fees for new local parks. The number of local parks or sites accepted by the County, or acquired with in-lieu fee revenue, has declined since the approval of Proposition 13 in 1978.

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LSSD revenue has not been adequate to fund development of new parks or to provide maintenance for additional parks. As a result, the County has been requiring developers to irrevocably offer parks for dedication. These parks, either developed or undeveloped, are privately maintained by homeowners' associations until such time as the LSSDs have sufficient funds to accept them as public parks.

Future Conditions

The remaining six Local Special Services Districts will likely be dissolved in the future as the respective unincorporated communities incorporate as new cities or annex to existing municipalities.

GOAL, OBJECTIVES AND POLICIES: *Local Special Services Districts*

Goal 1

Continue the delivery of appropriate levels of local service within the service areas of LSSDs.

• Objectives

- 1.1 Service provision should be prioritized and implemented within the limit of funding availability.
- 1.2 Identify and implement alternative funding mechanisms to assure the continued delivery of adequate LSSD services.

1.3 Optimize local services provided by LSSDs through planning review techniques and practices.

1.4 Develop alternative mechanisms which ensure that LSSD-type services desired by newly developing areas can be extended to such areas which are not within boundaries of existing LSSDs.

1.5 New land use proposals shall not be annexed to existing LSSDs for local services. Rather, each new proposal development will need to establish a mechanism, likely a master Homeowners Association, to finance and provide for such local municipal-type services.

Policies

1. LSSD FINANCING

A mechanism to assure that community services can be adequately provided and funded shall be determined for all development proposals, including general plan amendments and zone changes for new and existing planned communities. The formation of a Community Service District, or homeowner and business owners' associations to provide such services through fees and charges are appropriate alternative devices to provide community services.

2. LAND USE REVIEW

Through the project review process,

**“One’s mind
once
stretched by
a new idea
never
regains its
original
dimensions.”**

***Oliver Wendell
Holmes***

land use proposals shall be required to incorporate appropriate construction and landscape designs and materials to minimize the costs for public slope, median, and roadside maintenance.

IMPLEMENTATION PROGRAMS: *LOCAL SPECIAL SERVICES DISTRICTS*

1. COORDINATED LAND USE DEVELOPMENT REVIEW

Action:

The County shall review land use proposals prior to their consideration in order to evaluate and recommend the appropriateness of formation of a new LSSD, or utilization of other mechanisms which ensure appropriate provision of municipal-type services.

Discussion:

In areas of large scale development, new LSSDs may be created with the understanding that no property tax revenue would be diverted to provide local services. For example, Aliso Viejo CSA No. 25 was formed with the recommendation that current service funding will consist of property owners' association assessments, benefit charges, or direct developer contributions.

Existing or New Program: Existing program

Implementation Schedule: Ongoing

Responsible Agencies: CEO and RDMD

Source of Funds: County General Fund

SCHOOLS

Introduction

Orange County is comprised of 28 separate school districts (Figure V-5). The majority of these school districts entirely or predominantly serve the incorporated North County areas. Within South County, the majority of the projected population and construction growth is expected to occur within two school districts: Saddleback Valley Unified School District and Capistrano Unified School District.

Saddleback Valley Unified, in particular, is expected to experience significant growth over the next few years. The Orange Unified School District is also experiencing growth and will be drawing additional students both from existing north county areas as well as from substantial new construction growth in the district's undeveloped areas.

Enactment of legislation, such as Assembly Bill 2926 passed in 1986, has transferred authority to implement developer fee programs for financing of school facilities from the local government to the individual school districts. However, certain functions (e.g., issuance of building permits and zone changes) remain with the County, enabling the County to encourage and support the

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adequate provision of school facilities. This component of the Public Services and Facilities Element emphasizes the coordination between District and County efforts.

Background

Historically, Orange County's population has shown a steady increase, with the unincorporated areas showing a decidedly larger increase than the predominantly developed incorporated areas. Census figures have recorded a figure of 2.7 to 2.8 persons per household for the unincorporated areas for the last decade. This has mirrored the countywide statistics for the same time period.

Public school (K-12) enrollment in Orange County between 1960 and 1998 has experienced both incredible growth and decline due to several social and economic factors. K-6 enrollment began their decline in 1970 and continued until 1983 when they began to grow at an average 7,050 students (3.5%) per year. Almost all of the school districts in Orange County are experiencing growth, some due to new housing and others because of the changing demographics in the mature areas of the County.

The fastest growing school districts are a prime example of this (Capistrano Unified and Santa Ana Unified). Capistrano's enrollment increased by 23,094 students (221%) and Santa Ana Unified enrollment increased by 20,282 students (157%) in the

fifteen years leading up to 2000. During this same period the overall enrollment county-wide has increased 136,263 students (141%) and expected to continue to grow at two to three percent through the 2003 school year.

Effective with the 1996-97 fiscal year, the Class-Size Reduction Program was enacted (Chapter 163, SB 1771) which provided an incentive (\$650 per student) for school districts to reduce the number of students in certain grade level classes to no more than 20. Later legislation increased this incentive funding to \$800 per student with statutory cost of living increases.

For 1998-99, funding was set at \$832 per pupil. A related bill (Chapter 164, SB 1789) provided \$25,000 for portable facilities. Initially, this bill applied to kindergarten through third grade, but other legislation expanded class size reduction to the high school level at \$135 per pupil.

These laws, while offering financial incentives, have created a school housing shortage in many of the school districts in Orange County. Additionally, the student enrollment has risen approximately 24%, from 360,213 in 1989-90 to 471,412 in 1998-99. The combination of these two factors has created a serious lack of classrooms throughout Orange County.

School Site Selection Process

Selection of an appropriate site for a school is an important consideration for the community and the school district. Proper

**In 1997,
public school
enrollment in
Orange
County was
458,489.**

**"Pretty much
all the
honest truth-
telling there
is in the
world is
done by
children."**

***Oliver Wendell
Holmes***

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location, size, and shape of school sites can materially affect educational programs and opportunities. The size of a site should be determined by the educational program planned for that site.

The educational program differs for various types of schools and programs. In Orange County, each district has a slightly different site selection process and set of selection criteria. Although the State Department of Education does not have a mandatory set of site selection criteria which must be adhered to, they do provide some suggested guidelines which local districts follow at least to some degree. These guidelines are described in the following site selection discussion.

The responsibility for site approval is given to the California Department of Education through Education Code Section 39000, et seq. and Section 17723. The Education Code requires the Department of Education to review and approve all new school sites and additions to school sites for all school districts regardless of the source of funding.

In addition to site approval authority, the California Department of Education, School

Facilities Division has the responsibility to ensure that districts applying for State School Building funds comply with all State Allocation Board policies regarding site acquisition. This responsibility includes determination of site size, consideration of alternative sites, and evaluation of different proposals.

Whereas it is the responsibility of the California Department of Education to approve school sites, it is the responsibility of the individual school districts to select the site. In order to be as accurate and specific as possible in selecting sites, criteria are developed to evaluate present and future possible characteristics of the site and surrounding property.

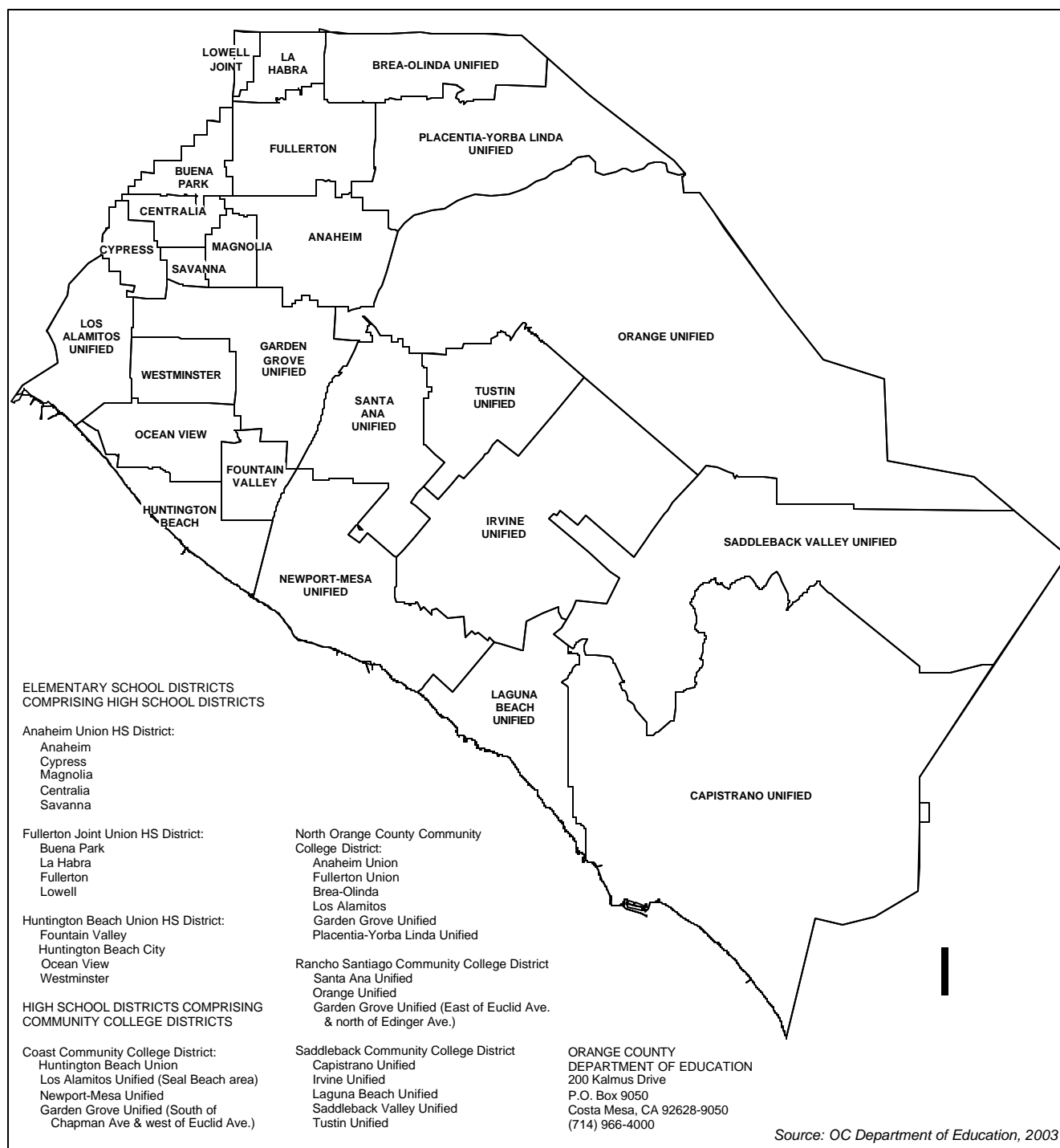
To help focus and objectify the site selection process, the School Facilities Planning Division has developed screening and ranking procedures based on the following 12 criteria, listed in general order of importance, commonly affecting school site

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Figure V-5



ORANGE COUNTY SCHOOL DISTRICTS

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selection. These criteria are not the only ones which might be considered.

1. Safety
2. Location
3. Environment
4. Soils
5. Topography
6. Size and Shape
7. Accessibility
8. Cost
9. Availability
10. Political Implications
11. Utilities
12. Public Services

Within each of these primary factors are secondary factors which are of equal importance for a complete analysis of a given site. They provide an understanding of the types of data needed in the identification, selection, and acquisition of a school site.

Safety

Safety is the first consideration in the selection of school sites. Certain safety factors are governed by state regulations or by policy of the School Facilities Planning Division. In selecting a school site, the selection team should consider the following safety factors:

- 1) proximity of a site to airports,
- 2) proximity of a site to high voltage power transmission lines,
- 3) cellular facilities and towers,
- 4) presence of potentially toxic and hazardous substances,
- 5) results of geological studies and soils analyses,
- 6) proximity to railroads,
- 7) proximity to high pressure gas lines, gasoline lines, or pressurized sewer lines,
- 8) proximity to high pressure water pipelines,

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- 9) traffic and school bus safety conditions, and
- 10) joint use safety studies.

SADDLEBACK VALLEY UNIFIED SCHOOL DISTRICT

The Saddleback Valley Unified School District was formed on July 1, 1973 as a result of the unification of the schools previously a part of the Trabuco Elementary School District, the San Joaquin Elementary School District and the Tustin Union High School District. The district encompasses an area of 95 square miles and is a highly regarded, modern educational system which serves approximately 34,000 students from the communities of Foothill Ranch, Laguna Hills, Lake Forest, Rancho Santa Margarita, Trabuco Canyon and Mission Viejo.

At the present time, there are twenty-six elementary schools, four intermediate

schools, four high schools, one continuation high school and one special education center. Among these schools are six National Blue Ribbon Schools and twelve State Distinguished Schools.

School Choice

Saddleback Valley Unified School District's School Choice Policy, in effect since its approval by the Board of Education in February of 1994, allows parents and students to choose to attend any school in the district if space is available. This policy allows each family to determine which school program can best assist their student in achieving their goals.

Special Education

Special Education provides programs and related services for students meeting the State eligibility criteria for special disabilities. During the 1997-98 school

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year, over 2,500 students were enrolled in special education programs.

Individualized Education Program (IEP) teams make recommendations for students to receive special education programs and services in a variety of district settings. With an instructional staff of 108 teachers, Resource Specialist Programs (RSP) are offered at every school in the district, while Special Day Classes (SDC) are regional to maximize services to students as close to home as possible. Services in such areas as Speech and Language and Adapted Physical Education are also provided at all schools in the District.

Reduction in Class Size Plus Enrollment Increases Resolved by Addition of Teachers and Facilities

Recent enrollment history reflects increased student population at every grade level every year and the 1998-99 school year set an enrollment record of over 34, 040 students. With careful planning, the district has been able to effectively house all of our students and the district has fully implemented primary and high school class-size reduction programs.

The district's kindergarten, first, second and third grade classes have student-to-teacher ratios of 20 or fewer students per teacher. In Saddleback Valley Unified School District, starting in kindergarten, the first four years of a child's education will be in a classroom with 20 or fewer children. For the 1998-99 school year, the District further expanded

class size reduction to include ninth grade in the two subjects of English and Cultural Geography/History. To accommodate the changes, the district hired additional qualified, certified teachers and created new classroom space.

The state of California appropriated monies to assist with this unprecedented opportunity, as long as the economy and state education funding remains strong.

Recreation & Community Services Department

The goal of the district's Recreation & Community Services Department is to provide a variety of high quality programs, activities, and services to meet the varied recreation needs of the local community. It is a totally self-supporting operation that requires no funding support from education dollars.

Childcare Program

The Learning Connection (TLC) offers quality before-and-after school care at reasonable rates for school-age children of working parents. TLC operates at elementary school sites (except Trabuco) throughout the school year from 7:00 a.m. to 6:00 p.m. and at selected schools throughout the summer months.

Creative Playtime is a 2- and 3-day part-time preschool program offered for children 3-5 years of age.

**"Teachers
open the
door, but you
must enter
by yourself."
*Chinese Proverb***

**The largest
share of all
property tax
supports
school
districts.**

The Pre-Kindergarten program offers an opportunity for the younger students who missed the birthday cutoff to prepare in the spring for next fall's kindergarten class.

Youth and Teen Program

Kid's Factory is a "drop-in" after-school program conducted at specified elementary school sites throughout the entire year on a free basis. Activities include organized games, sports and planned arts and craft activities.

Teen programs and activities are offered year-round and include dances, open gym drop-in program, teen excursions, sports, and more.

Other special programs include a variety of after-school intramural programs coordinated and taught by credential teachers at schools where they regularly teach.

CAPISTRANO UNIFIED SCHOOL DISTRICT

Current Enrollment and Facility Capacity

Capistrano Unified School District (CUSD) serving approximately 195 square miles, is the second largest school district in Orange County. Much of CUSD is unincorporated and governed by the County of Orange, and includes the communities of Coto de Caza, Ladera Ranch and Las Flores. The

remainder of the district is located within the cities of San Juan Capistrano, Dana Point, Laguna Niguel, San Clemente, Aliso Viejo and Mission Viejo.

Facility construction was nearly stagnant before the district unified in 1964. Between that date and 1977, district enrollment increased from 4,756 to 16,054 students. Consequently, 13 elementary schools, three junior high schools and three high schools were constructed and occupied during this 13-year period. Even more significant growth occurred from 1977 to 1999 resulting in higher student enrollment.

The regular K-12 enrollment of CUSD in October 2003 was 49,000 students including 22,169 elementary school students, 9,229 middle school students, and 10,459 high school students. In fact, within the last six years, a total of 14 schools have been constructed to meet the enrollment demands.

CUSD currently operates a total of 45 facilities: 32 elementary schools (K-5), eight junior high schools (6-8), five high schools (9-12), and one exceptional-needs facility.

A variety of special programs are also offered by CUSD including a Regional Occupation Program (ROP), a community education program, a continuation high school as well as various support services. The facilities that house these special uses are shared by one or more operations.

All schools within CUSD operate beyond their original design capacities. Most schools utilize portable classrooms to

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accommodate the tremendous increase in student enrollment that has occurred. Currently, the district utilizes approximately 750 portable classrooms.

Based upon State formulas and loading standards for determining existing building capacities, CUSD has available seats for 17,040 elementary school students; 4,104 seats for middle school students; and, 6,237 seats for high school students, equaling 27,381 available seats. Comparing this data with the current enrollment listed above indicates a significant shortfall in school capacity for all grade levels. Therefore, any additional development will exacerbate the current overcrowded conditions of district schools.

SB 327 required that 30 percent of all State-funded teaching stations were to be located in portable buildings. CUSD adhered to this requirement and utilized permanent and

portable facilities to reflect this development ratio.

In recent years, CUSD purchased additional portables and participated in the State Emergency Portable Lease Program for new classrooms at various school sites. As noted above, the district utilizes approximately 750 portable classrooms. Most of these are owned by the district, with nearly 150 leased from the State. Portable classrooms not only accommodate new student growth, but they are used to implement Class Size Reduction (CSR) for grades one through three.

District Program and Non-Program Needs

Within the CUSD, classroom space is utilized for instructional programs other than general or special education. Additional programs include computers, music and sciences, as well as library and administration usage.

“An education isn’t how much you have committed to memory, or even how much you know. It’s being able to differentiate what you know and what you don’t.”

Anatole France

Non-school uses are also accommodated at existing school sites as well as at other locations. These programs include adult education, a regional occupational program, an instructional media library and a satellite guidance center. The first three programs are all conducted on the Serra Continuation School site. The satellite guidance center is operated at a commercial center in downtown San Juan Capistrano. The guidance center makes available additional counseling for both parents and students. In order to address facility needs of the district, several measures for school facility funding have been established, including: collection of developer fees (on a cost per square-foot basis); negotiated mitigation agreements with developers; “land-in-lieu of fee” agreements; redevelopment agency pass-through agreements; certificates of participation (COP); and Mello-Roos community facilities districts. CUSD currently has eight Mello-Roos districts.

Enrollment Projections

Enrollment projections for the next five years were recently prepared as part of the new SB 50 School Facilities Program “Eligibility Determination” (form SAB 50-03). Based on the development proposals within the district (including a projected new

unit count of 20,143 homes), K-12 enrollment is expected to reach 59,245 students representing a 30 percent increase in overall student growth. This projected enrollment includes 32,830 elementary school students, 8,987 middle school students, and 17,428 high school students.

Facility Needs and Costs

In comparing the enrollment projections for the next five-year time period (1999-2004) with the current classroom capacity described above, CUSD has eligibility with the State to construct many new schools for all grade levels. The district is currently eligible to receive assistance from the State in school construction funding for 22 new elementary schools (at 725 students per school), four new middle schools (at 1,200 students per school), and five new high schools (at 2,400 students per school).

Development costs for elementary schools are currently near \$14,000,000 inclusive of land acquisition, construction, and the purchase of furniture and equipment. Middle schools are near \$28,000,000, and high schools are near \$60,000,000 based upon average land values per acre within the district. Costs may vary slightly.

CHAPTER V. PUBLIC SERVICES & FACILITIES ELEMENT



Under SB 50 (State School Facilities Program), the State of California will provide funding assistance to districts that qualify under their eligibility guidelines for construction of new schools, and modernization of old facilities. For new school construction, the State will provide a 50 percent match of local funds raised to build new schools. For modernization of old facilities, the State will provide 80 percent of the upgrade costs, up to the State's modernization program limit. Therefore, \$360 million of the new construction costs would be paid by the State, and \$360 million would come from local sources such as developer fees, mitigation agreements, COP's, and Mello-Roos community facilities districts.

In order to raise a portion of the required 50 percent local share of school development funds, the district is in process of preparing and adopting a "School Facility Needs

Analysis" (SFNA). The SFNA serves as a prerequisite to levying alternative statutory school fees on new construction beyond the current allowable fee of \$1.93 per square foot for residential properties and .31 per square foot for commercial/industrial properties (known as Alternative 1 fees).

Alternative 2 fees equal 50 percent of the total land acquisition and building construction costs with the fee amount based upon recent land appraisals, and development cost factors.

Alternative 3 fees equal the total sum of land acquisition and building construction costs, applicable only if the State does not have available funding for new school construction.

As indicated earlier, many Orange County school districts will be affected by school housing problems, either due to a rise in enrollment in the next several decades

because of enormous growth due to new housing or due to the Class-size Reduction Program. Many districts will require capital facility projects to accommodate the projected increases.

**“Imagination
is more
important than
knowledge.
Knowledge is
limited.
Imagination
encircles the
world.”**

Albert Einstein

GOALS, OBJECTIVES, AND POLICIES: *Schools*

Goal 1

Encourage the funding and development of adequate school facilities to meet Orange County's existing and future demand.

• *Objective*

- 1.1 To achieve the desired level of school facilities through coordinated land use and facility planning.

Policies

1. To coordinate land use proposal reviews with appropriate school districts to assure that facility needs shall be adequately addressed, including the notification and participation of school district planners in initial County studies of all major developments.
2. To encourage periodic updating of School District Master Plans and analysis of school facility needs by appropriate school districts and County agencies.
3. To continue to require compliance with AB 2926.

IMPLEMENTATION PROGRAMS: *Schools*

1. BUYER NOTIFICATION PROGRAM

Action:

Continue the administration of the Buyer Notification Program as designated by the Board of Supervisors Resolution 82-1368 and as subsequently amended. Land use maps and planning information required by the guidelines shall be updated yearly by the subdivider/developer or, more often, if the Director of Planning/RDMD is aware of planning changes which affect the subdivision and make the update a condition of his approval of the map.

Discussion:

The Buyer Notification Program provides prospective home buyers and businesses with an overview of nearby planning and development. Information provided includes: demographics, land use, and the location of public facilities, including schools.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agency: RDMD

Source of Funds: County General Fund

2. INTERGOVERNMENTAL COORDINATION

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Action:

Continue to develop intergovernmental relations toward achieving school facility provision goals, objectives, and policies.

Discussion:

Although legislation has dramatically decreased the role of the County in the provision of school facilities, the County still plays an important supportive role in ensuring that the County's school facility needs are addressed. Both the County and the appropriate school districts respond to State-mandated guidelines such as those concerning application of funds for construction of new facilities; distribution of funds; site selection; and monitoring and review of implementation programs. Continued cooperation among agencies will provide a coordinated effort toward achieving school facility funding, phasing, and implementation of goals and objectives.

New of Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies:

- Orange County Unified School Districts
- RDMD
- CEO
- Various state agencies (e.g., State Allocation Board, State Dept. of Education).

Source of Funds: Various Funding Sources

CHILDCARE

Introduction

Childcare imbalances occur between the need for and provision of adequate and affordable facilities. With a significant increase in women in the labor force, the rising numbers of single-parent households, the rise in dual-income households and the increase in the number of children (infants through school-aged), the supply of childcare has not kept pace with the demands. Orange County has the third greatest child population in the State. The Childcare Improvement Program addresses measures which not only help to alleviate current pressures but also address the future demands.

It should be noted that although discussion of childcare in this Element highlights opportunities for increased County participation, it is acknowledged that local schools, private agencies and non-profit entities play the primary role in the provision of childcare facilities and services. For example, many of the school districts in Orange County participate to some degree in latch-key or Extended Day programs. These programs have been established to provide a safe, nurturing environment for the care of children before and after school. Additionally, the programs serve as support for the family and the school in guiding

“Education is what survives when what has been learned has been forgotten.”

B.F. Skinner

“The moral test of government is how it treats those who are in the dawn of life, the children; those who are in the twilight of life, the aged; and those who are in the shadows of life, the sick, the needy and the handicapped.”

Hubert Humphrey

children’s growth and development.

Current Conditions

The Land Use Element ensures that childcare facility proposals shall not be precluded from any land use category, but shall be subject to review. The purpose of the Childcare Improvement Policy is to encourage and facilitate provision of childcare facilities to address the growing County demand. Implementation of a Childcare Improvement Policy is essential to achieve a balance between supply and demand of the various types of childcare facilities. Supply and demand for childcare services will be monitored through the Annual Monitoring Report process.

Future Conditions

Due to changing demographic trends, there exists a countywide shortfall in filling childcare demand which is expected to increase significantly over the next decade. In order to address this shortfall, it will be necessary to examine three components of childcare needs. Infant care refers to childcare for children 0-2 years old; preschool care is primarily for children 2-5 years old; and Extended Day Care is for school age children after and/or before normal school hours. Provision of sites for the first two types of childcare should be encouraged in concentrated employment areas for ease of access for working parents (however, some communities may have sufficient demand in residential areas). Extended Day Care

facilities are more appropriate near residential areas and school facilities.

GOALS, OBJECTIVES, AND POLICIES: *Childcare*

Goal 1

To encourage and facilitate provision of childcare facilities to address the growing County demand.

- ***Objective***

- 1.1 To achieve facilitation of childcare services consistent with the Orange County General Plan.

Policies

1. LAND USE COMPATIBILITY

To ensure that childcare facility proposals are compatible with surrounding land uses and to review planned land uses adjacent to facilities for their compatibility with facility operations.

2. INTERAGENCY COOPERATION

To encourage and support a cooperative effort among all agencies towards the implementation of necessary childcare facilities through normal County review procedures.

IMPLEMENTATION PROGRAMS: *Childcare*

1. **CHILDCARE IMPROVEMENT PROGRAM**

Action:

New developments will participate in the Childcare Improvement Program through conditions placed on projects in the unincorporated South County area. Appropriate coordination will also be encouraged between the County, school districts, community programs, and developers. An assessment of the supply and demand for childcare facilities should be monitored through the Annual Monitoring Report process.

Discussion:

The purpose of this program is to ensure that childcare facilities are accommodated in areas of greatest need.

This program also provides coordination between the County and school districts and/or private agencies which provide childcare services. School districts/private agency services include before and after school programs located at local schools.

New or Existing Program: Existing

Implementation Schedule: Ongoing

Responsible Agencies: RDMD

Source of Funds:

- County General Fund
- New Development Exaction
- Private Project Processing Fees

“We are at a point in this nation where most children will spend thousands of hours in day care and pre-school programs before they enter school; an experience that will profoundly shape the quality of their education and their lives.”

Ernest L Boyer, The Carnegie Foundation