III. CIRCULATION ELEMENT

City of San Dimas

General Plan

INTRODUCTION



The Circulation Element has been a mandatory element of the General Plan since 1955. It represents an infrastructure plan concerned with the circulation of people, goods and resources it is closely related to the Land Use Element of the General Plan. The provisions of the Circulation Element support the goals, objectives, policies of the Land Use Element; while the Land Use Element is a reflection of a community's circulation system and the planning proposals for that system.

The provisions of the Circulation Element affect the City's physical, economic and social environment in several ways. The circulation system is one of the chief generators of physical settlement patterns, and its location, design and constituent modes have major effects on air quality, environmental noise, community appearance and other elements of the environment. Economic activities also require circulation for materials, products, or employees. Finally, the circulation system has a major impact on the areas and activities which it serves, on community cohesion, and on the quality of human life. Clearly, it should be a system accessible to all segments of the population, including the disadvantaged, the young, the poor, and elderly, and the handicapped.

The City of San Dimas, located in the easterly sector of Los Angeles County, is served by a network of roadways illustrated in Exhibit III-1. Located inland, access to San Dimas is possible through three primary corridors: Inter-

state 10, Interstate 210, and State Route 30. These corridors traverse San Dimas and surrounding communities in a north-south (Interstate 210) and east-west (Interstate 10 and State Route 30) orientation. The high capacity freeway lengths attract the majority of through traffic and commuter type traffic.

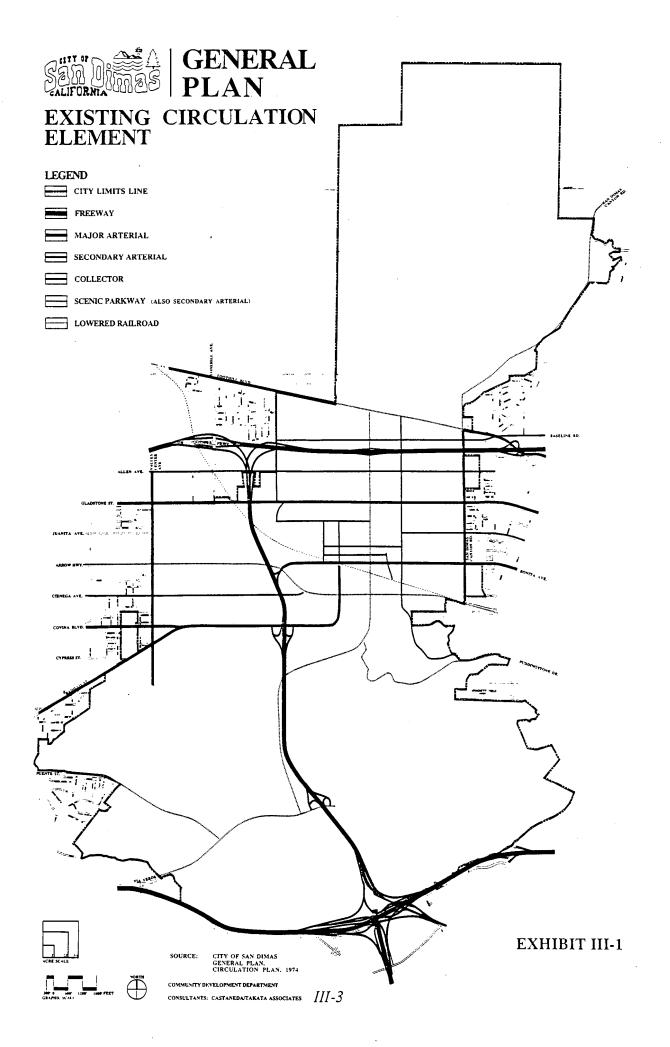
The network affords connections to neighboring cities to the east such as La Verne, Pomona, Claremont, Upland, Ontario, and Chino in the Pomona Valley. In the San Gabriel Valley to the west are Glendora, Covina, West Covina, Irwindale, Baldwin Park, and Azusa.

FINDINGS-

The following findings summarize a comprehensive circulation analysis consisting of interviews, review of existing documents, community attitude survey, community-wide workshops and numerous work sessions with the General Plan Advisory Committee (GPAC) including:

- Regional Coordination, Transit and Commuter Provisions;
- Equestrian/Recreational Trails;
- Bikeway System;
- Fiscal Limitations;
- Jurisdictional Responsibility; and
- Traffic Capacity

These findings form the basis for the updated circulation element's goals, objectives, plan proposals and implementation measures.



Regional Coordination, Transit and Commuter Provisions

San Dimas lies in the eastern portion of Los Angeles County, is an island in its regional setting. The Circulation Element should therefore be coordinated with the regional mobility and congestion management plan to provide regional continuity. Opportunities for commuter rail on the existing railroad rights-of-way could provide alternative means of transportation and potential transit stations and nodes within the City. Additional park and ride facilities could also be added.

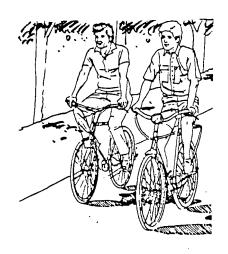
Equestrian and Recreational Trails

The City has developed an extensive system of equestrian trails; the need has basically kept up with the demand. The City has an Equestrian Commission; they review proposed trails and recommend trails and facilities for implementation to the City Council. These trails are primarily used for recreation, but these trails offer an alternative transportation mode to get to work, school and shop.

The community attitude survey and community meetings confirmed the equestrian trail needs have been adequately met. However, in order to meet the need for more bicycle and hiking trails, there are opportunities to link equestrian, bicycle and hiking trails to existing regional trails and to trail systems of the adjacent cities of Covina, Glendora, La Verne and Pomona. (Please see Open Space Element for a detailed discussion regarding equestrian trails.)



There are many equestrian trails in the City



Bicycle trails can connect key areas of the City

Bikeway System

The local bikeway system, including the regional bike paths, could be expanded to serve more of the City. Several loop systems in the downtown core area and connecting links each with Via Verde and Frank G. Bonelli Regional Park would facilitate the bicycle system immensely.

Opportunities for on street bicycle trails can expand the City trail system with minimal capital outlay.

Additional trail opportunities can be implemented by providing joint use trails by combining mountain bike, equestrian and hiking uses. These joint trails shall consider safety of the user as an integral part of the design.

Fiscal Limitations

Many of the improvements included in the Circulation Element will have citywide and/or regional benefit and may need to be constructed prior to the development of the contiguous property. The City should develop alternate funding mechanisms to pay for the construction of circulation improvements included in the Circulation Element. Potential alternatives include allocation of general fund revenues to a Capital Improvement Program, Proposition "A" funds, implementation of an off-site Road Improvement Fee on new developments, or consideration of Benefit Assessment or Mello-Roos Districts to assess all

benefiting property owners for infrastructure improvements.

Jurisdictional Responsibilities

Within the limits of San Dimas, all of the streets/roads fall under the jurisdiction of the City, except State Route 30 and Interstate 210 which are part of the Interstate System and under the jurisdiction of CalTrans. Outside of the City, in the immediately adjacent areas, the street/roads are under the jurisdiction of the City of Glendora, City of Covina, City of Pomona, City of La Verne, and County of Los Angeles.

Traffic Capacity Future Roadway Conditions

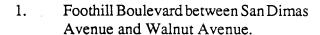
Traffic Capacity measured by Level of Service (LOS). Level of Service is a qualitative measure of roadway and intersection performance stated on a scale from "A" to "F", with LOS "A" representing free flow traffic and LOS "F" representing severe traffic congestion. It is a ratio of traffic volume to the capacity of the roadway, (see Table III-1) and the basis for the traffic analysis.

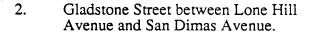
TABLE III-1 LEVEL OF SERVICE DEFINITIONS

		Volume/ Capacity Ratio
LOS A		
I	Free flow conditions	
1	No motorist waits longer than one signal	0-0.60
LOS B		
5	Stable traffic flow	
1	Motorists rarely wait through more than one signal	0-61-0.70
LOS C		
S	Stable and acceptable flow but speed and maneuverability	
S	omewhat restricted due to higher volumes	0.71-0.80
N	Motorists intermittently wait through more than one signal	
(Occasional backups behind left turning vehicles	
LOS D		
I	Extensive delays at times	0.810.90
	Some motorists, especially left turners, may wait through	
	one or more signals, but no excessible backups	
	Maneuverability restricted	
LOS E		
	Very long lines may create lengthy delay, especially for eff turns	0.91-1.00
	Volume at or near capacity	0.91-1.00
	Instable flow	
LOSF	Silvanic flow	
	Backup from locations downstream restrict movement at	
	ntersection approaches	1.01 or above
	Forced flow conditions	
S	Stoppage for long periods due to congestion	
	Volumes drop to zero in extreme cases	

This methodology reflects the fact that most of the City is adequately planned and will remain unchanged during the life of the update General Plan. As noted in the land use element, market analysis conducted for the General Plan update indicates limited potential for additional City-serving commercial due to the small increase in population, current establishments competing for the same market, and already developed character of the commercial areas.

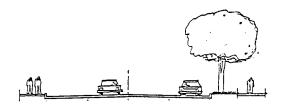
Without improvements, the following roadway segments are estimated to experience traffic demands which exceed existing capacities:





- 3. Bonita Avenue between Cataract Avenue and Walnut Avenue.
- 4. Lone Hill Avenue between Cienega Avenue and Covina Boulevard.
- 5. Cataract Avenue between Bonita Avenue and Arrow Highway.
- 6. San Dimas Avenue between Gladstone Street and Via Verde.

With improvements, the roadway system is generally brought into balance in terms of volume to capacity relationships.



Typical right-of-way illustration sectioncut

Some of the artieral roadways in the City of San Dimas have not been constructed to ultimate cross-section widths based upon existing City and County highway classifications. Roadways that experience volume to capacity ratios greater than 0.70 should be evaluated for improvements, such as, restriping, increased lanes by restriping, left-turn pockets and syncronized signalling to improve traffic conditions. San Dimas Avenue between Gladstone Street and Bonita Avenue has existing volume to capacity ratios of 0.74 and 0.90 and Bonita Avenue between Cataract Avenue and Walnut Avenue has existing volume to capacity ratios of 0.88 to 0.93.

In order to retain neighborhood character, the GPAC was fully supportive of retaining existing street configurations and widths on San Dimas Avenue and Bonita Avenue.

The volume and speed of traffic on residential streets are key determinants in the quality of life residents perceive of their neighborhoods. It is of great importance that the circulation system not only be designated to facilitate the movement of people and goods, and that it be coordinated with regional facilities, but that it be designed to maintain an acceptable quality of life in residential areas.

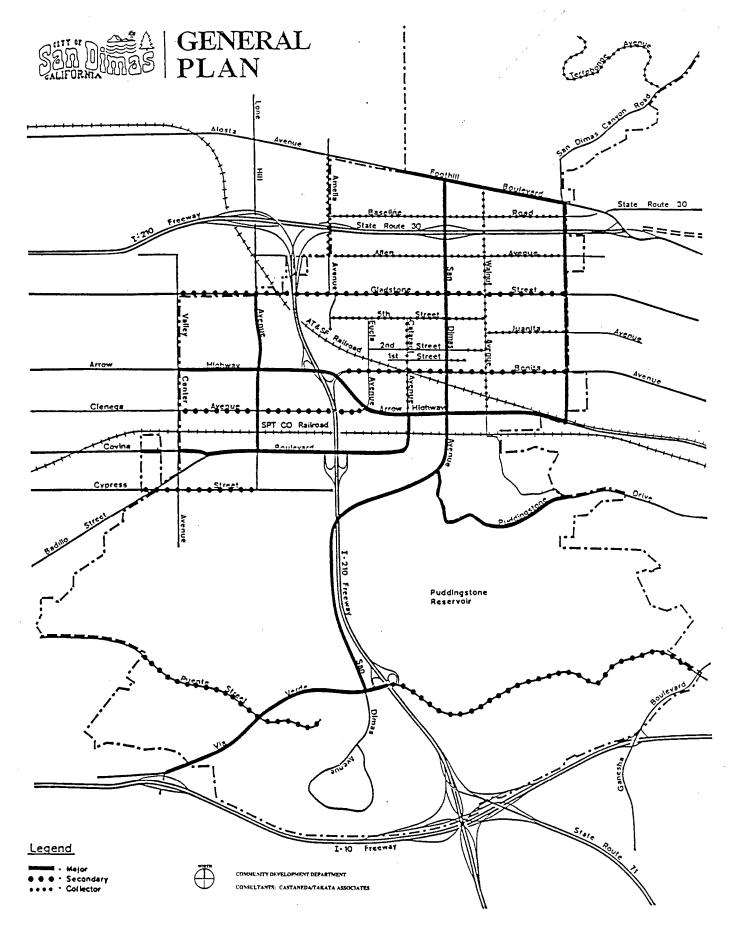
DEVELOPMENT POLICIES

A development policy is a general plan statement that guides action; it includes:

- Goals
- Objectives
- Policies
- Plan Proposals
- Implementation Measures

Please refer to Section I for a detailed definition and explanation of these elements and how these implementation measures are referenced.

These development policies are summarized in a matrix on page III-25.



ROADWAY CLASSIFICATIONS

EXHIBIT III-2

GOALS STATEMENT C-1:

TO PROVIDE A STREET NETWORK TO MOVE PEOPLE AND GOODS SAFELY AND EFFICIENTLY THROUGHOUT THE CITY OF SAN DIMAS

OBJECTIVES:

1.1 Maintain a minimum Level of Service C at all intersections during non-peak hours and Level of Service D (volume/capacity ratio of 0.90 or less) at all intersections during peak hours to ensure that traffic delays are kept to a minimum.

POLICIES:

- 1.1.1 Classified road facilities (see Figure III-2) shall be constructed or upgraded, where feasible, to meet City standards.
- 1.1.2 The City shall require new developments to be served by roads of adequate capacity and design standards to provide reasonable access.
- 1.1.3 The City shall pursue measures to reduce congestion at intersections and maintain levels of service as identified in Objective 1.1.
- 1.1.4 They shall analyze the feasibility of widening San Dimas Avenue and Walnut Avenue at the railroad crossing.

to avoid diversion of through traffic into residential neighborhoods and adequate levels of safety pursuant to

Objective 1.2.

POLICIES: OBJECTIVES: The City shall enforce speed restric-1.2 1.2.1 Establish adequate measures to ensure traffic safety. tions. 1.2.2 The City shall require that future roads and improvements to existing roads be designed to minimize conflicting traffic movements such as turning, curb parking, uncontrolled access, and frequent stops. 1.2.3 The City shall require that pedestrian and vehicular traffic is separated to the maximum feasible extent. 1.3.1 The City shall enforce speed limits 1.3 Preserve the quality of residential neighborhoods by maintaining the of 25 miles per hour in residential areas defined by the California legally enforceable speed limits and by discouraging the flow of truck Vehicle Code as residential neightraffic and through traffic in these borhoods. areas. 1.3.2 The City shall establish weight restrictions where necessary on routes traversing through residential neighborhoods. 1.3.3 The City shall maintain adequate levels of service on major City streets pursuant to Objective 1.1 as measures

OBJECTIVES:

POLICIES:

- 1.4 Establish financing programs which 1.4.1 incorporate adequate funding for the City's roadway system.
- The City shall identify and evaluate potential revenue sources for financing roadway system development and improvement projects.
- 1.4.2 The City shall pursue viable revenue sources to meet the roadway system funding needs.
- 1.4.3 The City shall only implement street widenings when Transportation System Management strategies, such as the removal of on-street parking, lane restriping, etc., have been exhausted.

Plan Proposal: Identify Candidate Transit Stops on the Land Use Plan.

Implementation: a, b, c, d, e, f, q (see page III-22)

GOALS STATEMENT C-2:

TO PROMOTE A PUBLIC TRANSPORTATION SYSTEM THAT IS SAFE, CON-VENIENT, EFFICIENT, AND MEETS THE IDENTIFIED NEEDS OF THE CITY OF SAN DIMAS

OBJECTIVES:

POLICIES:

- 2.1 Require dedication and/or construction of appropriate facilities in support of a public transportation systems noted in the regional mobility plan.
- 2.1.1 The City shall work with the transportation agencies to designate commuter rail stations within the City of San Dimas.
- 2.1.2 The City shall support improved transit services for elderly disabled and other transit dependent persons.
- 2.1.3 The City shall work with all public transportation and coordinating regional agencies and adjacent cities in pursuing additional transit routes within the City, to the City and from the City.
- 2.1.4 The City shall strive for reasonable and practical means through current technology to find transit solutions which are economically feasible not only in terms of ridership fees but in terms of City support for investigation and promotion.
- 2.1.5 Manage truck traffic entering the City by enforcing and posting of designated truck routes and lanes.

Plan Proposal: Identify Candidate Transit Stops on the Land Use Plan.

Implementation: g, h, r (see page III-23)

GOALS STATEMENT C-3:

TO PROMOTE SAFE ALTERNATIVES TO MOTORIZED TRANSPORTATION THAT MEET THE NEEDS OF ALL CITY RESIDENTS.

	OBJECTIVES:		POLICIES:								
3.1	Provide a circulation network that accommodates the safe and efficient movement of cyclists.	3.1.1	The City shall create a system of bicycle routes within the street right-of-way to meet the needs of both the local and commuter cyclist. The routes shall be designed for the safety of the cyclist.								
3.2	Provide a system of sidewalks or pathways in residential and commercial areas that provides a safe environment for pedestrians.		Where possible future developments shall contain an internal system of trails linking schools, shopping centers, and other public facilities with residences.								
		3.2.2	The City shall promote the design and location of future land uses to encourage access by non-automotive means.								
3.3	Provide a circulation network that accommodates the safe and efficient movement of equestrians.	3.3.1	The City shall create a system of recreational trails to meet the needs of both the recreational and commuter equestrian. The trails shall be safe and easily maintained.								
	Plan Proposal: Man the City's existing and proposed recreational trails designating										

Plan Proposal: Map the City's existing and proposed recreational trails designating bicycles, equestrian and hiking trails in the Open Space Element.

Implementation: i, j, k, l, s (see page III-23)

GOALS STATEMENT C-4:

TO PROVIDE AN ADEQUATE SUPPLY OF PRIVATE OFF-STREET AND PUBLIC PARKING TO MEET THE NEEDS OF RESIDENTS AND VISITORS TO THE CITY.

OBJECTIVES:

POLICIES:

- 4.1 Provide joint-use and public parking facilities where needed by special assessment districts or other mechanisms.
- 4.1.1 The City shall enforce its parking ordinance and standard requirements such as necessary design features, the number of required handicapped parking spaces, etc. in conjunction with the parking ordinance.
- 4.1.2 The City shall pursue methods of encouraging the provision of increased on-site parking supply through a range of techniques including redevelopment activities.
- 4.1.3 The City shall require developers to provide adequate on-site parking and/or to contribute to a program to acquire and/or maintain off-site facilities.
- 4.1.4 The City shall encourage joint development of parking facilities to the maximum extent feasible.

Plan Proposal: None

Implementation: m, p (see page III-24)

GOALS STATEMENT C-5:

TO MANAGE PEAK HOUR TRAFFIC FLOW AND CHANGE DEMAND ON THE CIRCULATION SYSTEM TO REDUCE TRAFFIC CONGESTION WHERE NECESSARY AND FEASIBLE.

OBJECTIVES:

POLICIES:

- 5.1 Provide for the development and monitoring of Transportation System Management (TSM) and Travel Demand Management (TDM) programs at locations where trip making is concentrated. See III-2 for definitions of TSM and TDM.
- 5.1.1 The City shall support programs with the objective of increasing the vehicle occupancy rate.
- 5.1.2 The City shall encourage public support for the development of a balanced circulation system through a well organized public relations program.
- 5.1.3 Provide Park and Ride Facilities within the flood control right-of-way (on the south side of San Dimas Canyon Road).

Plan Proposal: None

Implementation: n, o (see Page III-24)

EXHIBIT III-2 TRANSPORTATION SYSTEM MANAGEMENT

The Transportation System Management (TSM) plan is designed to address the shortterm transportation needs of urban areas through more efficient use of existing transportation resources. In developing the Transportation System Management plan, urban areas are expected to consider a wide range of actions of operational, pricing and regulatory nature. Typical examples of Transportation System Management actions are traffic operations improvements; provision of reserved lanes and other forms of preferential treatment for transit and other high occupancy vehicles; graduated parking fees and peak-hour tolls to reduce commuter traffic congestion; reduced transit fares to stimulate off-peak use of transit facilities; incentives for ride sharing; provision of better local collection, distribution and internal circulation services in suburban areas; more flexible and responsive routing, scheduling and dispatching of transit vehicles; greater coordination between feeder and line-haul services; and other measures designed to make a more productive use of existing highway and transit investment.

The problem in many cities is not one of too little capacity but rather one of inefficiently used facilities and services. The objective of Transportation System Management is to make more efficient use of the highways and transit systems already in place, and thus reduce the need for new capital investment and, hopefully, for operating assistance.

TRANSPORTATION DEMAND

MANAGEMENT

TDM is the set of measures designed to reduce the number of trips made by the single occupant vehicle during the peak traffic period.

As the name implies, TDM does not expand the supply of transportation services or infrastructure, but adjusts the demand for various means to get to work. For example, TDM measures can be categorized into three groups:

1) person trip reduction strategies that eliminate trips altogether (e.g., work at home); 2) vehicle trip reduction strategies that accommodate person trips in fewer vehicles (e.g., vanpooling); and 3) peak period modification strategies that move trips out of the most congested periods (e.g., flex-time). Categorized by these groupings, TDM measures include:

TDM Category

Measures

Person Trip Reduction

Compressed Work
Weeks.
Telecommunications
and Work-At-Home.
Non-Work Trip
Reduction.
Walking and Cycling
to Work.

Vehicle Trip Reduction

vanpooling
Vanpooling
Transit and Shuttles
Employer Bus Pass
Subsidies or Sales
Parking Management
Auto Use Restrictions

Peak Period Modifications Flex-Time User Fees

Other supportive TDM strategies include designing new employment sites to encourage alternative transportation modes, such as, car pools, van pools, transit and bicycling commuting. Also provision of on site amenities, such as, on site cafeterias and automated teller machines can reduce automobile trips.

Plan Proposals

- A: Identify candidate transit stops on the Land Use Plan.
- B: Designate the Packing House on the M&E site as a potential transit stop.
- C: Map the City's existing and proposed recreational trails designating bicycle, equestrian and hiking trails in the Open Space Element.

Implementation:

- a: The City shall require an adequate evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, the City shall require the implementation of appropriate mitigation measures prior to or in conjunction with project development.
- b: The City shall prohibit parking on Major roadways to increase the traffic capacity of these roadways.
- c: The City shall identify the major intersections requiring special design treatment to increase their vehicular capacity.
- d: The City shall properly interconnect traffic signals in order to maximize progression and minimize the acceleration/deceleration that produces significantly higher vehicular emission and noise levels.

- e: The City shall ensure that the development of new private driveways do not pose significant traffic conflicts for major roadways and residential collector roads.
- f: The City shall maintain an ongoing monitoring program to ensure the safety of the City's roadway system.
- g: The City shall review site plans to determine if pedestrian access to public transit stops will be direct and convenient.
- h: The City shall require construction of bus turnouts adjacent to new developments where transit demand levels may be sufficient in the future to warrant such accommodations.
- i: Adequate traffic control devices shall be provided for bicycle and equestrian crossings.
- j: The City shall conduct a public information program to increase public awareness of bicycle, equestrian and hiking safety.
- k: The City shall review site plans to determine if shopping areas are designed for pedestrian access.
- l: The City shall require the installation of wheelchair ramps on all new sidewalks and shall encourage their installation in older neighborhoods.

- m: The City shall work cooperatively with developers and the business community to develop funding mechanisms for the construction of future parking facilities.
- n: The City shall require the development and implementation of Transportation Management Plans for key industrial and office areas. These plans shall be designed to reduce peak hour traffic and vehicle miles of travel.
- o: The City shall encourage the development of park-n-ride lots near freeway interchanges in conjunction with CalTrans policies.
- p: Enforce and periodically update the zoning ordinance which specifies minimum parking requirements for various types of land use.
- q. Encourage an interchange on Route 30 in La Verne at Foothill Boulevard.
- r. Reevaluate truck routes and update to today's standards for larger trucks and pavement sections.
- s. When development opportunities present themselves, the City shall require the developer to contribute to the construction of a north-south equestrian trail link.

Circulation Element - Goals / Implementation Matrix

Goals / Implementation	a	ь	С	d	е	f	g	h	i	j	k	I	m	n	0	р	q	r	s
C-1. Provide a street network to move people and goods safely and efficiently throughout the City of San Dimas.			×			11													
C-2. Promote a public transportation system that is safe, convenient, efficient, and meets the identified needs of the City of San Dimas.			:				I	=										=	
C-3. Promote safe alternatives to motorized transportation that meets the needs of all City residents.		,						·		=									
C-4. Provide an adequate supply of private off- street and public parking to meet the needs of residents and visitors to the City.													=						
C-5. Manage peak hour traffic flow and change demand on the circulation system to reduce traffic congestion where necessary and feasible.														Ħ		-			