

# 4.4 Transportation

## 4.4.1 Infrastructure Needs or Deficiencies

### Performance Standard

The City of Holtville General Plan Circulation Element includes a classification of streets into the following categories:

- **Arterial Streets:** Intended to move through traffic between major traffic generators.
- **Collector Streets:** Collect and distribute traffic between arterial streets and local streets.
- **Local Streets:** Provide direct access to property by local traffic.

**Figure 4.4-1** depicts current street classifications within the City and **Figure 4.4-2** depicts cross sections for each of the classes of streets described above.

The performance of streets and roadways is typically measured by comparing the level of traffic to documented standards for the type of street based on classification, number of lanes, and width. Imperial County has developed standards for roadway capacity that are applicable to conditions in the City of Holtville. These roadway performance standards are shown in **Table 4.4-1**.

In traffic engineering methodology, roadway levels of service (LOS) are typically rated from LOS A to LOS F. LOS A indicates light traffic conditions, in which drivers have a great deal of freedom to maneuver and little interference from other drivers. LOS F indicates a situation where the traffic relying on a particular facility is beyond the capacity of the facility, with significant delays and queues and traffic. A minimum performance standard of LOS C is considered to be consistent with the roadway conditions in smaller cities and rural areas.

### Inventory of Existing Facilities/Personnel

Nearly all roadways in Holtville have two lanes. The exception is the segment of SR 115 from Grape Avenue to Orchard Road. The intersection of SR 115 and Holt Avenue is controlled by a four-way stop. All other intersections in Holtville are either uncontrolled or controlled by a two-way stop.

**Figure 4.4-3** depicts existing average daily traffic counts. Based on the street performance standards identified in **Figure 4.4-2**, it is possible to calculate existing levels of service wherever existing traffic counts are available. The results are shown in **Table 4.4-2**. Currently, all streets in Holtville are considered to operate at LOS C or better. Therefore, the existing street system is considered to be adequate.

The City's streets are maintained primarily by a Streets Maintenance Worker, with the assistance of a Field Coordinator, another Maintenance Worker III, and two Maintenance Workers I.

Table 4.4-1  
Roadway Performance Standards  
Maximum Average Daily Traffic By Level of Service

Roadway Classification	Number of Lanes	A	B	C	D	E
Freeway	4	30,000	40,000	50,000	60,000	70,000
Prime Arterial w/median	6	22,200	37,000	44,600	50,000	57,000
Major Arterial w/median	4	14,800	24,700	29,600	33,400	37,000
Secondary Arterial	4	13,700	22,800	27,400	30,800	34,200
2 lane Arterial	2	2,000	4,500	7,700	11,800	17,500
Collector	2	1,900	4,100	7,100	10,900	16,200
Residential Street	2	*	*	1,500	*	*
Residential or Cul-de-Sac Loop Street	2	*	*	200	*	*

Note: Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of Service normally apply to roads carrying through traffic between major trip generators and attractors.

Source: Imperial County.

Table 4.4-2  
Roadway Performance Evaluation - Existing

Roadway	Location	Average Daily Traffic	Capacity	Level of Service
SR 115 (Evan Hewes Highway west of Fourth Street, Fifth Street east of Fourth Street)	West of Fourth	4,400	34,200	A
	Cedar to Holt	8,900	34,200	A
	Holt to Walnut	9,200	34,200	A
	Grape to Towland	2,900	17,500	B
Eleventh Street	West of Melon	300	17,500	A
Ninth Street	Walnut to Towland	400	16,200	A
Bonds Corner Road	South of Fourth	1,000	17,500	A
Orchard Road	South of Fourth	2,600	17,500	B
Towland Road	SR 115 to 9 <sup>th</sup>	300	17,500	A
Holt Avenue	North of 11 <sup>th</sup>	1,500	17,500	A

#### Inventory of Approved Facilities/Personnel

No additional transportation facilities or personnel have been approved at this time as existing facilities are adequate to serve projected growth in the near future.

**Figure 4.4-1  
Street Classifications**

**Figure 4.4-2  
Street Section Standards**

**Figure 4.4-3  
Existing Average Daily Traffic**

## Year 2020 Demand for Facilities/Personnel

Average daily traffic forecasts for the Year 2020 are shown in **Figure 4.4-4**. **Table 4.4-3** shows capacity analysis conducted for City streets in the Year 2020. All streets in Holtville are expected to meet or exceed the LOS C performance standard in the Year 2020. Therefore, the street system is expected to be adequate for Year 2020 conditions. While the overall street system is expected to meet existing transportation performance standards for Year 2020 conditions, the following street improvements are recommended:

- Installation of a traffic signal (if warranted) at the intersection of SR 115 and Holt Avenue.
- Provision of new collector and local streets to serve new developments.

Because there are currently no specific plans for development in the City and its SOI, it is difficult to predict where and when new streets will be needed to serve Year 2020 conditions. While traffic conditions beyond the Year 2020 are difficult to foresee, the next major roadway improvement that is needed in the Holtville area is a new arterial roadway running south of and parallel to SR 115. This new arterial would ultimately run from Towland Road to Barbara Worth Road and would cross the Alamo River at a location south of all existing developed areas. A first phase of this new arterial could be constructed from Bonds Corner Road to Orchard Road, with extensions built as needed. Based on current population projections, this new arterial street would not be needed until the Year 2030.

Additionally, Highway 115 will be realigned to line up with State Route 7 (SR-7) and by pass the City of Holtville. This realignment is listed as a near-term project and is expected to be completed before the year 2010. SR-7 will connect with the new Calexico East Port of Entry (POE) between the United States and Mexico. This new alignment would have a limited number of traversing points allowed for major arterials. This may necessitate the construction of an east/west bound arterial further south that would increase the costs associated with this realignment in the future.

Since there are no specific plans for development, it is difficult to determine when new facilities will be required. The SR 115/Holt Avenue traffic signal will probably be required by the Year 2010, and the need for new streets will occur gradually at a rate of approximately two miles of new streets every five years as development progresses. In order to mitigate the impact of growth in the Holtville service area, the following transportation mitigation measures are recommended in order to maintain existing performance standards:

- Installation of a traffic signal (if warranted) at the intersection of SR 115 and Holt Avenue.
- Provision of new collector and local streets to serve new developments.

To meet the demand in 2020, it is estimated that four positions will need to be added to current staffing levels: Maintenance Worker I (2) and Maintenance Worker II (2).

### 4.4.2 Financing Constraints and Opportunities

Costs estimates for the mitigation measures described above are as follows (in 1998 dollars):

- SR 115/Holt Avenue traffic signal - \$150,000;
- New Streets - \$16,000,000 (eight miles @ \$2,000,000 per mile).

In Fiscal Year 2004-2005, the City budgeted nearly \$140,000 for salaries and benefits, and approximately \$110,000 for operations costs.

**Figure 4.4-4**  
**Year 2020 Average Daily Traffic**

Table 4.4-3  
Roadway Performance Evaluation - Year 2020

Roadway	Location	Average Daily Traffic	Capacity	Level of Service
SR 115 (Evan Hewes Highway west of Fourth Street, Fifth Street east of Fourth Street)	West of Fourth	7,500	34,200	A
SR 115 (Evan Hewes Highway west of Fourth Street, Fifth Street east of Fourth Street)	Cedar to Holt	15,100	34,200	B
SR 115 (Evan Hewes Highway west of Fourth Street, Fifth Street east of Fourth Street)	Holt to Walnut	15,600	34,200	B
SR 115 (Evan Hewes Highway west of Fourth Street, Fifth Street east of Fourth Street)	Grape to Towland	4,900	17,500	C
Eleventh Street	West of Melon	500	17,500	A
Ninth Street	Walnut to Towland	700	16,200	A
Bonds Corner Road	South of Fourth	1,800	17,500	A
Orchard Road	South of Fourth	4,400	17,500	B
Towland Road	SR 115 to 9 <sup>th</sup>	500	17,500	A
Holt Avenue	North of 11 <sup>th</sup>	2,600	17,500	B

The City received funds annually from the Local Transportation Authority, State Gas Tax funds, and the Imperial County Transportation Development Act (TDA) funds. These monies are used for maintenance, operations and overlay street projects.

Additional sources of revenue for transportation facilities include general taxes (i.e., property, sales, use, business license, utility user's transient occupancy, etc.), parcel tax, motor vehicle license fee, gasoline tax, benefit assessment, and development impact fees and exactions. Additional sources of revenue for transportation services includes parcel tax, motor vehicle license fee, gasoline tax, and benefit assessments.

### 4.4.3 Cost Avoidance Opportunities

The City's streets are maintained primarily by a Streets Maintenance Worker III. The Streets Maintenance Worker III is assisted as necessary by a Maintenance Field Coordinator, another Maintenance Worker III, and two Maintenance Workers I. The Maintenance Field Coordinator, Maintenance Worker III, and two Maintenance Workers I maintain general city and park facilities as well, resulting in cost avoidance.

The City contracts with a private firm for annual street crack sealing projects. These contracts avoid capital costs involved in obtaining the equipment and vehicles required for this specialized type of roadway services. The City also contracts with CalTrans to sweep Highway SR 115 within City Limits.

### 4.4.4 Opportunities for Rate Restructuring

The City does not charge direct fees for transportation improvements or services.

### 4.4.5 Opportunities for Shared Facilities

Roadways within the City and Sphere of Influence are operated and maintained by the City, County of Imperial, or Caltrans. Caltrans maintained SR 115 passes through downtown Holtville along 5<sup>th</sup> street and could be considered a shared facility as the City has an agreement to sweep this roadway section.

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