3.0

CIRCULATION ELEMENT

ENVIRONMENTAL SETTINGS

3.1 INTRODUCTION

This section discusses the existing circulation system in the Delano area and reviews the current plans and related issues that affect the Circulation Element. Also included is an analysis of the operating condition of the current circulation system along with identification of traffic problems within the community. Other alternative transportation modes including transit, aviation, rail, bicycle and pedestrian, truck, transportation management systems, goods movement, and parking are discussed.

3.2 PURPOSE

The Circulation Element was first required by state law in 1955. Since then, transportation technology and needs in California have changed greatly, with the emphasis today on the development of a balanced, multi-modal transportation system. According to state law, the policies and plan proposals of the Circulation Element should:

- Coordinate the transportation and circulation system with planned land uses;
- Promote the efficient transport of goods and the safe and effective movement of all segments of the population;
- Make efficient use of the existing transportation facilities; and
- Protect environmental quality and promote the wise and equitable use of economic and natural resources.

The Circulation Element should cover the following to the extent that they pertain to the community:

- Streets and highways;
- Parking provisions;

- Transit and paratransit;
- Railroads;
- Air transportation; and
- Bicycle and pedestrian facilities.

The policies and plan proposals of the Circulation Element should be coordinated closely with those of the Land Use, Housing, Noise, and Community Design Elements.

3.3 AUTHORIZATION

Government Code Section 65302(b) states the following as the mandatory requirement for General Plan Circulation Elements:

> *"A Circulation Element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element of the plan."*

3.4 EXISTING TRANSPORTATION AND CIRCULATION

3.4.2 Existing Plans and Elements

The Delano Circulation Element has been prepared to be consistent with the other plans or elements currently in effect. This consistency is a requirement of all elements of the community's General Plan. The following are the plans that have been used in the development of this Element.

- City of Delano, Final Transit Development Plan, prepared by Max Bacerra & Associates, June 1997
- City of Delano, Municipal Airport Master Plan Update, prepared by Aries Consultants Limited, October 1992
- City of Delano, Subdivision Standards
- City of Delano, Enter Prior Zone Boundary Map
- Downtown Delano Circulation Study, prepared by QUAD Consultants, May 1994
- Kern Council of Governments, Regional Transportation Plan, 2005
- Peters Engineering Group, City of Delano Circulation Element Supplement, May 17, 2005.

3.4.3 Streets and Highways

This sub-section describes the existing conditions of the community's street and highway network. Also included is a discussion of functional classification, street capacity, and Level of Service. The sub-section will close with an assessment of the system's existing operating conditions and problems.

Functional Classification

A community's street system is composed of a wide range of facilities. Street and highway facilities serve two basic functions, mobility and land access. Mobility means the provision for the movement of motorists between their points of interest or from one place to another. Land access means providing for the parking, storage or driveway access at the origin or destination of a person's trip.

Each facility type in a circulation element is designed to emphasize to varying degrees the mobility or land access function. Some facilities emphasize land access over mobility, while other streets emphasize mobility over land access. The following hierarchy delineates the typical function of the facilities used in this circulation element.

Table 3.1
Functional Classification

Facility Type	Emphasis
Freeway	Mobility with no direct land access and access limited to interchanges.
Expressway	Mobility with more frequent access to arterials but no direct land access.
Major Arterial	Mobility with connections to freeways, arterials and other collector streets, and limited access to traffic generators.
Arterial	Mobility with connections to other arterials, collectors, some local streets and major traffic generators.
Collector	Connects local streets with arterials, also provides access to adjacent land uses; balances mobility and access.
Local	Access to adjacent land uses only; no mobility function.

Freeways

Table 3.1 shows that freeways are designed to provide for higher volumes of traffic at higher speeds, over longer distances. Greater volumes and speeds require limited access, which is generally regulated by interchanges spaced at a minimum of one mile in urban areas, and two miles in rural areas. Within the City of Delano, interchanges between Garces and Cecil do not meet this standard.

Expressways

Expressways, like Freeways, provide for higher traffic volumes, at higher speeds and longer travel distances. Access is provided via at-grade intersections, generally spaced no closer than one-half mile apart. Expressways are intended to provide a high level of capacity in selected high volume corridors.

Major Arterials

Major Arterials provide access to major travel generators and are typically designed with six lanes for through traffic, a parking/transit/right turn lane, and a median with dual left turn lanes at intersections. Access to adjacent land uses is limited. Arterials provide for moderate volumes at moderate speeds and distances, with access to other arterials and collectors at half-mile intervals, and access to local streets and collectors at quarter mile intervals.

Arterials

Arterials are intended to provide the majority of a community's traffic carrying capacity. Arterials provide connections via interchanges to the freeway system and to other arterials and collectors via intersections. Arterials, more than any other type of street, illustrate the conflicts which may arise between the provision of access and mobility. Typically, arterials are designed with two through lanes in each direction, a median with a left turn lane, and transit stop/right turn lanes on each side.

Collectors

Collectors are intended to provide connectivity between local streets and the arterial street system. Collectors also provide access to major activity centers (commercial or employment) and some abutting land uses. Collector streets are typically designed with one through lane in each direction, a left turn lane, and parking/right turn lane/transit stop areas on both sides.

Local Streets

Local Streets are intended to provide direct access to abutting land uses. Movement of traffic is the secondary purpose for local streets. Local streets should not carry through traffic. Local streets also serve as easements for utilities. Typically, these streets are designed with one lane in each direction and parking is provided on both sides.

The proper designation of the community's street network can assist in the development of an efficient system for both mobility and access. The proper balance not only ensures that a street is sized to function properly, but it allows a community to properly allocate its resources to the streets needing additional capacity or improvements. A properly designed system will also prevent the use of local streets for through trips or the overburdening of freeways, expressways, and arterials with traffic.

Problems begin to occur in a system when a street that is designated to provide mobility is asked to provide land access. Land access typically requires driveways and on-street parking to adequately address the land access function. When many access points or on-street parking is provided, traffic

conflicts occur and the facility loses its ability to provide for mobility. Likewise, when a street designed for access is asked to provide for mobility, conflicts occur. This generally happens on arterial and collector streets that were not developed with adequate access control or on local streets that are asked to carry through traffic.

Existing Street System

The following describes the existing circulation system for the community.

State Highways and Freeways

State Route (SR) 99 runs in a north-south direction through the center of the City. SR 99 is a major freeway, which connects Northern California and Southern California. The facility provides for regional movement and inter-regional access through the Central Valley from Bakersfield to Sacramento. The freeway is a four lane divided facility that is currently being upgraded to a six lane, divided freeway. A number of the interchanges along State Route 99, including Garces, Cecil, Fourth, Avenue, Eleventh Avenue, and County Line Road are substandard, and in need of improvements.

SR 155 is a two lane, undivided highway in the study area. In the City of Delano, SR 155 is comprised of a two-way couplet that runs north and south fronting SR 99 between the SR 99 at 9th Avenue ramps and Garces Highway. The west portion of the couplet is designated as Ellington Street and the east portion of the couplet is designated as Fremont Street in the City of Delano. Both portions of the couplet are designated as collectors. SR 155 also runs in an east-west fashion through the City of Delano east of SR 99. This portion of SR 155 is designated as Garces Highway and is classified as a major arterial. SR 155 connects to the Sequoia National Forest entrance east of the City.

Arterials

There are six arterials designated in the Delano Urban Area. Generally, arterial streets are developed with right-of-way widths of 90' - 110' depending on medians and turn lane requirements. Delano does not have an arterial developed to full arterial standards, which is four lanes with a center median. Most of the existing arterials in the community are two lanes in each direction and with some left turn lanes at signalized intersections.

County Line Road, Cecil Avenue, Garces Highway, and a portion of Woollomes Avenue are the City's east-west arterials. Cecil Avenue and Garces Highway are the primary east-west arterials servicing the City. The majority of Garces Highway is a two lane undivided facility. The majority of Cecil Avenue is a four lane undivided facility where the street passes through the City. The area between Cecil Avenue and Garces Highway, east of SR 99 is considered to be the City's central business district.

The north-south arterials in the community are Albany Street, High Street, and Browning Road, which are all located within the City limits. Albany Street delineates the City's western boundary. High Street runs parallel to SR 99 and serves as the primary north-south arterial in the central City area. Albany Street, High Street, and Browning Road are two lane, undivided facilities. Browning Road marks the current eastern boundary of the City limits.

Arterial Streets

North-South	East-West
Albany Street/ Stradley Road	Cecil Avenue
Browning Road	County Line Road
High Street	Garces Highway
Hiett Avenue	Woollomes Avenue (portion)
Randolph Street	Schuster Road

Collectors

All or portions of the following streets are currently designated as collector streets in the Delano area. Collectors are currently constructed on 60' - 80' right-of-ways with one lane in each direction and parking on both sides.

Collector Streets

North-South	East-West
Princeton Street	13th Avenue
Ellington Street	9th Avenue
Fremont Street	11th Avenue
Garzoli Avenue	20th Avenue
Girard Street	Woollomes Avenue (portion)
Lexington Street	
Norwalk Street	
Clinton Street	

Local Streets

The remainder of the streets in the community are classified as local. Local streets are typically 50' - 60' right-of-way with two lanes and parking on each side.

Gateways and Scenic Corridors

There are no designated scenic corridors identified in Delano. Gateway streets have been designated for Fremont Street, High Street, Cecil Avenue, Glenwood, Ellington Street, Garces Highway, County Line Road, Browning Road, Albany Street, and Woollomes Avenue.

Roads Of Regional Significance

Regional access to the Delano area exists through freeways and rural roadways. Roadways that provide regional access to the community of Delano include Albany Street, Browning Road, Cecil

Avenue, Garces Highway (SR 155 east of SR 99), and State Routes 43, 46, and 99. Figure 3-1 identifies the Regional Roadway System for the City of Delano area.

Albany Street is a north-south arterial on the western edge of the Delano City limits. It provides access to McFarland to the south. Albany Street is a two lane undivided facility. Browning Road is also a north-south arterial located east of Delano. Browning Road extends south to McFarland and provides access to SR 99 in McFarland. Browning is a two lane undivided road. Cecil Avenue is an east-west facility running through the center of Delano that connects to SR 43 to the west and rural areas to the east. It is a 2-4 lane undivided facility from Albany to Randolph and a two lane undivided facility in the rural areas.

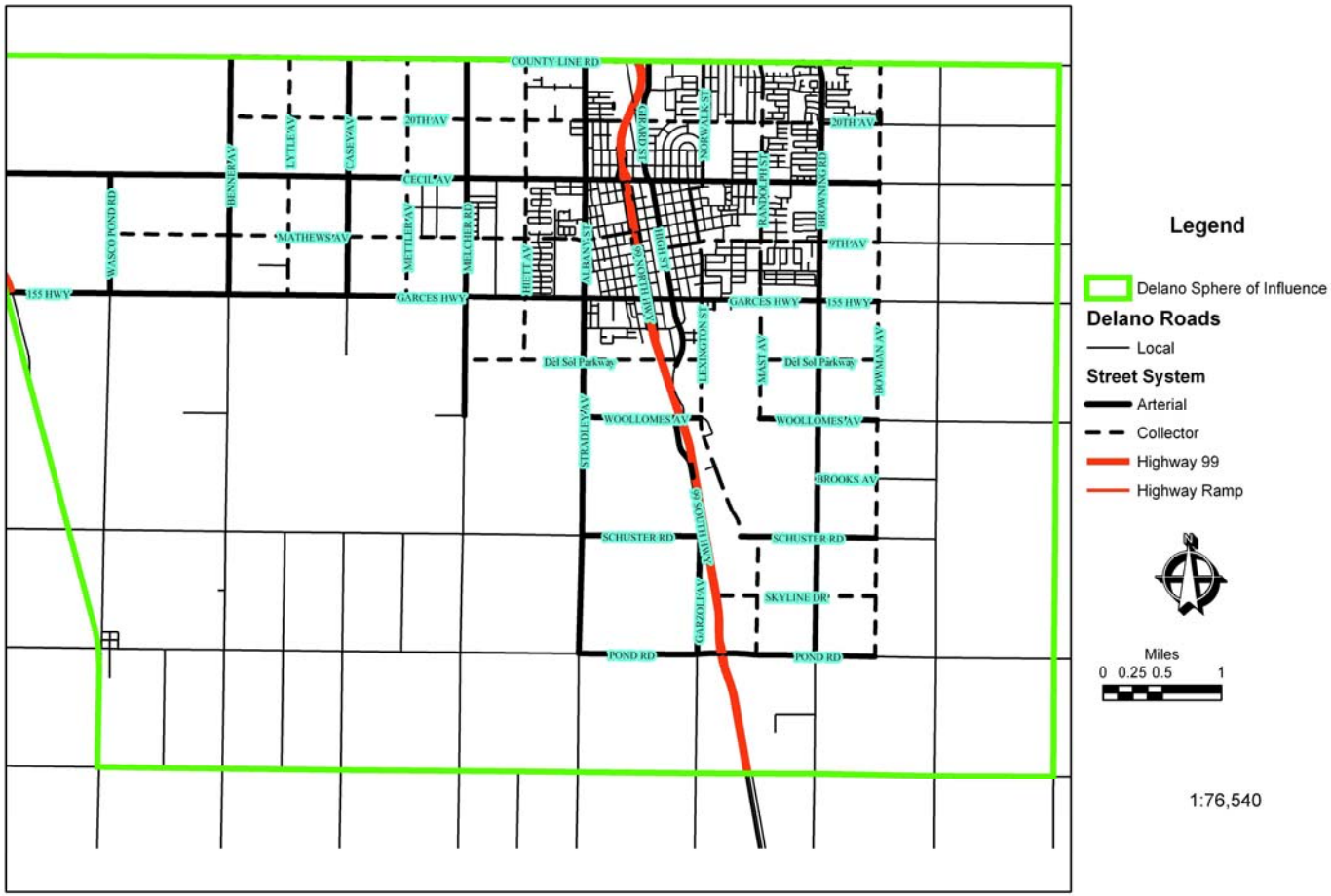
Garces Highway, designated as SR 155 from SR 99 east, is also an east-west facility that is located to the south of Delano. Garces Highway extends to Corcoran Road and SR 43 to the west and to the Porterville Highway (SR 65) and the Sequoia National Forest to the east. This is a two lane undivided facility.

SR 43 is a north-south highway west of Delano. This highway provides access from Fresno and Tulare Counties to the north, and Kern County to the south. SR 43 is a two lane undivided facility. SR 46 is an east-west highway and is located south of Delano. SR 46 originates in the town of Famoso, at SR 99, and continues west to SR 1 along the Pacific Ocean's coast. SR 99 is a north-south freeway that runs through the center of Delano. This major regional facility provides access to Northern and Southern California. SR 99 is a four lane divided highway.

Existing Traffic Conditions

The existing traffic conditions were evaluated to develop a base line, or beginning point, for understanding Delano's existing street network. This analysis was completed for freeways, selected arterials and collector streets. The analysis focused on three specific issues: street capacity, classified system pattern and connectivity.

The evaluation of street capacity was the central focus of the analysis process. The capacity of a street or highway is affected by a number of factors. The number of lanes; the location and spacing of intersections; the type of traffic control devices used (stop signs, traffic signs, etc.); the traffic signal timing plan; the use of on-street parking; the percentage of trucks; the level of transit activity; and the number and location of adjacent driveways all have an effect on the carrying capacity of a particular street or highway segment. Table 3-2 defines carrying capacities of the street facilities in the community. Each facility is presented with a different number of lanes and with different geometric characteristics. The capacity shown for each facility represents the theoretical capacity of the street at LOS "E."



Circulation Plan
City of Delano

Fig.3-1

Table 3-2
Capacity of Functionally Classified System

Facility	Geometrics	LOS "E" Theoretical Capacity [1]	LOS "C" Theoretical Capacity
Freeway	4 Lane	63,800	49,600
	6 Lane	95,700	74,400
Major Arterial	4 Lane-divided	29,400	22,800
	6 Lane-divided	44,500	34,600
Arterial	2 Lane-divided	13,800	10,700
	4 Lane-divided	28,800	22,400
	6 Lane-divided	43,700	34,000
	2 Lane-undivided	13,100	10,200
	4 Lane-undivided	23,000	17,900
	2 Lane with lefts	13,400[2]	10,400
	4 Lane with lefts	27,360	21,300
Collector	2 Lane-divided	11,100	8,600
	4 Lane-divided	23,000	17,900
	2 Lane-undivided	10,600	8,200
	4 Lane-undivided	18,400	14,300
	2 Lane with lefts	10,800[2]	8,400
	4 Lane with lefts	21,800	17,000
Local		5,000[3]	5,000

Notes:

1. Daily two-way traffic volumes representing 99% of the street's capacity
2. Includes left turn pockets and two-way continuous left turn lanes estimated from 2 lane divided and 2 lane undivided capacities
3. Estimated capacity for local streets

Source: Florida's Level of Service Standards and Guidelines Manual for Planning, Florida's Department of Transportation, 1992.

The table delineates the capacities of the various street segments to be evaluated. The capacity is defined as the number of cars (vehicles) per lane that pass a specific point during a twenty-four hour period.

The evaluation of a street's capacity introduces the concept of level of service (LOS), which is defined as a qualitative measure describing operational conditions within a traffic stream, and the perception of these conditions by motorists. A specific level of service definition generally describes these conditions in terms of factors such as speed and travel time; freedom to maneuver; traffic interruptions; comfort and convenience; and safety. There are six LOS designations ranging from "A" to "F," with "A" representing the best operating condition and "F" representing the worst. At LOS "E," the street begins to operate less efficiently and the driver is subject to excessive delays.

The Level of Service for each critical street segment has been calculated using volume capacities from the Florida Department of Transportation's *Florida's Level of Service Standards and Guidelines Manual for Planning*, April 1992 (Florida Tables). This manual provides a method for evaluating freeways, expressways, arterials, and collectors. This method was selected for this analysis because of its intended use in planning studies and its consistency with adopted procedures for the Kern Council of Governments (Kern COG).

The Florida Tables are generalized planning tables based on the definitions and measurement techniques of the 1985 Highway Capacity Manual. This methodology incorporates signalization characteristics (number of signals per mile) and roadway characteristics (number of lanes, left-turn pockets, divided/undivided) into the LOS determination. The Florida Tables separate facility types into freeways, state arterials with both interrupted (signalized) and uninterrupted (non-signalized) flow, and non-state roadways. Within these various classifications, the facilities are separated by number of lanes and divided versus undivided. There are also adjustments for facility types not given in the tables. For each facility type under each classification are levels of service A through F with corresponding traffic volumes. These volumes are the maximum amount of traffic that a given facility with given characteristics can carry and maintain a given LOS. This maximum volume per LOS is also called the capacity of the facility. Appendix D contains copies of the Florida Level of Service Tables used in evaluating the Delano circulation system.

As can be seen on the Florida Tables shown in Appendix D, higher level of service values may not be achieved on interrupted flow facilities even with extremely low traffic volumes. As stated in the Florida Tables manual, "these higher quality levels of service cannot be achieved primarily because the signalization characteristics simply will not allow vehicles to attain relatively high average travel speeds." Therefore, when looking at the circulation tables in the General Plan and it's EIR, streets labeled as collectors will never attain LOS "A" and "B." Likewise, arterials with a higher number of signals will never attain LOS "A".

Existing Traffic Volumes

To complete the assessment of existing 1997 traffic conditions in Delano, the Kern COG traffic model, the CalTrans 1995 Traffic Volumes Report, and 1997 count data was used. Kern COG's model has the capabilities to estimate traffic volumes for any given roadway based on actual counts taken in recent years. The existing conditions assessment includes City streets and County roads. Traffic volumes shown in Figure 3-2 reflect average daily traffic in vehicles per day.

Existing Level of Service

The traffic volumes delineated on the following page were used to evaluate the operating conditions of the existing street and highway system. The analysis was based on the relation of the existing traffic volume of the street to the current maximum capacity volume of the street.

Traffic Volumes
City of Delano

Fig. 3-2

The City has set its level of service standard at LOS "C," except at freeway interchanges and other high volume locations, where LOS "D" is used. CalTrans adopted level of service standard is LOS "D."

Table 3-3 lists the analyzed streets by segment. A brief description of the existing geometrics (number of lanes) and the facility type is provided. The existing traffic volumes shown in Table 3-2 are either 1997 counts supplied by the city, 1998 counts supplied by the City's consultant ATE, estimated from the 1997 Kern COG model, special speed/volume counts prepared by the City Engineer, or counts taken from the CalTrans Count Book. The volumes that are actual counts or were taken from the CalTrans Count Book are noted in Table 3-3. The current theoretical capacity, LOS "E," of the specific segment is given and was developed based on the geometrics of the facility in conjunction with the Florida Tables. The current level of service shown was developed from the traffic volume information, the geometrics and the Florida Tables.

The result of the existing level of service analysis shows that all of the major streets in the community are currently operating at LOS "C" or above. There is a significant factor of note with regard to the usage of the Kern COG projections to describe existing conditions. In at least several significant circumstances (Cecil, Girard and Garces which have new traffic counts), the Kern COG traffic model significantly under-projects traffic volumes on major roadways. Therefore the data in Table 3-3 should be used to illustrate the pattern of traffic in the community and these projections should not be construed as actual traffic volumes.

Table 3-3
EXISTING CIRCULATION SYSTEM

Street	Segment	Existing Facility	Geometrics Median	Facility Type	Existing Volume	Level of Service
Wasco-Pond Road	Cecil Ave to Garces Highway	2 lane	Undivided	Unclassified	N/A	
	Garces Highway to Pond	2 lane	Undivided	Unclassified	N/A	
	Pond Road to Peterson	2 lane	Undivided	Unclassified	N/A	
	Peterson to Elmo Highway	2 lane	Undivided	Unclassified	N/A	
Casey Avenue	County Line to Cecil	2 lane	Undivided	Unclassified	N/A	
Melcher Road	County Line to Cecil	2 lane	Undivided	Unclassified	550[E]	C[F]
	Cecil to Garces Highway	2 lane	Undivided	Unclassified	550[E]	C[F]
	Garces Highway to Hart	2 lane	Undivided	Unclassified	N/A	
Albany Street	County Line to Cecil	2 lane	Undivided	Arterial	350[E]	A
(Stradley)	Cecil to Garces Highway	2 lane	Undivided	Arterial	580[E]	A
	Garces Highway to Woollomes	2 lane	Undivided	Arterial	1,800[E]	A
	Woollomes to Hart	2 lane	Undivided	Arterial	N/A	
	Hart to Pond	2 lane	Undivided	Arterial	N/A	
Dover Place	Garces Highway to Woollomes	2 lane	Undivided	Collector	840	C[F]
Ellington Street	Cecil to 11th	2 lane	Undivided	Collector	3,300[E]	C[F]
(SR 155)	11th to Garces Highway	2 lane	Undivided	Collector	3,420[A]	C[F]
	Garces Highway to 1st	2 lane	Undivided	Collector	7,300[E]	C[F]
Garzoli Avenue	Woollomes to Hart	2 lane	Undivided	Collector	1,400[A]	C[F]
	Hart to Pond	2 lane	Undivided	Collector	N/A	
SR 99	Ave 16 to County Line Road	4 lane	Divided	Freeway	38,000[B]	C
	County Line Road to Cecil	4 lane	Divided	Freeway	38,000[B]	C
	Cecil to Garces Highway	4 lane	Divided	Freeway	33,500[B]	B
	Garces Highway to Woollomes	4 lane	Divided	Freeway	35,500[B]	C
	Woollomes to Pond	4 lane	Divided	Freeway	35,500[B]	C
Fremont Street	Cecil to 11th	2 lane	Undivided	Collector	3,500[E]	C[F]

Table 3-3
EXISTING CIRCULATION SYSTEM

Street	Segment	Existing Facility	Geometrics Median	Facility Type	Existing Volume	Level of Service
(SR 155)	11th to Garces Highway	2 lane	Undivided	Collector	2,450[C]	C[F]
	Garces Highway to First	2 lane	Undivided	Collector	1,550 [C]	C[F]
High Street	County Line to Cecil	2 lane	Undivided	Arterial	12,200[C]	C
	Cecil to Garces Highway	2 lane	Undivided	Arterial	700 [C]	B
	Garces Highway to Woollomes	2 lane	Undivided	Arterial	5,200 [C]	B
Girard Street	County Line Road to High Street	2 lane	Undivided	Collector	9,300[C]	D
Lexington Street	Cecil to Garces Highway	2 lane	Undivided	Collector	4,900 [C]	C[F]
	Garces Highway to Woollomes	4 lane	Undivided	Collector	4,600 [C]	C[F]
Norwalk Street	County Line Road to Cecil	2 lane	Undivided	Collector	1,000[E]	C[F]
Randolph Street	County Line to Cecil	2 lane	Undivided W/ Left	Collector	1,200[E]	C[F]
	Cecil to Garces Highway	2 lane	Undivided W/ Left	Collector	3,400 [C]	C[F]
	Garces Highway to Woollomes	2 lane	Undivided	Collector	1,120 [C]	C[F]
Browning Road	County Line to Cecil	2 lane	Undivided	Arterial	1,800[A]	A
	Cecil to Garces Highway	2 lane	Undivided	Arterial	2,300[A]	A
	Garces Highway to Woollomes	2 lane	Undivided	Arterial	3,700[E]	B
Driver Road	County Line to Cecil	2 lane	Undivided	Unclassified	N/A	
	Cecil to Garces	2 lane	Undivided	Unclassified	N/A	
	Garces Highway to Woollomes	2 lane	Undivided	Unclassified	N/A	
	Woollomes to Pond	2 lane	Undivided	Unclassified	N/A	
Zachary Avenue	County Line to Cecil	2 lane	Undivided	Unclassified	N/A	
	Cecil to Garces Highway	2 lane	Undivided	Unclassified	N/A	
	Garces Highway to Woollomes	2 lane	Undivided	Unclassified	N/A	
	Woollomes to Pond	2 lane	Undivided	Unclassified	N/A	
County Line Road	Mettler to SR 99	2 lane	Undivided	Arterial	1,100[E]	A

Table 3-3
EXISTING CIRCULATION SYSTEM

Street	Segment	Existing Facility	Geometrics Median	Facility Type	Existing Volume	Level of Service
	SR 99 to Girard	2 lane	Undivided	Arterial	3,100[E]	B
	Girard to Browning	2 lane	Undivided W/Left	Arterial	2,600[E]	A
	Browning to Driver	2 lane	Undivided	Arterial	400[E]	A
	Driver to Zachary	2 lane	Undivided	Arterial	400[E]	A
20th Avenue	Girard Street to Browning Road	2 lane	Undivided	Collector	1,100[E]	C[F]
Cecil Avenue	Wasco-Pond to Casey	2 lane	Undivided	Arterial	N/A	
	Casey to Melcher	2 lane	Undivided	Arterial	N/A	
	Melcher to Albany	2 lane	Undivided.	Arterial	N/A	
	Albany to Lexington	4 lane	Undivided. W/Left	Arterial	15,700[C]	B
	Lexington to Browning	4 lane	Undivided	Arterial	8,700[C]	A
	Browning to Driver	2 lane	Undivided	Arterial	N/A	
	Driver to Zachary	2 lane	Undivided	Arterial	N/A	
11th Avenue	Albany to Lexington	2 lane	Undivided	Collector	2,900[E]	C[F]
	Lexington to Randolph	2 lane	Undivided	Collector	N/A	
9th Avenue	Albany to Lexington	2 lane	Undivided	Collector	630[A]	C[F]
	Lexington to Browning	2 lane	Undivided	Collector	2,600[E]	C[F]
Garces Highway	Wasco-Pond to Casey	2 lane	Undivided	Arterial	1,300[E]	A
	Casey to Melcher	2 lane	Undivided	Arterial	1,300[E]	A
	Melcher to Albany	2 lane	Undivided	Arterial	910[E]	A
	Albany to Lexington[D]	2 lane	Undivided	Arterial	10,800[B]	C
	Lexington to Browning[D]	2 lane	Undivided	Arterial	9,100[C]	C
	Browning to Driver	2 lane	Undivided	Arterial	2,300[B]	A
	Driver to Zachary	2 lane	Undivided	Arterial	1,500[B]	A
1st Avenue	Dover Place to Ellington	2 lane	Undivided	Collector	N/A	
	Fremont to High	4 lane	Undivided	Collector	N/A	

Table 3-3
EXISTING CIRCULATION SYSTEM

Street	Segment	Existing Facility	Geometrics Median	Facility Type	Existing Volume	Level of Service
Woollomes Ave	Albany to Lexington	2 lane	Undivided	Arterial	7,600[E]	B
	Randolph to Driver	2 lane	Undivided	Collector	630[E]	C[F]
	Driver to Zachary	2 lane	Undivided	Collector	N/A	
Pond Road	Wasco-Pond to Stradley	2 lane	Undivided	Unclassified	3,800[E]	C[F]
	Stradley to Lexington	2 lane	Undivided	Unclassified	4,000[E]	C[F]
	Lexington to Browning	2 lane	Undivided	Unclassified	1,800[E]	C[F]
	Browning to Driver	2 lane	Undivided	Unclassified	1,800[E]	C[F]
	Driver to Zachary	2 lane	Undivided	Unclassified	1,800[E]	C[F]
Peterson Road	Wasco-Pond to SR 99	2 lane	Undivided	Unclassified	N/A	
	SR 99 to Eastern Boundary	2 lane	Undivided	Unclassified	N/A	

Notes:

[A] 1997 City count
[B] 1995 CalTrans Count Book
[C] 1998 ATE count
[D] 1998 ATE count data not yet available for these locations
[E] Estimated from Kern COG 1997 Model data
[F] LOS "A" and "B" not achievable. See explanation under Plan Section 2, Existing Traffic Conditions.
[G] LOS "B" not achievable. See explanation under Plan Section 2, Existing Traffic Conditions.

Existing Classified System Pattern

The pattern and spacing of a community's street system are as important as the proper designation of the functional classification of the streets. Arterial streets located approximately every mile with collector streets located between the arterials at approximately half-mile intervals are ideal for communities like Delano that have developed their circulation system based on the automobile.

This pattern accomplishes several goals. It balances the system by providing for mobility with arterials, thus not committing the community to an over expenditure of resources. It provides for movement within an area with collectors at half-mile intervals. It protects neighborhoods from through traffic by isolating local streets and promoting through movements on collectors and arterials, which are designed to accommodate these trips. Finally, it complements the Land Use Element by providing locations along arterials and collectors for traffic generating activities. The following sections discuss the relationship of Delano's existing street pattern to the pattern described above.

Regional access to the Delano area is directly provided from SR 99, which runs through the downtown area. As previously identified, Albany Street, Browning Road, Cecil Avenue, Garces Highway (SR 155 east of SR 99), and SR 43 and 46 also provide regional access to the community. Roadways providing regional access to Delano are either two lane undivided facilities which are rural in nature or a four lane divided freeway.

One-mile spacing between the existing arterials is proving to be ideal for the type and intensity of development in the community. Typical of rural cities in the Central Valley, Delano's collector street system has not been fully developed. Overall, collector streets in Delano generally balance their mobility and access functions adequately. In the core area of town, the collectors are through streets such as 9th Avenue and 11th Avenue, which run through the central business district.

Connectivity

The success of a community's street system is greatly affected by the concept of connectivity. Connectivity describes the continuity of a street system. Typically, street systems develop over a long period of time and can develop missing links in the network. These missing links can create both local and community wide problems as the traffic that would logically use the missing link must use another street to complete a trip. Delano's street system has developed with some connectivity problems, which center around the Union Pacific Railroad. The railroad bisects several streets between Cecil Avenue and Garces Highway in the downtown area. The streets not providing connectivity due to the railroad are 6th, 7th, 8th\, 9th, 10th, 12th and 14th Avenues.

Other than these downtown streets, Delano has developed its existing street system with excellent connectivity. Most of the arterials are continuous within the community and the expansion of these facilities to provide for future development can be accommodated.

Truck Routes

The City of Delano does not have any designated truck routes within the City. At this time, trucks are allowed on all street segments within the City. A truck parking ordinance is in effect which generally identifies restricted overnight truck parking areas.

According to City staff, most of the trucking activity occurs at the east end of the City. Browning and Randolph Avenues have an abundance of heavy truck traffic from the outlying County areas. In addition, the SR 99/Woollomes off ramp has a high level of truck activity.

Transportation System Management

Transportation System Management (TSM) is defined as the use of various traffic and demand management strategies to maximize the use and capacity of the existing transportation system. The goal of transportation management is to use low cost solutions to congestion problems delaying the need for large capital outlays. As traffic and parking demand continues to increase in Delano, TSM strategies can be used to assist in mitigating the associated problems. Traditional transportation system management strategies include, but are not limited to:

- the timing of traffic signals to more efficiently respond to traffic demand;
- the striping of existing streets to include exclusive turn lanes or additional through lanes to maximize the carrying capacity of the street;
- the use of flexible work schedules to shift or lengthen the peak hour of travel;
- development of carpools and ridesharing programs to increase the number of people per vehicle; and
- the use of public and private transit to reduce the number of vehicles using the streets during the peak hour.

Goods Movement

The movement of goods and services is a primary function of any circulation system. The movement of goods and services includes those into, through, and within the community. Delano is home to DLS, the western hub of distribution for Sears. Currently, the primary goods and services moved in Delano are related to the agriculture industry. Delano is one of the country's primary producers of kiwi fruit, table grapes, and a variety of other fruit crops. In addition to agriculture, light and heavy industries are located in Delano and the surrounding County areas. Some of the major employers in the Delano area that would require goods movement include:

Business Name	Number of Employees
Pandol & Sons	1,500
North Kern State Prison	1,240
V.B. Zaninovich & Sons	1,000
Pavich & Sons	700
Superior Farming Co.	700
Anton Caratan & Sons	650
M. Caratan & Sons	650
Castle & Cooke	600
Delano Regional Medical Center	505
Lucich Farms	500
Skyline Ducor Ranch	500
Marco B. Zaninovich	500
Dan Tudor & Sons	500
Jasmine Vineyards	450
Delano Logistics Services	550
A. & N. Zaninovich	400
Paramount Citrus	300

Source: Delano Economic Development Department

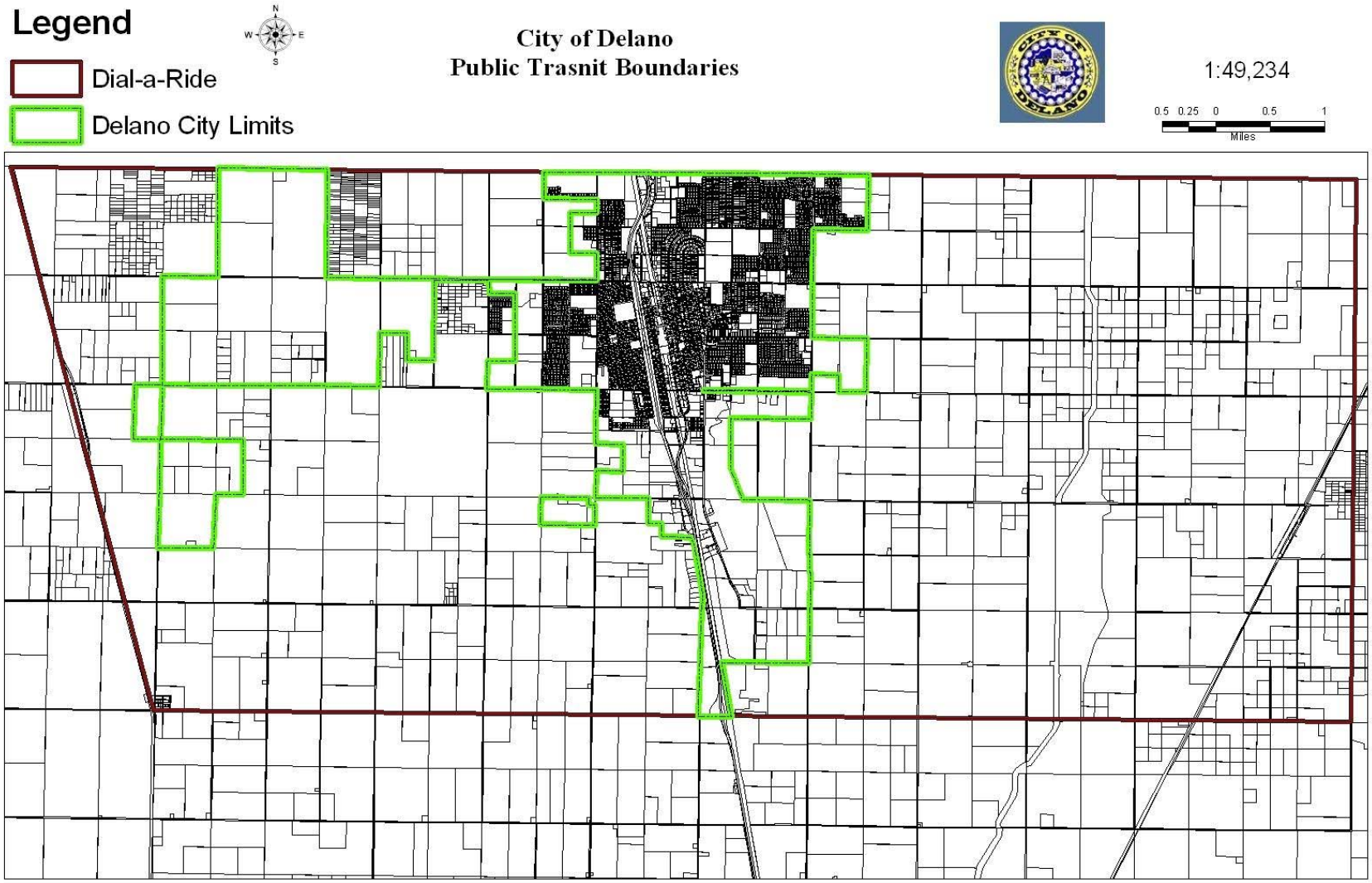
The State Highways, County roads and City arterial streets are the primary facilities for moving goods and services. Other modes providing for the movement of goods and services include railroads and package express. The railroad provides for limited shipment of agricultural products out of the community and the shipment of goods into the community. Package express service is provided to Delano by most package express companies and the U.S. Post Office.

3.4.4 Transit

Public Transit

The City of Delano is currently served by a number of public transit programs. These programs include a demand-response, a fixed route, County of Kern service, a medical van shuttle, and Social Service Transportation transit programs. The demand-response or Dial-a-Ride (DAR) service has been operated by the City since 1988. Prior to 1988, the DAR service was privately operated by Gilbert Transportation. The fixed route system was implemented by the City in 1995. The City's transit system provides service to the community within the City limits.

The existing fixed route transit system currently offers three bus routes. All routes begin at one central point, the Delano Transit Center, 11th Avenue and Glenwood Street, adjacent to downtown Delano. The Delano Area Rapid Transit (DET) operates on 30-minute headways, with the starting and ending location at the Delano Transit Center. Figure 3-3 illustrates DET's current service area boundaries and existing route designations.


Legend
Dial-a-Ride
Delano City Limits
City of Delano
Public Trasnit Boundaries
1:49,234
0.5 0.25 0 0.5 1
Miles

The DET operates on a seven day service schedule. Service hours are as follows: Monday through Friday from the hours of 7:00AM to 6:00PM, and Saturday and Sunday from 9:00 AM to 5:00 PM. One-way fares for the fixed route service are 50 cents per person. Advance ticket purchases are available for a reduced fare. Delano Express Transit services the local shopping, business areas, medical centers and schools.

The Delano Dial-A-Ride (DAR) service is based on a first come-first serve basis. Clients call the transit center to schedule a pick up.

Overall, combined ridership for the Delano Express Transit and DAR service totaled 239,145 passengers during Fiscal Year 1996/1997. Of this total, the fixed route carried approximately 156,000 riders, the demand response carried an estimated 30,000 riders, and the remaining 30,000 riders were comprised of County and Social Services passenger trips. Annual operating costs for Fiscal Year 1997/1998 were $682,944. Delano Transit fares totaled approximately $113,000 and the remaining revenue of $530,624 came from a combination of state and federal transportation funding sources. These funding sources include Transportation Development Act (TDA) funds, Federal Transit Administration (FTA), Section 5311(f) Grants (formerly known as Section 18), and other state and federal funding.

Kern County Transit Service

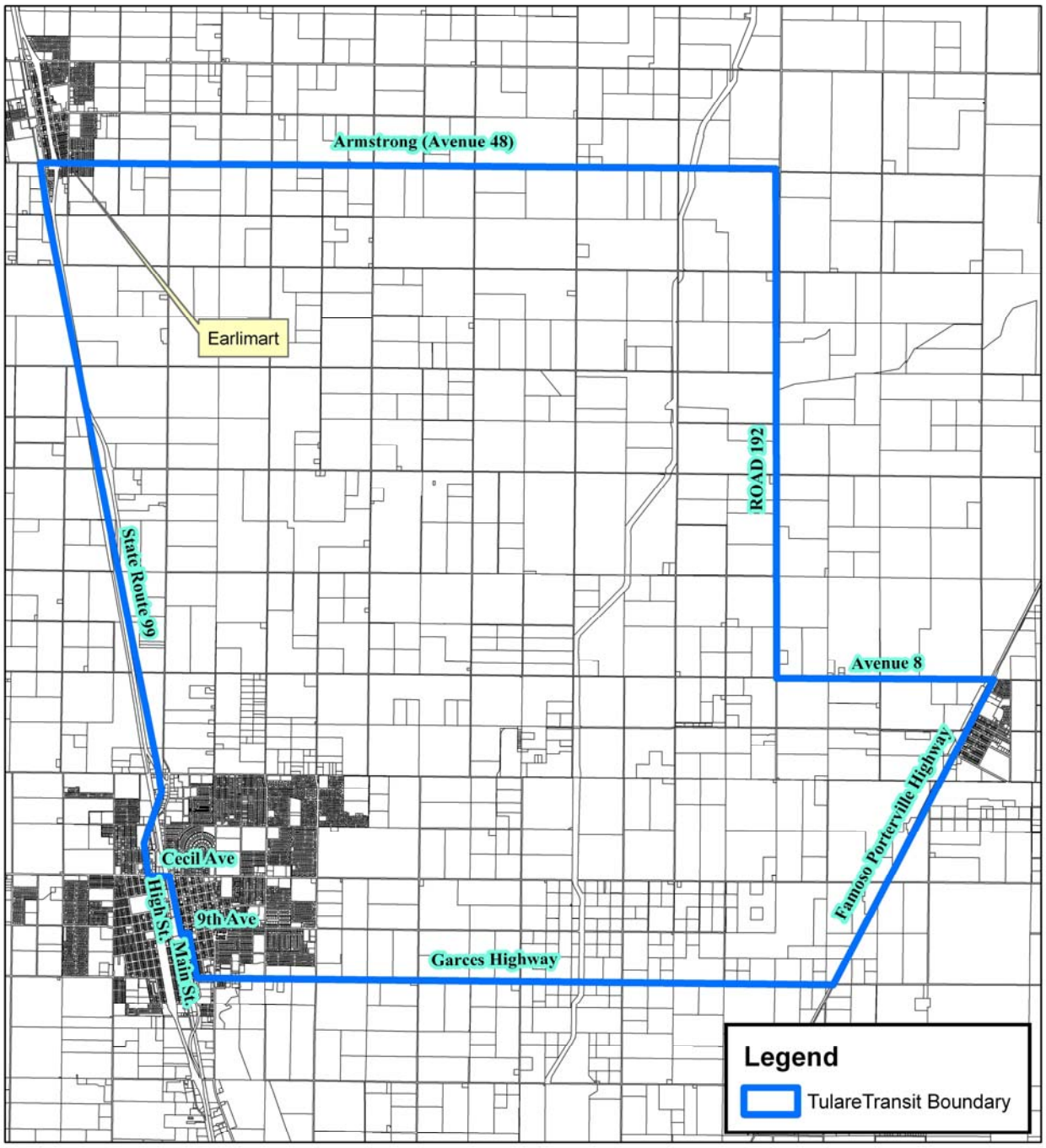
The Delano Express Transit (DET) has an agreement with the County of Kern to provide services outside the Delano City boundary to County residents who live within the service area. The City is reimbursed by the County for providing these services to County areas. The Kern County service area is bounded by County Line Road on the north, Kyte Road on the east, Pond Road on the south, and SR 43 on the west.

Tulare County Transit Service

The County of Tulare has recently revised their routing system in the Delano region. As of August 1997, the County implemented additional routing services to the areas of Earlimart, Richgrove, and Delano. Service to these areas will be available five days a week, with two service times a day (morning and afternoon). Currently, the Earlimart, Richgrove, Delano route operates only two days a week.

There are two stops located in the City of Delano. They are the Regional Medical Center, and the Delano Ranch Market. Recently, service stops at the local KMART and Greyhound bus station have been discontinued due to lack of demand.

The cost to ride the Tulare Transit system is $1.50 per person, per trip. Tokens are available for seniors, free of charge. Children six years of age and under ride free of charge with an accompanying adult. Figure 3-4 displays the County of Tulare's transit service area boundary.



Tulare County
Transit Service Area Boundary
City of Delano

Fig. 3-4

Private Transportation

Regional transportation service in the Central Valley is provided by Greyhound. Greyhound provides access to Bakersfield and Southern California to the South and Fresno, Sacramento, and the Bay Area to the North. Greyhound is the only private transportation organization that services the City of Delano. The Greyhound station is located at High Street and 11th Avenue in central Delano. Greyhound provides services through Delano two times a day.

Social Service

The City also offers a "meals-on-wheels" program, which provides food to qualifying senior citizens, as part of the State of California Nutrition Program.

Taxi Service

Currently, there are no private taxi companies operating in Delano. The City operates a Dial-A-Ride system that works on a reservation basis. However, persons needing a ride may not always be able to reserve the Dial-A-Ride vehicle when it is convenient for them due to previously made reservations. Therefore, a taxi company may fill the gap in the demand responsive transit system that currently exists.

3.4.5 Aviation

History/Ownership

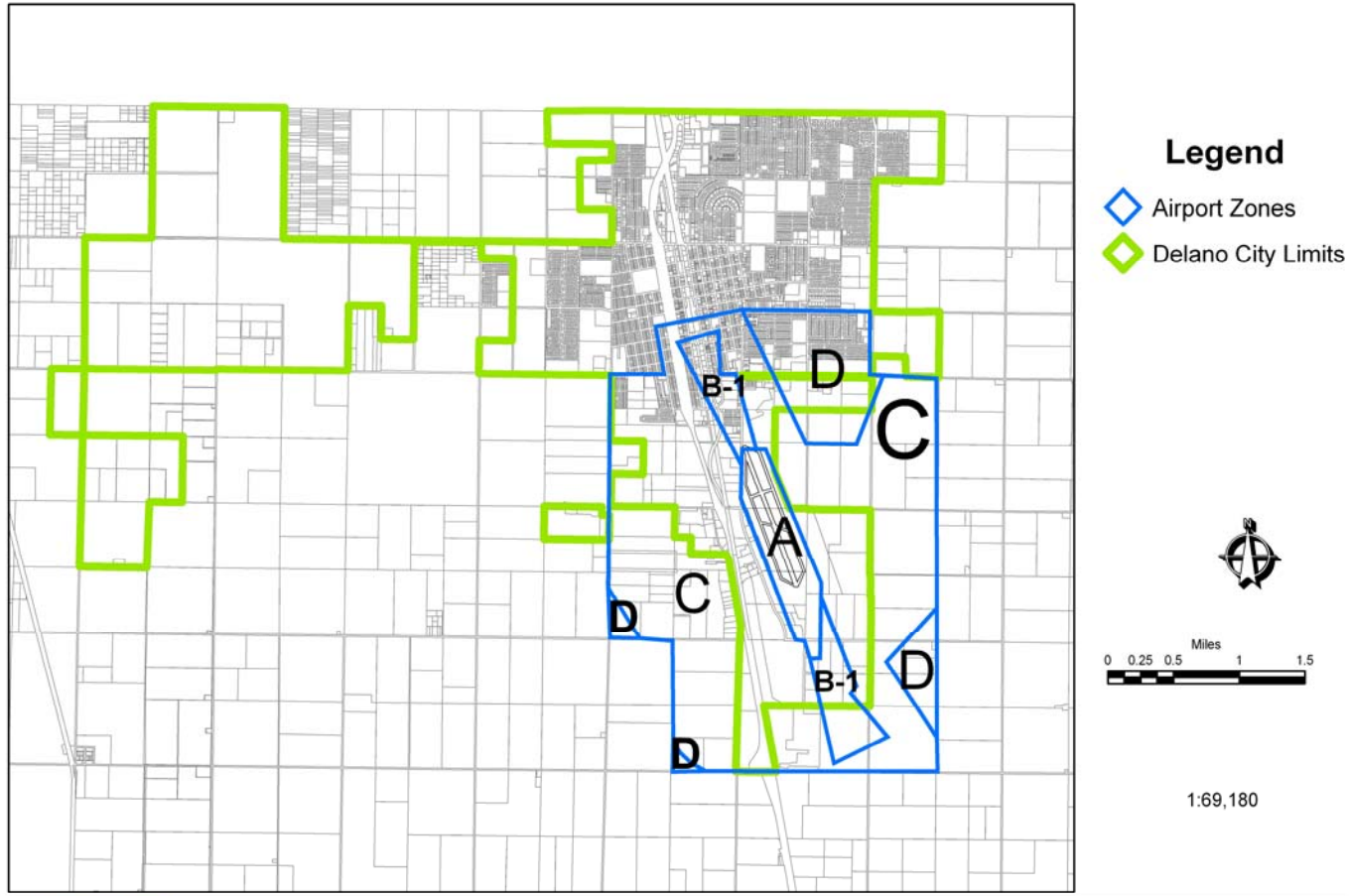
The Delano Municipal Airport is located in the southeast portion of the City of Delano, approximately two miles from the downtown center. The airfield was built in the 1930s and was originally operated as a County facility. In 1941 the airfield was used as an active air base and was operated by the United States Government. After World War II, the County operated the site until 1972 when the airport was transferred to the City. The City has owned and operated the airport from 1972 to the present day.

Airport Classification

The Delano Municipal Airport is classified by the National Plan of Integrated Airport Systems as a General Utility - 1 facility. Operation of the airport is the responsibility of the airport manager, a City employee. Figure 3-5 displays the most recent Airport Master Plan. It is the City's intent to maintain an up-to-date Master Plan for the airport.

Existing Facilities

The airport currently houses single engine, twin engine, and helicopter operations. There are a number of public and private hangers available, along with aircraft tie-down pads and shelters. Twenty-four hour self-service aviation fuel is available on-site.



Legend

- Airport Zones
- Delano City Limits

Miles

0 0.25 0.5 1 1.5

1:69,180

Airport Zones
City of Delano

Fig.3-5

Revised 12/5/05 by Leif Davisson

There is currently one runway in operation. The main runway is approximately 5,560 feet long and 50 feet wide. A second restricted runway is in need of deferred maintenance and repairs and may be shut down in the near future. The airport is equipped with AWDS III navigation and lighting facilities and is open twenty-four hours a day. The airport currently operates on a non-precision instrument approach method.

The City has an existing 1,500 square foot terminal building, which is located at the airport. The building consists of a small office, pilot lounge, and waiting area. The airport also has a restaurant on-site.

In the past two years, the airport has undergone a variety of new construction projects as part of a runway overlay program, which has allowed for better service. These projects totaled an estimated $300,000 and included repair of existing ramps and other facilities, and the installation of reflectors on taxiway lights.

The City is seeking Federal Aviation Administration (FAA) funding as part of the Airport Improvement Program (AIP). The City has applied for $400,000 of grant funds for airport improvements. The City desires to make improvements associated with updating the runway, such as runway paving, implementation of a rotating beacon, and the installation of a new lighting system.

Based on future demand for aircraft services, the airport does have space available for expansion of the existing airport operation. There are currently sixty ramp parking spaces available at the airport.

Existing Operations

Recently, there has been a decrease in crop dusting activity at the airport. The airport currently houses the planes utilized for agricultural spraying. Mixing of the chemicals associated with said agricultural spraying operation is now accomplished in the field, instead of on-site at the airport. One of the reasons the airport has been able to support the existing aircraft stock is their competitive fuel prices. The airport has shown an increase in itinerant business through the round-the-clock automated fueling system. The airport does not currently offer air cargo services and has no plans to implement an air cargo service within the next five years.

There are currently two fixed base operators located at the airport. These operations include private maintenance/repair and helicopter services. The City plans to construct a maintenance and repair facility at the airport when funding is available.

Commercial Passenger Service

There is no commercial air service operating to and from Delano Municipal Airport. The closest service is available at Meadows Field in Bakersfield, approximately 30 miles south of the City. Meadows Field is operated by Kern County Airport, where Commercial service is provided. These commuter airline shuttles provide linkages to the large urban areas of Southern California and the Bay Area.

The Delano Municipal Airport has no plans to implement a commercial passenger service within the next five years.

Airport Master Plan

In 1992, the City of Delano adopted an update to the Airport Master Plan. The Plan states that the general objective of the Airport Master Plan is to "prepare a long-range plan to guide development in order to maintain the airport as a valued transportation facility for both Delano and those parts of the surrounding area for which the Airport is the most convenient aviation facility." Some of the principal findings from the Plan are outlined as follows:

The City of Delano serves as an important economic center for Northern Kern County and Southern Tulare County, providing major commercial and health care services for the surrounding communities of Earlimart, Richgrove, McFarland, Wasco, Pond, Alpaugh and Pixley. Other major industries are retail trade, professional services, and manufacturing, while agricultural employment accounts for over one-third of the employment in Delano.

Population growth through the planning period is based on the City's continuing economic development marketing efforts and the impact of the new State Prison and the Return-to-Custody facility. This new population segment will necessitate a substantial work force, as well as the creation of ancillary businesses and industries. Additional population and employment opportunities are anticipated by the relocation of businesses to the area.

The number of based aircraft at Delano Municipal Airport is forecast to increase from 49 in 1990 to 80 in 2010, with a larger percentage increase in multi-engine aircraft and helicopters than in single-engine aircraft.

The number of annual aircraft operations at Delano Municipal Airport is forecast to gradually increase over the planning period from 12,500 in 1990 to 38,000 by 2010. As airport operations expand and the role of the airport evolves, the City will undertake updates of the Airport Master Plan to ensure that it is up-to-date.

3.4.6 Rail

Existing Rail Service

Delano is currently served by the main line of Union Pacific Railroad, formerly the Southern Pacific Railroad. The railroad runs essentially in a north-south direction, parallel to SR 99. There are currently seven railroad crossings within the City as follows: Woollomes Avenue, First Avenue, Garces Highway, 11th Avenue, 13th Avenue, Cecil Avenue, and County Line Road. It should be noted that the rail line is situated adjacent to the City's South Delano Industrial Park Area, allowing for easy rail access to industrial sites. No changes have been made to the existing rail line since the 1982 Circulation Element. Additionally, there are no abandoned rail lines in the community.

The Union Pacific Railroad is the main freight train service in the Central Valley. Due to the vast

agricultural production in the region, the railroad is an essential transportation shipping mode. Furthermore, cold storage facilities are located along the line allowing for quick service of local agricultural commodities.

As mentioned above, there are a number of existing railroad crossings scattered throughout the City limits. At certain times of the day, when a train is moving through the City, there are temporary traffic congestion problems. The City is currently considering the construction of a grade separation at either Cecil Avenue or Garces Highway to reduce traffic congestion when trains are present.

Passenger Rail Service

Delano is not currently served by AMTRAK passenger service. The closest station is in Wasco, approximately 15 miles southeast of the City. Other AMTRAK stations are located in the nearby communities of Corcoran and Bakersfield.

3.4.7 Bicycle and Pedestrian

Currently, the City of Delano does not have designated bicycle routes. Most of the bicycle activity in Delano occurs around the schools by school children. Delano has one high school, one junior high school, one middle school, and six elementary schools. A Draft Bicycle Plan was prepared for the City in 1980, but has never been formally adopted. Approximately 12 miles of City streets were proposed to be designated for bicycle use. Randolph Street, Eleventh Avenue, Lexington Street, and Norwalk Street are all designated for bicycle use along with other local community streets. Due to high volumes of traffic on the City's arterial streets, bicycle travel is discouraged on these streets. Updating and adopting the bicycle master plan is needed.

Pedestrian facilities in Delano are limited to sidewalks, crosswalks, and pedestrian crossing lights. These facilities are located to varying degrees throughout the community. Curb cuts and ramps are being required on any new construction in the City.

3.4.8 Parking

There are six city off-street parking lots in the downtown area of the City of Delano, as well as various striped and unstriped on-street parking. Figure 3-6 illustrates the location of the City's off-street parking lots. Existing parking in the downtown area is sufficient to serve the current parking demand. Most of the available parking lots have minimal use during the day. Furthermore, some of the lots remain empty. It appears that adequate on-street, diagonal parking and associated business parking areas are currently meeting the parking needs of the community.

3.4.9 Circulation Issues

This section focuses on current issues affecting the circulation system in the Delano area, and those issues that will have an effect on the system in the future. Understanding how the circulation system works today will help determine how the system will work in the future, and assist the Community in anticipating future issues that will affect the transportation network.

Downtown Off-Street Parking
City of Delano

Fig. 3-6

Issues are covered by area of concern; streets and highways, transit, aviation, rail, bicycle/pedestrian, trucks, and goods movement. In addition, issues affecting the system are discussed in a State context, regional context and from a local perspective. A final section on opportunities and constraints of the 1982 General Plan is also included.

Statewide Issues

Growth will continue to be one of the biggest issues facing the citizens of California for the next two decades. The ability to accommodate population growth will be a major challenge facing the State in the years to come. The San Joaquin Valley is faced with an even greater challenge than the rest of the State. By the year 2040, the valley floor will increase by 9.48 million persons. Kern County alone is expected to increase by approximately 2.1% annually through 2020 and reach a population of approximately 1,220,300. Projections for population growth for the Valley are higher than that of the State as a whole. The issues of growth, coupled with diminishing resources at all levels of government, will adversely impact City budgets, requiring them to be particularly prudent in the administration of services.

Air quality is also a major question that is facing California. Areas such as the San Joaquin Valley are experiencing serious air quality problems. In the Valley the sources of this air pollution are wide ranging. Pollution sources include the San Francisco Bay Area (which is responsible for up to 40% of the pollution in the Valley), the Kern County oil industry, and mobile sources (interstate trucks and the automobile). The Circulation Element is designed to have a positive effect on air quality by creating a street network that will improve the operating efficiencies of the Community's street system. This is accomplished by decreasing vehicle delays, travel times and engine idling time, all of which contribute to vehicular emissions. The more efficient the Delano circulation system becomes, fewer delays will occur and less fuel will be consumed. The Circulation Element can also contribute to improved air quality by laying a framework for the development of a balanced transportation system. The Circulation Element can ensure that resources are balanced to match the Community’s needs by encouraging the use of all modes for the most efficient transportation of people, goods, and services.

Regional Issues

Regional issues are becoming more influential on their impact on the local circulation system. Several issues bear notice as they relate to the future Circulation Element. These regional issues will have a more dramatic effect on the development of the local circulation system.

Since SR 99 runs through the City of Delano, regional access to and from Delano is not an issue. However, the off- and on-ramps to/from SR 99 are inadequate in several locations. Once the inadequate ramp situation is addressed and corrected, SR 99 access will play a major factor in the future growth of the City.

Like the State as a whole, the issue of growth will be central to the future of Delano. The growth projections for the Community suggest that the valley-wide growth trend will affect Delano similarly. The future Circulation Element must provide for the corresponding increase in travel by providing a balanced transportation system.

The most critical issue may be the problem of air quality. This issue may have the greatest impact on the development of the Circulation Element, requiring a careful evaluation on how to accommodate the projected population growth with an adequate circulation system. Much of the Valley is considered a non-attainment area for ozone and particulates. Mobile source emissions (cars and trucks) contribute to both of these pollutants. The development of a system to effectively handle the increased number of trips is an issue for all communities in the Valley.

The emergence of regional public transit in Tulare County and City service to Kern County will have a great effect on the development of the local Delano Transit operations. The local system will be called upon to provide both local commuter and social service transportation, but in the future will be asked to play an expanding role in feeding ridership to the regional intercity service.

The issues associated with "jobs/housing balance" are emerging in the Central San Joaquin Valley. The relationship between the location where people live and where they work has long been an issue in the Bay Area and Southern California. Locally, the emergence of significant levels of commuters from Bakersfield suggests that the transportation system will be asked to accommodate future commuters with patterns historically seen in more urban areas of California. The relationship of the "jobs/housing balance" and the future demands for transportation is a critical item. A number of people live outside of the Delano area and commute into the City to work. Generally, these are professional people who live in larger cities and work in Delano. A number of professional medical employees live in Bakersfield and work in the Delano Regional Medical Center (DRMC) facility. The following chart summarizes commuter profile information for the City of Delano.

Delano Commuter Characteristics

	Time
Workers Per Vehicle	1.31 Workers
Median Travel Time	17.2 Minutes
Drive Alone Time	13.3 Minutes
Median 2-Person Carpool	19.2 Minutes
Median 3-Person Carpool	29.7 Minutes
Median 4+ Person Carpool	31.7 Minutes
Bus	22.5 Minutes
Bicycle/Pedestrian	9.1 Minutes
Taxicab, Motorcycle, Other	12.2 Minutes

Source: 1990 Census Transportation Planning Package

Local Issues

Coupled with the concept of growth in the Valley, the creation of jobs within the community is of critical importance. Equally important in the context of the Circulation Element is the location within the community of these new jobs. Currently, industrial development is taking place primarily in southeast parts of town. Housing developments are currently planned throughout the community. This

planned land use pattern will require residents and workers to use both north/south arterials for commuting trips to and from work. This represents a fairly balanced approach to the jobs/housing layout within the community.

The companion to the creation of jobs is the development of commercial growth. The level of retail activity will influence the development of the future street system and require care in the location of regional services. Commercial development exists mostly in the downtown area, which has placed traffic on Main, High, 9th Avenue, 11th Avenue, and a number of other streets in the area. Traffic could increase as growth and revitalization continues in these areas.

Street and Highway Issues

Several issues affecting the street and highway system have surfaced over the past 17 years since the 1982 Circulation Element was completed. Several of these items reflect the effects of outside changes, while several indicate the need to address changes within the Community.

In the past, the Union Pacific rail line greatly affected the development patterns for the streets in Delano. The layout of the downtown streets reflects the original layout of the rail line. Today the railroad affects the circulation system through traffic delays as the trains pass through the City. The railroad also impacts the circulation system by limiting the number and location of grade crossings within the Community. This places added emphasis on selected street crossings to handle all traffic wishing to cross the tracks.

The issue of the conversion of two lane streets to four lanes must be addressed in the future as traffic volumes increase. Currently, arterials are typically constructed on a 90' to 110' right-of-way with a 72' to 90' curb-to-curb design. When streets are converted to four lanes with left turn pockets, one design option is the removal of on-street parking. This will affect businesses, truck deliveries and future transit operations in commercial areas. In residential areas, some homes lose the on-street parking and are limited to on-site parking.

Increasing agricultural and other truck traffic along Browning Road and Randolph Avenue are impacting circulation in the region. These streets were originally designed as rural two lane roads and have now transitioned into use as urban two lane roads. These segments at the east end of town should be upgraded to urban standards in order to accommodate this increase in traffic and use.

In addition, the northbound interchange of SR 99 at Woollomes Avenue is inadequate for truck traffic. The current configuration of the off-ramp, in conjunction with the nearby Union Pacific Railroad Crossing, does not allow for proper truck storage areas or ample turn space. This interchange was developed as a rural interchange and should be upgraded to an urban interchange to accommodate truck traffic to the airport and associated areas within the community. Part of the reason for increased truck traffic on Browning and Randolph is due to the rerouting of traffic that would normally use the SR 99/Woollomes interchange. Due to an insufficient facility, the alternate route is chosen, thereby creating more traffic on the north/south City street system at the east end of the City. The existing interchange at County Line Road is also inadequate due to an undersized northbound hook ramp. Significant congestion results from northbound vehicles exiting the freeway and attempting to turn left onto Girard Street. The Garces Avenue and Cecil Avenue interchanges are also substandard in that

they are partial interchanges, relying on two sets of hook ramps to the north and south of Eleventh Avenue along both sides of the freeway.

The City is also concerned about existing freeway overcrossings, as well as the need for additional overcrossings. Many existing overcrossings are too narrow and do not provide adequate space for normal traffic flow. There is, however, little room for expansion of the overcrossings, and the City does not have the funds available to undertake a major project such as widening of the overcrossings. State funding is minimal, and the City has other immediate needs for street improvements in the City which take precedent.

The City of Delano has two fire stations within the City boundary. One is located west of SR 99 and one can be found east of SR 99. The potential exists for emergency access to be limited when a train is passing through the City.

The City of Delano's Regional Medical Center (DRMC) is located east of SR 99. DRMC serves as a full service hospital for the community and encompassing region. An additional concern is access to Interstate 5. No direct access in an emergency is available from Interstate 5 to the Delano Regional Medial Center.

Another concern in the Community is the operation of local streets as collectors. This is a common issue for communities the size of Delano. The designation of collectors well in advance of development is one method for eliminating the continuance of this confusion. By determining where and how the collectors will be developed, the street system can be designed to provide the proper balance between mobility and access.

The future street system can also be used to further strengthen the concepts of neighborhoods by physically defining the areas designated by the Land Use Element for growth. The relationship between the location of arterials and collectors and the planned residential neighborhoods can be used to define "neighborhoods." Areas formed by arterials can be used to define distinct sections of the Community.

In addition to the above listed issues, the City should implement certain policies to provide for an overall growth management plan for the City's street system. Some of the policies and goals related to this issue are detailed in Section 4 of this report.

The following areas within the City are known "hot spots" where traffic congestion is a problem from time to time:

- County Line Road at SR 99 intersection/ramps
- Girard at SR 99 ramps
- Cecil Avenue at SR 99/High Street/Union Pacific Railroad
- Cecil Avenue at Norwalk (Delano High School)
- County Line Road at Randolph Street
- High Street at 11th Avenue intersection
- Garces Highway from Clinton to Randolph Street

- Browning and Randolph (full length of City)
- Union Pacific Railroad Crossing between 11th Avenue and Garces
- Woollomes Avenue at SR 99 off-ramp
- Main and 11th Street

Transit Issues

The City of Delano currently owns and operates its own transit system. Delano Transit operates both a demand-response and fixed-route service within Delano's City limits. The City also provides service to the outlying Kern County areas. The County has a financial reimbursement arrangement for the City to offer this service. The Tulare County Transit offers a rural route service to the City of Delano. The routes operate daily and serve the communities of Earlimart, Richgrove and Delano.

The City is faced with the need for additional integration of transit systems to ensure adequate transportation services to the community and adjacent County areas. The Transit Development Plan Fiscal Year 1996/97 identifies the need for a downtown Transit Transfer Station, which should be located as close as possible to the current transit hub.

Based on the projected 4.2% growth expected for the City of Delano, the transit service must be able to expand their services to meet the needs of the population. Additional routes may need to be implemented as ridership increases, and different areas of the City develop.

Aviation Issues

The City of Delano has land available for expansion of its existing airport facilities. The annual operations at the airport are expected to steadily increase over the next two decades.
The primary focus for the airport will be the upgrading and improvements to existing facilities currently at the airport. Based on FAA funding approval and allocation, the airport may undergo a large-scale rehabilitation of current facilities over the next few years.

Due to the strategic location of the airport at the southeast corner of the City, and the restricted non-airport use type of development, there are no noise, safety, or land use concerns related to the airport at this time. However; the airport should be protected from future encroachment by incompatible noise sensitive land uses or land uses involving large assembly of persons, especially in the approach zones.

Rail Issues

The long-term health of the rail industry continues to be affected by competition from trucking. The rail industry is restructuring its organizations to become more competitive. The merger of Union Pacific Railroad with Southern Pacific Railroad represents one restructuring example. Because underlying economic demands are facing the Union Pacific Railroad, care must be exercised in circulation and land use decisions that might affect current and potential rail shippers. The loss of the rail shipment option would place additional demands on the street network as existing and future businesses would be limited to only truck shipments.

The continuing development of industrial uses in southeast Delano could increase the demand for rail

service along the Union Pacific line. This increase in rail service will strengthen rail freight service to and from the community. The need to strengthen the number and volume of shippers along both rail lines is important to the long term economic health of the Union Pacific Railroad. Traffic studies have also identified the need for railroad grade separations at Garces Highway, 11th Avenue, and/or Cecil Avenue.

Bicycle and Pedestrian Issues

A lack of a comprehensive bicycle plan is typical of a community the size of Delano. As Delano has grown, the need for formal bicycle routes has arisen. Although bicycle traffic comprises a small percentage of the overall traffic in the City, it is anticipated that bicycle travel will grow as population and employment increase in Delano. Bicycle routes could encourage people to use this alternative form of transportation and provide recreation for citizens in the Community.

Some areas in Delano lack adequate pedestrian facilities. There are numerous curb returns in the older sections of the City that are not handicapped curb returns. In addition, sidewalks are missing in some areas and sidewalk replacement is needed in other areas.

Truck Route Issues

Trucking will continue to be the major mode for the movement of goods into and out of Delano. With the continued urbanization of the area, the shipment of agricultural products will be augmented by the ever increasing amounts of consumer goods. Major employers in the Delano area are located throughout the community and not concentrated in a specific area. However, increased trucking activity near the airport's industrial area will continue to impact the existing roadway system.

Transportation System Management Issues

The use of transportation system management strategies is becoming more applicable in the cities in the Central Valley. As cities continue to grow, the development of a wide range of strategies will be seen. These strategies can be used not only to relieve congestion, but can be expected to assist in the improvement of mobile source emissions. The application of existing strategies and the innovation of new strategies will continue over the years to come. These management techniques will be essential to facilitate continued development in the region. The implementation of new strategies, including the use of lane restriping and traffic signal timing changes, would enhance the existing transportation system management strategies already in place. Furthermore, the City has provided adequate parking facilities in the downtown area not only for existing demand, but also to accommodate future expansion and growth.

Goods Movement Issues

The efficient movement of goods and services will continue to be a primary issue for the circulation system. As Delano's population grows, delivery truck traffic can be expected to increase, which will place an added burden on the community's system. The location of major distribution or manufacturing plants in the community will increase the regional and statewide shipping of goods into

and out of the area. The Delano Municipal Airport and the Union Pacific Railroad also provide a transportation source for movement of goods throughout the region, state, and nation. The City will most likely experience an increase in airplane and rail activity commensurate with growth and expansion of the community.

3.5 CIRCULATION POLICIES

ESTABLISH A SAFE AND EFFICIENT TRANSPORTATION SYSTEM THAT PROVIDES ADEQUATE ACCESS THROUGHOUT THE CITY

Objectives

A. Achieve and maintain Level of Service "C" all intersection throughout the City, with the exception of freeway interchanges and high volume intersections where the City's objective is to achieve and maintain Level of Service "D".

ROADWAY CLASSIFICATION, STANDARDS

Objectives

A. Develop a circulation network of local roads, collectors, arterials and major arterials that will meet projected traffic needs.

Policies, Standards

1. All street and roadway improvements shall be consistent with the Circulation Element of the General Plan.

2. The Circulation Element shall determine the function of major streets. The City's functional street classification system shall include major arterials, arterials, collectors, minor collectors and local streets.

3. Designate streets according to the following functional classifications:

    a. Arterials serve as the principal network for cross-town traffic flow. They connect areas of major traffic generation within the urban areas and connect with important county roads and state highways. They also provide for the distribution and collection of through traffic to and from collector and local streets serving residential, commercial, and industrial areas.

    b. Collector streets provide for traffic movement between arterial and local streets, traffic movement within and between neighborhoods and major activity centers, and limited direct access to abutting properties.

c. Local streets provide for direct access to abutting properties and for very localized traffic movements within residential, commercial and industrial areas.

4. Apply consistent standards for new street development, based on traffic carrying capacity and classification.

5. Work with Caltrans to eliminate the existing hook ramps between Garces and Cecil, replacing them with "slip ramps onto one-way frontage roads along either side of the freeway. Modify the existing frontage roads along State Route 99 to function as one-way streets between Garces and Cecil.

6. Arterial, collector and local street standards shall be developed which provide adequate capacity for their appropriate function, and these shall be incorporated into the Subdivision Standards for the City of Delano.

7. Actual design and improvement to ultimate standards shall be achieved through inclusion of facilities as part of the City-wide Capital Improvements Program, or by new developers as areas adjoining the designated circulation system are developed, with allowance for bicycle lanes, in locations adopted by the City Council.

8. The design of arterials, collectors, local collectors, and local streets shall comply with the Subdivision Standards for the City of Delano, as amended.

9. Standards for new street development can be altered or refined through the specific plan or planned unit development process when it can be demonstrated that projected traffic flows can be accommodated.

10. New street developments in areas of urban expansion should not be limited to a "grid system." More efficient and varied street layouts should be encouraged, wherever possible.

11. New arterial and collector streets shall be designed to operate at Level of Service "C" level or better for a period of at least 20 years following their construction, wherever feasible. Freeway interchanges and high volume intersections where it is not feasible to achieve and maintain LOS "C" shall be designed to achieve and maintain LOS "D" for a period of at least 20 years following their construction,.

12. The right-of-way widths and construction widths of all classes of streets from local to arterial shall be updated as necessary to reflect the street classifications in the Circulation Element.

13. Right-of-way essential to the circulation system should be dedicated and/or developed to the appropriate extent and width when a zone change to a greater density, division of property or development occurs.

14. City circulation system street alignments shall be coordinated with the County of Kern and County of Tulare circulation system street alignments.

15. Work with Kern and Tulare counties should incorporate Delano's Circulation Element into their Countywide General Plans.

16. All land development proposals shall be reviewed to assure consistency with this Circulation Element.

Arterials

17. The following streets are proposed to be arterial streets within Delano's urban area:

East-West Arterials	North-South Arterials
County Line Road	Wasco-Pond Road
Cecil Avenue	Casey Avenue
Garces Highway (SR 155 E of SR 99)	Melcher Road
Woollomes Avenue	Albany Street/Stradley Avenue
Schuster Road	Garzoli Avenue
Pond Road	High Street
	Browning Road

These major arterials shall be developed with a minimum right-of-way of 110 feet, to include four travel lanes, parking, and a two-way left center turn lane or median. Where the Public Works director determines that a 110-foot right-of-way is not required to meet applicable level of service standards, arterials may be developed within a 90-foot right-of-way, eliminating either the center median or on-street parking, as determined appropriate by the Public Works Director.

18. The primary purpose of arterials is to carry traffic. Parking should be discouraged on such streets and eliminated where it now exists, along existing arterials as traffic safety conditions warrant.

19. Arterials shall be built in areas where traffic demand warrants the development of this facility to meet the adopted level of service standard.

20. Arterial streets shall be built at a typical separation of one mile.

Collectors

21. The following streets are proposed to be collectors within Delano's Urban Area:

East-West Collectors	North-South Collectors
20th Avenue	Mettler Avenue
11th Avenue	Hiett Avenue
9th Avenue	Ellington Street (Portion of SR 155)
"Future Street" between Garces and Woollomes	Fremont Street (Portion of SR 155)
18th Avenue	Princeton Street
	Lexington Street
	Norwalk Street
	Randolph Street/Mast Avenue

22. Collectors are designed to have an 80-foot right-of-way width which allows four lanes undivided with parking, or two lanes with a two-way left turn center lane. Minor collectors may be developed with a 60-foot right-of-way to include two travel lanes, and parking.

23. Collector streets shall be at approximately one-mile intervals centered between arterial streets and shall be planned to intersect with other streets so as to maximize traffic safety and discourage fast flowing traffic through residential areas.

24. Major arterials, arterials, and collectors shall form 4-leg, right angle intersections. Offset or skewed intersections of streets shall be avoided where possible.

Local Streets

25. Local street right-of-way shall be a minimum of 50 feet which allows two travel lanes and parking.

26. Local streets shall serve residential neighborhoods, and shall not be used to carry through traffic or high traffic volumes.

27. Local streets shall not carry an unreasonable level of through traffic. Should it be determined that a local street is carrying an unacceptable level of through traffic, the City may use appropriate means to reduce traffic through creation of one-way traffic flow, upgrade the street to collector status, installation of traffic diversion devices, and/or any other means deemed to be acceptable under the Vehicle Code of the State of California.

28. Permit design standards for local streets to reduce right-of-way width and paving where innovative approaches to street design are proposed within a planned unit development.

Median Breaks/Driveway Standards

29. Median breaks and driveway standards for arterial, collector and local streets directly affect the performance of these roadways, and the following minimum standards have been developed to facilitate the proper operation of these roadways:

Arterial Street Standards

30. Driveway access to major activity centers should be provided with adequate separation from the adjacent intersection of a collector or arterial street, measured from the curb return to the nearest edge of the driveway. If driveways must be provided near intersections for facilities (such as service stations) these driveways shall not be serviced by median breaks .

31. Adequate separation shall be maintained between driveways along commercially developed arterials. Where minimum spacing pursuant to City standards is not practical, the development shall provide acceptable traffic mitigation measures in addition to those already required.

32. Where practical and desirable, driveways should be located on adjacent collector streets rather than on arterial streets.

33. Driveway consolidation shall be encouraged through joint access agreements along arterials.

34. Full median breaks, where there is no adopted design, should provide access to collector streets and to major activity centers and should be provided with adequate separation.

Collector Street Standards

35. Adequate separation of driveway access to major activity centers should be maintained. If driveways must be provided near intersections for facilities (such as service stations) these driveways shall not be serviced by median breaks.

36. Adequate spacing between driveways and intersecting local streets should be maintained from the curb return to the nearest edge of the driveway. Where spacing pursuant to City standards is not practical, the development shall provide acceptable traffic mitigation measures in addition to those already required.

37. Driveways to residential property along collectors should be consolidated whenever possible.

38. Medians on collectors shall be provided by concrete where left turn control is needed and by painted medians on two-way left turn pockets where appropriate. Where concrete medians are provided, median breaks should be adequately spaced.

GOODS MOVEMENT

Objectives

A. Provide for the safe transport and delivery of goods in and out of the City.

Policies, Standards

1. Truck routes to efficiently move heavy traffic through the City shall be designated and maintained.

2. Route heavy traffic to designated arterial and collector streets only and away from local residential streets.

3. Provide adequate access to busy destination points such as shopping centers, recreational sites, and employment centers.

Objectives

B. Assure the continuation of railroad freight service to the City of Delano.

Policies, Standards

1. Pursue expansion of industrial facilities that will use railroad freight services.

2. Support and participate in Kern COG rail transportation activities.

SAFETY STANDARDS

Objectives

A. Maintain safe and efficient circulation routes for safety and emergency purposes.

Policies & Standards

1. Establish adequate plans to insure effective police and fire protection to all parts of the City.

2. The street network shall provide a quick and efficient route for emergency vehicles, including police, fire and other vehicles, when responding to calls for service. The length of single-entry access routes shall be restricted to one quarter mile or less.

3. Designate SR 99, SR 155, Cecil Avenue, Garces Highway, Albany Street, Browning Road, Lexington Street, and County Line Road as vehicular evacuation routes out of the City.

4. Coordinate the City's evacuation routes with state and county government plans.

Objectives

B. Promote traffic safety throughout the City by enforcement of speed limits, installation of appropriate traffic control devices, and construction of pedestrian facilities.

Policies, Standards

1. Minimize hazardous encounters among all transportation modes by utilizing special safety techniques and precautions at intersecting points.

2. Prepare and maintain a comprehensive circulation plan to insure traffic safety and travel efficiency.

3. Encourage bicycle routes along less intensive vehicular paths.

4. Provide programs that will educate the public on bicycle, pedestrian, and vehicular safety.

5. Carefully design ingress and egress to shopping centers and employment centers to minimize traffic hazards.

6. In order to promote safe and efficient traffic flow throughout the City, traffic signals shall be spaced no closer than 1/4 mile on arterials except in unusual circumstances. The intersections of arterial and collector streets and the access driveways to major traffic generators shall be located so as to maintain this minimum spacing.

Objectives

C. Maximize the use of site planning techniques to improve traffic safety.

Policies, Standards

1. Direct access to collector streets from residential lots is prohibited except where physical circumstances do not allow other design solutions.

2. Left hand-turn lanes shall be provided where necessary for access from arterials into high traffic commercial or multi-family developments.

3. Project streets shall be designed in a manner that reduces through traffic on local streets and reduces the number of intersections with collectors and arterials.

4. New subdivisions shall contain non-continuous street patterns for interior local streets to protect neighborhoods from the intrusion of through traffic from collectors and arterial streets.

5. Residential subdivisions shall be designed to encourage access from collector streets.

6. Promote design standards that allow for safe and efficient transport, delivery, loading and unloading of goods from service vehicles within commercial and industrial areas.

7. Where major new activity centers are proposed along arterial streets, designs shall be encouraged which minimize construction along the property line or along the adopted set-back line, whichever is appropriate.

8. Developers shall mitigate traffic impacts associated with their projects.

9. The City shall promote an active policy of consolidating driveways, access points and curb cuts along existing major arterials, or arterials when development or change in intensity of development or land use occurs or when traffic operation or safety warrants.

10. Where arterials and collector streets are required, residential development shall be oriented away (side-on or rear-on) from such streets, and properly buffered so that the traffic carrying capacity on the street will be preserved and the residential environment protected from the adverse characteristics of the street.

11. Due to the traffic congestion which results from numerous points of ingress and egress along commercial streets, future commercial developments or modifications to existing developments shall be master planned with limited points of ingress and egress onto a major street. Ingress and egress to shopping centers should be carefully designed in order to promote traffic safety. Left-hand movements into and out of commercial areas should be minimized and existing points of ingress and egress shall be consolidated whenever possible.

12. Maintain an up-to-date airport master plan for the Delano Airport.

Objectives

D. Upgrade and maintain existing transportation corridors to meet urban safety standards.

Policies, Standards

1. Encourage the development of improved signalization and intersection design.

2. Utilize traffic control devices such as center medians and/or left turn pockets where appropriate.

3. Provide adequate street lighting and traffic control devices throughout the City to ensure safe and efficient mobility.

TRANSPORTATION SYSTEMS AND CONGESTION MANAGEMENT

Objectives

A. Maximize the efficiency of the existing street system.

Policies, Standards

1. The City encourages the use of energy efficient and non-polluting modes of transportation.

2. Transportation System Management and Transportation Demand Management are the preferred strategies for the mitigation of traffic and parking congestion. Public transit, traffic management, ridesharing and parking management are to be used to the greatest extent practical to implement transportation management strategies.

3. Promote the long term shifting of peak hour commute trips from the single occupant automobile to ridesharing, buses, pedestrian, and bicycles.

4. Large development shall be encouraged to incorporate transit passenger facilities, bicycle racks or lockers, shower facilities, as well as on site services (eating, mail, banking, etc.) as ways to encourage alternative modes for commute trips.

5. Delano shall participate in a joint SR 99 Corridor Study along with CalTrans and Kern COG to determine the best solutions and funding options for the needed segment, overpass, and interchange improvements. This study will encompass ramp intersections as well. The solutions to the segment, overpass, interchange and ramp intersection problems will result in an operating level of service of "C". Until this study is completed, the City of Delano will require traffic impact studies as part of the environmental review for all development proposals within one half mile of SH 99 that exceed 100 peak hours trips to determine the impact of the project on the State Highway System.

6. The City of Delano Redevelopment Agency shall implement the Redevelopment Plan for Project Area No. 1 to include infrastructure improvements to the City's transportation and circulation system which are needed to support economic development efforts, and attract new businesses to blighted areas of the community.

7. Needed improvements to the Pond Road and Woollomes Avenue ramps shall be timed to occur in conjunction with the commercial development projects planned for those areas.

STREET IMPROVEMENTS

Objectives

A. Protect rights-of-way for future street development.

Policies, Standards

1. Establish street dedication requirements as conditions of approval of development entitlements.

2. Establish official plan lines for all arterial and collector streets included in the Circulation Element of the General Plan.

MAINTENANCE/CONSTRUCTION

Objectives

A. Efficiently manage the construction and maintenance of the street and highway system.

Policies, Standards

1. The maintenance of the investment in the existing and future infrastructure is a high priority for the community.

2. The City shall maintain a high level of inter-governmental coordination and citizen participation in the circulation and transportation planning process and work with other agencies to assure that regional transportation plans are consistent with the City's General Plan.

3. Develop, maintain and update as appropriate a 7-year Capital improvement Program that identifies and provides adequate sources of funding for both maintenance and improvement of the street and highway system.

4. Develop a traffic monitoring system to assist in establishing a priority system for expending street and highway funds.

Objectives

B. Encourage the proximity of compatible land uses to reduce unnecessary travel.

Policies, Standards

1. Ensure that the provisions of the Circulation Element are integrated with those of the Land Use Element.

2. Encourage the development of truck terminals at appropriate locations adjacent to Hwy 99 to reduce truck parking in residential areas.

PARKING

Objectives

A. Promote a parking program that meets the needs of each land use type.

Policies, Standards

1. Adequate off-street parking shall be required of all commercial and industrial land uses to accommodate parking demand. Off-street parking shall also be required of multi-family residential land uses to accommodate tenants.

2. Parking standards shall be evaluated for new downtown development to ensure that parking requirements are satisfied within walking distance of development.

3. Parking standards shall be evaluated to assess the potential for offering reduced parking requirements to development that incorporate measures proven to reduce commute or customer trips.

4. Provide adequate parking areas at activity centers along major arterials.

5. Provide adequate parking facilities in the Central Business District (CBD) to accommodate the needs of the public.

6. Parking of commercial vehicles, gross vehicle weight rating 10,000 pounds or more, shall be prohibited on streets or building sites in residentially zoned districts except for pickup or delivery of persons or goods.

BICYCLE FACILITIES

Objectives

B. Provide various types of transportation modes throughout the City.

Policies, Standards

1. Maintain and encourage safe and interesting pedestrian and bicycle circulation routes throughout the City.

2. Rights-of-way considered for abandonment will be evaluated for use as bikeways and pedestrian paths and be acquired when feasible and desirable.

3. In order to provide a continuous and well integrated bikeway system linking public and private uses, a bicycle master plan will be prepared and adopted.

    a. *Bike lanes* are an on-street bikeway in which separate automobile and bicycle travel lanes are designed visually by signs and street markings. Bike lanes shall be implemented on new improved street or segments, where appropriate.

b. *Bike routes* are a system of streets with signs denoting them as a bike route, warning motorists to anticipate bicycles on these streets and indicating to bicyclists a desirable routing because of low traffic volumes or continuity to activity centers. Bike routes will be implemented on existing street segments.

c. *Bike paths* have their own right-of-way and are developed exclusively for bicycle travel and are entirely separate from streets and highways.

4. On street parking is prohibited on all new or improved sections of major streets planned for bike lanes where adequate street width is not available to accommodate both on street parking and a bike lane.

5. Secure bicycle parking facilities shall be required as conditions of approval for all new major activity centers, public and private places of assembly, and commercial or industrial developments.

PEDESTRIAN FACILITIES

6. Sidewalks, paths, and appropriate crosswalks should be located to facilitate access to all schools and other areas with significant pedestrian traffic. Whenever feasible, pedestrian paths should be developed to allow for unobstructed pedestrian flow from within a neighborhood.

7. The City shall require curb, gutter, and sidewalks in all areas of the community to accommodate pedestrian traffic, especially along routes with high pedestrian traffic such as schools, parks, and the Downtown area. Installation of these improvements shall be encouraged to the extent feasible in existing neighborhoods where they do not currently exist.

8. The City shall promote safe, convenient, and accessible pedestrian ways within the community.

9. Where walls or fences are proposed for residential developments along major arterials, arterials, or collector streets, pedestrian access will be provided between the major arterial, arterial, or collector, and the development to allow access to transit vehicles operating on the street.

10. Require street lighting within the rights-of-way of all public streets.

11. Include pedestrian signal indications as an integral part of the installation of traffic signals.

12. Assure adequate sidewalk maintenance.

PROVIDE A TRANSPORTATION SYSTEM THAT IS COST-EFFECTIVE, ENERGY-EFFICIENT, AND ENVIRONMENTALLY SENSITIVE

Objectives

A. Insure that the air pollution generated by transportation modes does not exceed required standards.

Policies, Standards

1. Maintain an automobile circulation system that promotes reduced vehicle travel.

2. The circulation system shall be designed and developed to minimize excessive traffic congestion, which would increase the rate of vehicle emissions. Development shall mitigate emission impacts primarily by implementing the standards of the San Joaquin Valley Unified Air Pollution Control District for a project's construction and operation/use.

3. A multi-modal transportation system shall be planned for that meets the needs of the community and improves air quality.

4. State and federal funds earmarked for bicycle and transit improvements will be vigorously pursued and used.

Objectives

B. Insure that noise emissions generated by transportation modes do not exceed acceptable noise standards.

Policies, Standards

1. The circulation system shall be designed and developed to minimize excessive noise impacts on sensitive land uses. Development shall mitigate its associated circulation related noise impacts.

2. Develop standards to screen various noise-sensitive land uses from the effects of heavy vehicular traffic.

3. Identify the heaviest transportation-related noise pollutants on the Noise Contour Map of the Noise Element.

4. Insure that heavy vehicles utilize Delano's Truck Route as a guide for maintaining an efficient circulation system.

5. Regulate the types of land uses in proximity to airport and railroad facilities.

Objectives

C. Provide a safe and convenient public transit system that meets the needs of all the economic segments of the community.

Policies, Standards

1. Maintain and expand the activities of the Delano Express Transit, the Delano Dial-A-Ride and similar operations, which offer residents safe and affordable transportation.

2. Continue to search for new and innovative alternatives that will provide a more efficient public transit system for the residents from all segments of the social and economic community.

3. Maximize the efficiency of transit services while minimizing costs by encouraging the consolidation of transit services within the metropolitan area.

4. Require transit improvements at all sites deemed appropriate and necessary by the Transportation Department and the transit provider and consistent with long range transit plans.

5. Coordinate transit services through the City's Community Services Department and in conjunction with surrounding cities, and the Counties of Kern and Tulare.

6. Provide benches, telephones and shaded areas at major transit destinations so people can utilize the transit system safely and comfortably. The City shall determine such need based on site plan review procedure and other planning implementation methods.

7. Major arterials, arterials, and collectors will be designed to allow transit vehicles to pull out of traffic. This policy may be implemented with either a continuous parking lane with bus stops, or with special bus pullout lanes.

8. Transit centers/stops shall be established to encourage the interface between commercial centers, high density residential uses and the transit system.

9. Encourage transit alternatives to meet the basic transportation needs of the young, the elderly, the handicapped, and the person without access to an automobile.

10. Maintain opportunities for a transit center within the City where alternative transit modes would connect.

11. Encourage and provide for ride sharing, park and ride, and other similar commuter energy savings programs.

Table 3-3 Future Level of Service

Road	Segment	Configuration	Future ADT	Future LOS
Benner Avenue	County Line to Cecil	4-lane undivided	1700	C
	Cecil to Garces	4-lane undivided	3200	C
Lytle Avenue	County Line to Cecil	2-lane undivided	900	C
	Cecil to Garces	2-lane undivided	1700	C
Casey Avenue	County Line to Cecil	4-lane undivided	3700	C
	Cecil to Garces	4-lane undivided	2400	C
Mettler Avenue	County Line to Cecil	4-lane undivided	10084	C
	Cecil to Garces	4-lane undivided	12764	C
Hiett Road	County Line to Cecil	2-lane undivided	800	C
	Cecil to Garces	2-lane undivided	12347	C
	South of Garces	2-lane undivided	5117	C
Albany Street	County Line to Cecil	4-lane undivided	4824	C
	Cecil to Garces	4-lane undivided	9799	C
Stradley Avenue	Garces to Woollomes	4-lane undivided	26716	C
	Woollomes to Schuster	4-lane undivided	6438	C
	Schuster to Pond	4-lane undivided	4733	C
Ellington (SR 155)	Cecil to 11th	2-lane undivided	4631	C
	11th to Garces	2-lane undivided	4275	C
SR 99	Avenue 16 to County Line	6-lane divided	91844	D
	County Line to Cecil	6-lane divided	95166	D
	Cecil to Garces	6-lane divided	92713	D
	Garces to Woollomes	6-lane divided	107660	E
	Woollomes to Pond	6-lane divided	102792	D
Fremont (SR 155)	Cecil to 11th	2-lane undivided	6187	C
	11th to Garces	2-lane undivided	5422	C
High Street	County Line to Cecil	4-lane undivided	6904	C
	Cecil to Garces	4-lane undivided	2709	C
	Garces to Woollomes	4-lane undivided	5274	C
Lexington Street	Cecil to Garces	2-lane undivided	5274	C
	Garces to Woollomes	4-lane undivided	11305	C
Norwalk Street	County Line to Cecil	2-lane undivided	3969	C
Randolph Street	County Line to Cecil	2-lane undivided	2701	C
	Cecil to Garces	2-lane undivided	4590	C
Mast Avenue	Garces to Woollomes	2-lane undivided	1700	C
	Schuster to Pond	2-lane undivided	500	C
Browning Road	County Line to Cecil	4-lane undivided	13221	C
	Cecil to Garces	4-lane undivided	17262	C
	Garces to Woollomes	4-lane undivided	27867	D
	Woollomes to Schuster	4-lane undivided	26928	D
	Schuster to Pond	4-lane undivided	21165	D
Bowman Avenue	County Line to Cecil	2-lane undivided	100	C
	Cecil to Garces	2-lane undivided	200	C
	Garces to Woollomes	2-lane undivided	400	C

Road	Segment	Configuration	Future ADT	Future LOS
	Woollomes to Schuster	2-lane undivided	200	C
	Schuster to Pond	2-lane undivided	500	C
County Line Road	Wasco-Pond to Benner	4-lane undivided	1200	C
	Benner to Casey	4-lane undivided	4700	C
	Casey to Melcher	4-lane undivided	6900	C
	Melcher to Albany	4-lane undivided	6022	C
	Albany to SR 99	4-lane undivided	7498	C
	SR 99 to Randolph	4-lane undivided	5636	C
	Randolph to Bowman	4-lane undivided	2911	C
20th Avenue	Wasco-Pond to Benner	2-lane undivided	300	C
	Benner to Casey	2-lane undivided	600	C
	Casey to Melcher	2-lane undivided	700	C
	Melcher to Albany	2-lane undivided	4729	C
	Albany to SR 99	2-lane undivided	6553	C
	Girard to Randolph	2-lane undivided	4292	C
	Randolph to Bowman	2-lane undivided	3053	C
Cecil Avenue	Wasco-Pond to Benner	4-lane undivided	2900	C
	Benner to Casey	4-lane undivided	13500	C
	Casey to Melcher	4-lane undivided	4917	C
	Melcher to Albany	4-lane undivided	21767	D
	Albany to SR 99	4-lane undivided	19193	C
	SR 99 to Randolph	4-lane undivided	12679	C
	Randolph to Bowman	4-lane undivided	9741	C
11th Avenue	Wasco-Pond to Benner	2-lane undivided	1000	C
	Benner to Casey	2-lane undivided	800	C
	Casey to Melcher	2-lane undivided	900	C
	Melcher to Albany	2-lane undivided	3966	C
	Albany to Fremont	2-lane undivided	6531	C
9th Avenue	Fremont to Randolph	2-lane undivided	4000	C
	Randolph to Bowman	2-lane undivided	1900	C
Garces Highway	Wasco-Pond to Benner	4-lane undivided	6700	C
	Benner to Casey	4-lane undivided	16700	C
	Casey to Melcher	4-lane undivided	17896	C
	Melcher to Albany	4-lane undivided	22294	D
	Albany to SR 99	4-lane undivided	15977	C
	SR 99 to Randolph	4-lane undivided	17469	C
	Randolph to Bowman	4-lane undivided	8756	C
Unknown	Melcher to Strdley	2-lane undivided	1200	C
	Stradley to SR 99	2-lane undivided	6800	C
	SR 99 to Mast	2-lane undivided	6900	C
	Mast to Bowman	2-lane undivided	1400	C
Woollomes Avenue	Stradley to Lexington	2-lane undivided	29955	E
	Lexington to Bowman	2-lane undivided	17652	C
Brooks Road	Mast to Bowman	2-lane undivided	400	C
Schuster Road	Stradley to Garzoli	4-lane undivided	9000	C
	Lexington to Bowman	4-lane undivided	4600	C

Road	Segment	Configuration	Future ADT	Future LOS
Spangler Road	SR 99 to Bowman	2-lane undivided	700	C
Pond Road	Stradley to Garzoli	4-lane undivided	14866	C
	Garzoli to Mast	4-lane undivided	15666	C
	Mast to Bowman	4-lane undivided	13229	C