

Table 6.4: Recreational Facilities Inventory

Facility	Amount	Unit Cost ¹	Total Cost
<i>Buildings</i>			
Eleanor Shadowen Senior Center	5,522 sq. ft.	250	1,380,500
Esperanza Youth and Family Center	5,440 sq. ft.	250	1,360,000
Coachella Boxing Club	9,849 sq. ft.	250	2,462,250
Coachella Community Center	5,160 sq. ft.	250	1,290,000
Subtotal, Buildings	25,971 sq. ft.		\$ 6,492,750
<i>Pools</i>			
Bagdouma Pool	5,922 sq. ft.	85	\$ 503,370
Bagdouma Pool Restroom	3,192 sq. ft.	150	478,800
Westerfield Pool	3,465 sq. ft.	85	294,525
Westerfield Pool Restroom	1,159 sq. ft.	150	173,850
Subtotal, Pools			\$ 1,450,545
Total Value, Recreational Facilities			\$ 7,943,295

¹ Estimates of facility replacement value. Land value is based on the estimate of Citywide land values for small, developable parcels. Building and pool values are conservative estimates generated by MuniFinancial based on experience with other cities in California.

Source: City of Coachella; MuniFinancial.

Park Facility Standards

Park facility standards establish a reasonable relationship between new development and the need for expanded park facilities. Information regarding the City's inventory of existing park facilities was obtained from City staff.

The most common measure in calculating new development's demand for parks is the ratio of park acres per resident. In general, facility standards may be based on a city's existing inventory of park facilities, or on an adopted policy standard contained in a master facility plan or general plan. The Open Space and Parks Element of the City of Coachella General Plan states that "the City shall provide park acreage at 3 acres per 1000 residents." The park impact fee is based on the standard identified in the General Plan.

Unit Costs for Land Acquisition and Improvement

The unit costs used to estimate cost per acre of new parkland facilities are shown in **Table 6.5**. All costs are expressed in 2007 dollars. Standard improvement costs are based on a recent bid for improvement work received by the City as well as MuniFinancial's experience with other cities. The per acre improvement cost of \$471,000 includes both standard improvements such as irrigation, parking lots, playing fields, and playgrounds, as well as the average per acre value of the special use recreational facilities detailed in Table 6.4.

The land cost used for parkland is based on a study dated November 20, 2007 by Scott Lidgard and Associates of average fair market land values in Coachella. The study found the

fair market value to be \$225,000 per acre for single family residential land and \$195,000 per acre for multi-family residential land. The land unit cost used, \$222,000, is the average of the single and multi-family land values, weighted by the total amount of land zoned for single and multi-family development in the Coachella *General Plan*, as determined by Urban Crossroads.

This report uses a residential land value for park facilities because parks are most likely to be located on relatively large parcels in residential areas. By contrast, most other facilities in this report, such as City Hall, police, and fire facilities, are more likely to be located on smaller, commercial parcels. Accordingly, this study uses a higher land value for those facilities.

Table 6.5: Parkland Unit Costs

	Cost per Acre	Share
<i>Park Improvements</i>		
Special Use Facilities ¹		
Buildings Value	\$ 6,492,750	
Pools Value	1,450,545	
Vehicles & Equipment	<u>423,500</u>	
Total Special Use Facilities (A)	\$ 8,366,795	
Total Improved Park Acres (B)	<u>49.04</u>	
Special Use Facilities Cost per Improved Acre (C = A / B)	\$ 170,612	
Standard Park Improvements per Acre ² (D)	<u>300,000</u>	
Park Improvements Per Acre Subtotal (E = C + D)	\$ 470,612	68%
Land Acquisition (F)	<u>222,000</u>	<u>32%</u>
Total (G = E + F)	\$ 692,612	100%

¹ Recreation facilities only include special use facilities that are not part of standard park improvements such as recreation centers and pools.

² Improvement costs are estimated at \$300,000 per acre for site improvements (curbs, gutters, water, sewer, and electrical access), plus basic park and school field amenities such as basketball or tennis court, restroom, parking, tot lot, irrigation, turf, open green space, pedestrian paths, and picnic tables. Excludes special use facilities such as recreation centers and pools.

Sources: Tables 6.2, 6.3 and 6.4; Scott Lidgard and Associates; City of Coachella; MuniFinancial.

ALLOCATING FACILITY COSTS TO NEW DEVELOPMENT

The total cost of park facilities needed to serve growth is calculated by multiplying the facility cost per acre estimated in Table 6.6 by the standard of acres per 1,000 residents and

the projected growth in residents. To accommodate the increase in service population through 2030 at the General Plan's standard of 3.0 acres per 1,000 residents, new development would need to fund approximately \$137.6 million in park facilities, as shown in Table 6.6.

Table 6.6: Park Facilities to Accommodate New Development

<u>Acres Needed</u>		
Facility Standard (acres/1,000 residents) (A)		3.00
Resident Growth (2007-2030) (B)		<u>66,232</u>
Facility Needs (acres) (C = (B/1000) x A)		198.70
<u>Land Costs</u>		
Land Cost per Acre (D)	\$	222,000
Facility Needs (acres) (C)		<u>198.70</u>
Total Cost of Parkland (E = C x D)	\$	44,111,400
<u>Improvements</u>		
Average Improvement Cost per Acre (F)	\$	470,612
Facility Needs (acres) (C)		<u>198.70</u>
Subtotal - Improvements (G = F x C)	\$	<u>93,510,604</u>
Total Facilities (H = E + G)	\$	137,622,004

Sources: Tables 6.1 and 6.5; MuniFinancial.

Table 6.7 shows the cost per capita of park facilities based on the General Plan facility standard of acres per capita and the estimated land and improvement costs per acre. This cost per capita is used as the basis for the impact fee.

Table 6.7: Park Facilities Costs per Capita

	Land	Improvements
Parkland Investment (per acre) (A)	\$ ^{100,000} 222,000	\$ 470,612
Facility Standard (acres per 1,000 residents) (B)	<u>3.00</u>	<u>3.00</u>
Total Cost Per 1,000 capita (C = A x B)	\$ ^{300,000} <u>666,000</u>	\$ <u>1,411,836</u>
	1,000	1,000
Cost Per Resident (D = C / 1000)	\$ ³⁰⁰ 666.00	\$ 1,411.84

Sources: Table 6.5; MuniFinancial.

The City of Coachella does not currently meet the General Plan's standard of 3.0 acres of parkland per 1,000 residents. Non-fee revenue will be needed to remedy this existing deficiency and bring the City to the facility standard identified in the General Plan. **Table 6.8** shows the non-fee revenue that will be needed to provide park facilities at the General Plan standard based on existing development. This includes the cost of improving the City's undeveloped parkland, as well as the cost of acquiring and developing the additional park acres that would be needed to meet the standard of 3.0 acres per 1,000 residents. As shown, approximately \$31.8 million of non-fee revenue will be needed to remedy the existing deficiency.

Table 6.8: Cost to Remedy Existing Deficiency

Existing Service Population (2007)	38,471	
Facility Standard (acres/1,000 residents)	3.00	
Facility Needs (acres) (A)	115.41	
Existing Developed Parkland (acres) (B)	49.04	
Existing Undeveloped Acres (C)	63.72	
Improvement Cost per Acre	\$ 470,612	
Cost to Improve Undeveloped Parkland		\$ 29,987,867
Additional Parkland Needed (acres) (D = A - B - C)	2.65	
Cost to Acquire and Improve Parkland	\$ 692,612	
Cost of Additional Parkland Needed		\$ 1,836,807
Total Cost to Remedy Existing Deficiency		\$ 31,824,674

Sources: Tables 6.1, 6.2 and 6.5.

FEE SCHEDULE

Park fees for single and multi-family residential development are based on the cost per capita for land and improvements shown in Table 6.7 and the projected single and multi-family dwelling unit densities. **Table 6.9** shows the park impact fee schedule.

Table 6.9: Park Facilities Impact Fee

Land Use	A Cost Per Capita	B Density	C=A x B Base Fee ¹	D=C x 2% Admin Charge ²	E=C+D Total Fee
<u>Single Family</u>					
Parkland	\$ 666.00	4.50	\$ 2,997.00	\$ 59.94	\$ 3,056.94
Improvements	1,411.84	4.50	6,353.28	127.07	6,480.35
Total					\$ 9,537.29
<u>Multi-Family</u>					
Parkland	\$ 666.00	3.78	\$ 2,517.48	\$ 50.35	\$ 2,567.83
Improvements	1,411.84	3.78	5,336.76	106.74	5,443.49
Total					\$ 8,011.32

1377.00
 6480.35

 7857.35

1134.65
 5443.49

 6578.17

¹ Fee per dwelling unit.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 2.2 and 6.7; MuniFinancial.

USE OF FEE REVENUES

The City anticipates that the park fees will be the primary revenue source to fund new development's investment in park facilities. Use of fee revenues will be informed by the City of Coachella Parks and Recreation Master Plan, which details specific needs by park type. Expected park projects include the creation of park facilities in newly developing areas of the City. The City may use impact fees for the purchase of land and the construction of park improvements and recreational facilities needed to serve new development.

7. LIBRARY FACILITIES

The purpose of the fee is to ensure that new development funds its fair share of library facilities. A fee schedule is presented based on the planned 2030 standard for library facilities in the City of Coachella to ensure that new development provides adequate funding to meet its needs.

SERVICE POPULATION

Residents are the primary users of libraries. Therefore, demand for libraries is based on the City's residential population and excludes workers. **Table 7.1** provides estimates of the resident population with a projection for the year 2030.

Table 7.1: Library Service Population

	Residents
Existing (2007)	38,471
New Development (2007-2030)	<u>66,232</u>
Total (2030)	104,703

Source: Table 2.1; MuniFinancial.

FACILITY INVENTORIES, PLANS, AND STANDARDS

This study uses the system plan approach to calculate the fee for library facilities because (1) facility plans are available that indicate the anticipated use of fee revenues, and (2) planned facilities will serve both existing and new development.

Table 7.2 shows the existing building and land inventories for library facilities in the City of Coachella. Presently only one library branch, owned by the City and operated by the Riverside County Library System, serves the City of Coachella. The existing Coachella Library is in a deteriorating structure that has limited value. The building unit cost estimate shown in Table 8.2 is based on information from County Library staff. The inventories and unit costs for volumes, computer equipment, and furnishings are also based on information from the Riverside County Library. Land unit costs are the same as those used for the general government facilities impact fee (see earlier chapter).

Table 7.2: Existing Library Facilities

	Inventory	Unit Cost	Total Value
<i>Existing Facilities</i>			
Land			
Library	0.85 acres	\$ 325,000	\$ 276,250
Subtotal	0.85 acres		\$ 276,250
Buildings			
Library	2,870 sq. ft.	\$ 172	\$ 493,640
Subtotal	2,870 sq. ft.		\$ 493,640
Volumes			
Library	41,900 volumes	\$ 40	\$ 1,676,000
Subtotal - Volumes	41,900 volumes		\$ 1,676,000
Equipment and Furnishings			\$ 105,000
Total Value Existing Facilities			\$ 2,550,890

Source: City of Coachella; Riverside County Library; Riverside County Planning Department.

Table 7.3 below details the facility plans for libraries in the City of Coachella. As described in Chapter 3, the City is planning to construct a new Civic Center complex on the site of the existing City Hall. This new complex will include a new City Hall as well as a 10,000 square foot library to replace the existing facility.

The facility construction cost is based on data from the City and the costs for volumes and equipment are based on an extrapolation of the current standards per square foot of library building space. The costs for interest on debt service for the facility represent only the share of total debt service allocated to the library facility. The remaining debt service costs are accounted for in Chapter 3 and allocated to general government facilities.

Table 7.3: Planned Library Facilities

	Inventory	Unit Cost ¹	Value
<i>Land (acres)</i>			
New Library at City Hall Complex ²	-	\$ 325,000	\$ -
<i>Buildings</i>			
New Library (square feet)	10,000	\$ 350	\$ 3,500,000
Library Volumes ³	104,100	40	4,164,000
Fixtures, Furniture and Equipment ³			260,900
Interest on Debt Service for New Facility ⁴			<u>3,200,000</u>
Total Value, Planned Library Facilities			\$ 11,124,900

¹ Estimates of facility replacement value. Land value is based on the estimate of Citywide land values for small, developable parcels. Building value based on the estimated cost per a needs assessment prepared for the City of Coachella.

² Facility to be located on the site of the existing City Hall. No land acquisition required.

³ Acquisition costs for volumes, fixtures, furniture, and equipment for the new library estimated by applying the existing ratios of volumes per square foot or value of furnishings, fixtures, and equipment per square foot to the net increase in facility square footage.

⁴ Proportionate share of total interest on the City Hall/Library complex. The remainder is allocated to General Government facilities.

Source: Table 7.2; City of Coachella; Riverside County Library.

The system plan cost standard based on 2030 library facilities is shown in **Table 7.4**. These values are calculated by dividing the total value of the existing and planned facilities inventories by the 2030 service population shown in Table 7.1.

Table 7.4: Library Facilities System Plan Standard

Total Value, Existing Facilities	2,550,890
Less: Existing Library Building (to be demolished)	<u>(493,640)</u>
Net Value of Existing Facilities	\$ 2,057,250
Total Cost of Planned Facilities	<u>\$ 11,124,900</u>
2030 Library System Value	\$ 13,182,150
2030 Service Population	<u>104,703</u>
Facility Standard per Capita	\$ 125.90
Cost per Resident	\$ 125.90

Sources: Tables 7.1-7.3; MuniFinancial.

ALLOCATING FACILITY COSTS TO NEW DEVELOPMENT

The completion of the new Library will result in a higher level of facilities per capita than the City currently provides. This section allocates planned facilities between those facilities attributable to new development and those facilities needed to raise the existing standard for existing development.

Table 7.5 details the existing inventory and system plan library facility standards for the City of Coachella based on the facility inventories and plans detailed above. The table shows the standard increasing from 75 to 96 building square feet per 1,000 capita, and volumes increasing from 1.09 to 1.39 per capita.

Table 7.5: Library Facility Standards

	2007	2030	Increase
Library Space (square feet)	2,870	10,000	7,130
Service Population	<u>38,471</u>	<u>104,703</u>	
Facility Standard (square feet per 1,000 capita)	75	96	
Library Volumes	41,900	146,000	104,100
Service Population	<u>38,471</u>	<u>104,703</u>	
Facility Standard (volumes per capita)	1.09	1.39	
Library Volumes per Building Square Foot	14.60	14.60	
Value of Equipment and Furnishings per Square Foot	\$ 36.59	\$ 36.59	

Sources: Tables 7.1-7.3; MuniFinancial.

Table 7.6 shows the projected library impact fee revenue through 2030, as well as the share of planned facility costs that must be funded by non-fee revenue sources. This later component represents existing development's fair share allocation of the planned Civic Center project. The City must raise these funds to complement impact fee revenues over the planning horizon of this study (through 2030). This funding is necessary to justify the fee imposed on new development using the system plan standard documented here. If this funding does not materialize, then new development will have paid too high a fee.

Table 7.6: Library Facilities to Accommodate New Development

Facility Standard Per Capita (A)	\$	125.90
New Development Service Population (2007-2030) (B)		66,232
Costs Generated by New Development (C = A x B)	\$	8,338,609
Cost of Planned Library Facilities (D)	\$	11,124,900
Non-Fee Funding Required (E = D - C)	\$	2,786,291

Sources: Tables 7.1, 7.3 and 7.4; MuniFinancial.

The City must raise approximately \$2.8 million to fund the library facilities representing existing development's benefit from planned improvements. Likely potential sources of revenue include existing general taxes, a new special tax, a general obligation bond, or a state library grant. New general taxes would require majority voter approval. Special taxes or a general obligation bond would require two-thirds voter approval. The state makes grants for libraries available on a competitive basis with funds from periodic statewide voter-approved bond measures.

FEE SCHEDULE

Table 7.7 shows the library facilities fee schedule. The cost standard is converted to a fee per unit of new development based on dwelling unit densities (persons per dwelling unit).

Table 7.7: Library Facilities Impact Fee

Land Use	A Cost Per Capita	B Density	C=A x B Base Fee ¹	D=C x 2% Admin Charge ²	E=C+D Total Fee
<i>Residential</i>					
Single Family	\$ 125.90	4.50	\$ 566.55	\$ 11.33	\$ 577.88
Multi-Family	125.90	3.78	475.90	9.52	485.42

¹ Fee per dwelling unit.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 2.2 and 7.4; MuniFinancial.

USE OF FEE REVENUES

As described, the City intends to use library facilities impact fee revenues to fund new development's fair share of the planned library within the Civic Center complex. The City may use fee revenues for similar expanded or new facilities to serve new development. Funding facilities may include land, buildings, equipment, and furnishings.

8. STREETS AND TRANSPORTATION FACILITIES

This chapter summarizes an analysis of the need for streets and related transportation facilities to accommodate growth within the City of Coachella. It documents a reasonable relationship between new development and an impact fee to fund streets and related transportation facilities that serve new development. This fee includes streets, bridges, interchanges, and grade separations.

The City also has an existing impact fee for bus shelter facilities. The streets and transportation facilities fee does not cover those facilities and will not replace the bus shelter fee. Appendix B provides an inflation update for the bus shelter impact fee.

TRIP DEMAND

The need for street improvements is based on the trip demand placed on the road system by new development. Vehicle trip generation rates are a reasonable measure of demand on the City's system of street improvements across all modes of transportation because alternate modes (transit, bicycle, pedestrian) often substitute for vehicle trips. While average daily trips and P.M. peak-hour trips are both reasonable indicators of the demand for transportation facilities, P.M. peak-hour trips are used in this study because the need for planned projects is based on a peak-hour level of service analysis. Peak-hours represent the most congested period for roadways and peak-hour analysis is therefore the primary determinant of capacity needs.

Two types of adjustments are made to trip generation rates to calculate trip demand, as described below:

- ♦ Pass-by trips are deducted from the trip generation rate. Pass-by trips are intermediate stops between an origin and a final destination that require no diversion from the route, such as stopping to get gas on the way to work.
- ♦ The trip generation rate is adjusted by the average length of trips for a specific land use category compared to the average length of all trips on the street system.

Table 8.1 shows the calculation of trip demand factors by land use category based on the adjustments described above. The trip generation factors are from *Trip Generation, 7th Edition*, published by the Institute of Transportation Engineers. The pass-by and trip length data are based on extensive and detailed trip surveys conducted in the San Diego region by the San Diego Association of Governments. The surveys provide one of the most comprehensive databases available of pass-by trips factors and average trip length for a wide range of land uses. Though urban development patterns may differ slightly between San Diego County and the City of Coachella, the use of this data is appropriate as a means of allocating trips across multiple land use categories.

Table 8.1: Trip Rate Adjustment Factor

	Primary Trips ¹	Diverted Trips ¹	Total Excluding Pass-by ¹	Average Trip Length ²	Adjustment Factor ³	ITE Category	PM Peak Hour Trips ⁴	Trip Demand Factor ⁵
<i>Residential</i> ⁶								
Single Family	86%	11%	97%	7.9	1.11	Single Family Detached Housing (210)	1.01	1.12
Multi-family	86%	11%	97%	7.9	1.11	Multi-Family Housing (230)	0.52	0.58
<i>Nonresidential</i> ⁷								
Commercial	47%	31%	78%	3.6	0.41	Shopping Center (820)	3.75	1.54
Office	77%	19%	96%	8.8	1.22	General Office Building (710)	1.49	1.82
Industrial	79%	19%	98%	9.0	1.28	General Light Industrial (110)	0.98	1.25

¹ Percent of total trips. Primary trips are trips with no midway stops, or "links". Diverted trips are linked trips whose distance adds at least one mile to the primary trip. Pass-by trips are links that do not add more than one mile to the total trip

² in miles.

³ The trip adjustment factor equals the percent of non-pass-by trips multiplied by the average trip length and divided by the systemwide average trip length of 6.9

⁴ Trips per dwelling unit or per 1,000 building square feet. For Office, trip rate is Weekday, P.M. Peak Hour. For other categories, trip rate is Peak Hour of Adjacent Street Traffic, One Hour Between 4 p.m. and 6 p.m.

⁵ The trip demand factor is the product of the trip adjustment factor and the average daily trips.

⁶ Trip percentages and average trip lengths based on "residential" category. See SANDAG for source, below.

⁷ Trip percentages and average trip lengths for commercial based on the midpoint between "community shopping center" and "regional shopping center" category, for office based on "standard commercial office" category, and for industrial based on "industrial park (no commercial)" category. See SANDAG for source, below.

Sources: San Diego Association of Governments, *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2001; Institute of Transportation Engineers, *Trip Generation*, 7th Edition, 2003; MuniFinancial.

Table 8.2 estimates the trip demand from existing and new development on the City's transportation system. Total trip demand is based on the trip demand factors calculated in Table 8.1 and the demographic estimates in Table 2.1. The buildout development scenario is based on data from Urban Crossroads. The Urban Crossroads buildout scenario relied on the City of Coachella General Plan as well as specific plans from several proposed development projects.

As shown in the table, development between 2007 and 2030 is estimated to generate 49 percent of the total trip demand generated by growth through buildout of the City's General Plan.

Table 8.2: Trip Demand From Existing and New Development

Trip Demand Factor	Development (dwelling units / 1,000 sq. ft.)			Trip Demand				
	Existing	Growth 2007-2030	Growth 2030-Buildout	Existing	Growth 2007-2030	Growth 2030-Buildout	Total Trip Demand	
<i>Citywide</i>								
<i>Residential</i>								
Single Family	1.12	6,207	10,195	11,000	6,952	11,419	12,320	30,690
Multi-family	0.58	2,219	6,011	1,000	1,287	3,486	580	5,353
Subtotal		8,426	16,206	12,000	8,239	14,905	12,900	36,044
<i>Nonresidential</i>								
Commercial	1.54	790	2,980	5,500	1,217	4,589	8,470	14,276
Office	1.82	610	740	3,000	1,110	1,347	5,460	7,917
Industrial ¹	1.25	1,560	6,580	2,400	1,950	8,225	3,000	13,175
Subtotal		2,960	10,300	10,900	4,277	14,161	16,930	35,368
Total					12,516	29,066	29,830	71,412
Percent of Trips from Growth						49%	51%	

¹ Includes trip demand from agricultural workers.

Source: Tables 2.1 and 8.1; Urban Crossroads; MuniFinancial.

IMPROVEMENTS INCLUDED IN IMPACT FEE PROGRAM

This street facility impact fee is calculated based on the planned facilities approach. Under this approach, the cost of facilities deemed necessary to accommodate the additional trip demand generated by new development is allocated to new development based on the trip demand factors shown in Table 8.1.

Planned Street Improvements

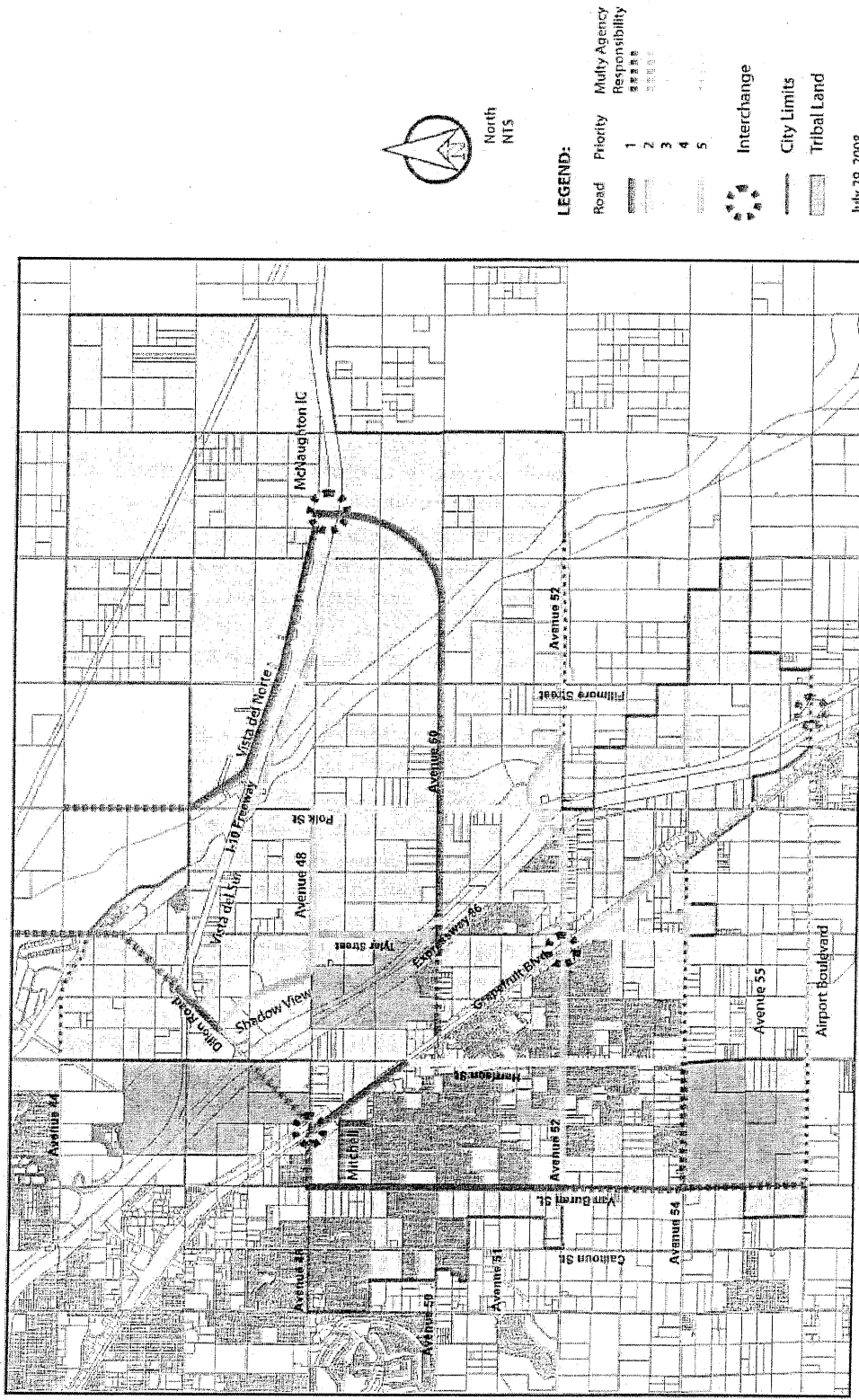
The list of needed improvements is based on the City-wide Traffic Study prepared for the City by Urban Crossroads and published on March 20, 2007. The Urban Crossroads study used street facility plans from the General Plan and traffic modeling software to determine the arterial streets that will need to be either added or expanded to accommodate increased trip volumes associated with future development. The improvement needs identified by Urban Crossroads are based on a buildout land use scenario in accordance with the City's General Plan. The Urban Crossroads study did not differentiate between projects needed before or after this study's planning horizon of 2030. The improvement needs are based on maintaining a level of service (LOS) of D or better for peak hour intersection operations, consistent with City of Coachella policy and the Riverside County General Plan. Improvement needs for intersections that serve Caltrans facilities, such as SR-111 (Grapefruit Boulevard) and SR-86S, are based meeting on Caltrans' level of service delay criteria of a minimum LOS of D with a delay of less than 45 seconds per vehicle for signalized intersections.

After completion of the City-wide Traffic Study, the City and Urban Crossroads identified some other needed street improvements. The Urban Crossroads study only covered improvements to arterial streets needed to serve new development. The City identified improvements that will be needed on collector streets to address deterioration in the level of service caused by new development. The City also made minor changes to the arterial improvements identified in the Urban Crossroads study. The final list of improvements to be included in the street facility impact fee is included in an August 8, 2008, letter to the City Engineer from Urban Crossroads, titled "City of Coachella Public Facilities Financing Program Traffic Engineering Support Roadway System Refinements." **Figure 8.1** shows the roadway segments where improvements are needed to serve new development. Improvements on these segments are used as the basis for the impact fee calculated in this chapter. The Urban Crossroads traffic study identified the need for some improvements outside of the City Limits. These projects appear in Figure 8.1. However, only improvements located within the City Limits are included for funding with impact fees.

All of the projects identified are required to provide adequate capacity for the increased trip volumes generated by new development. According to the City-wide Traffic Study, there are no deficiencies in roadway capacity under existing conditions.¹

¹ *City-Wide Traffic Study, City of Coachella, California*; Urban Crossroads; March 20, 2007; page 3-4.

Figure 8.1: Roadway Improvements Needed to Accommodate New Development



Bifurcation Policy

The City intends to fund improvements that serve primarily regionally oriented traffic through the impact fee program, while funding locally required roadway improvements with sources other than impact fee revenue. This division of funding responsibility between impact fee revenue and other sources is referred to as a “bifurcation policy.” Locally required improvements are defined as the outside lane in each direction (for roads with more than two total planned lanes), curb, gutter, and sidewalk, while the center median and remaining travel lanes are defined as regionally oriented traffic improvements to be funded with impact fee revenue.

Instead of impact fee revenue, the locally required improvements will be funded by new development adjacent to the roadway and other sources. Adjacent development cannot be used as a funding source where local development has already occurred and new redevelopment is not expected in the near future or where the roadway is adjacent to a freeway, water drainage channel, or other public facility. In these areas, the City will need to identify other funding sources for locally required improvements. **Appendix C** shows the proposed bifurcation policy.

Total Planned Facilities Costs

The planned street improvements are detailed in **Table 8.3**, including the current and future number of lanes and the length of each segment. Table 8.3 also shows the fair share percentage of each improvement allocated to development in the City. The allocation of each segment to development within the City is determined as follows:

- ♦ *Segments completely within City boundary:* Generally 100 percent allocated to development within City and included in fee program.²
- ♦ *Segments running along City boundary:* Fifty percent of the improvement cost included in the fee program because half of the street is within the City limits.
- ♦ *Segments on borders of Indian land within Coachella where the City does not have primary responsibility for funding traffic improvements:* Urban Crossroads estimated fair share of City funding responsibility based on the share of trips on each segment resulting from development within the City.

The design standard for each roadway classification is based on the roadway cross-sections shown in Exhibit 3-H of the City of Coachella General Plan. The August 8, 2008, Urban Crossroads letter identifies modified cross-sections for portions of Avenue 48 and Van Buren Street to accommodate constraints on available right-of-way.

Estimated costs for the planned improvements are shown in **Table 8.4**. Willdan Engineering generated the cost estimates. Project cost estimates include construction, right-of-way acquisition, and support costs. The cost estimation process involved a review of recently completed projects in the region as well as relevant documents from the Coachella Valley

² One segment within the City (Dillon Road from I-10 to Avenue 44) has a reduced City of Coachella funding share due to anticipated Indio traffic using that segment. For this segment, Urban Crossroads estimated the fair share of City funding responsibility based on the share of trips on the segment resulting from development within the City.

Association of Governments and the Western Riverside Council of Governments. Key assumptions behind the cost estimates include:

- ◆ \$1 million per lane mile for road construction;
- ◆ \$55 per linear foot for 22-foot curbed center medians, \$45 per linear foot for 16-foot curbed medians, and \$189 per linear foot for striped medians;
- ◆ Construction contingency of 25 percent;
- ◆ Support costs at 30 percent for soft costs such as design, engineering, and project management; and
- ◆ Base right-of-way at \$10 per square foot, with adjustments when right-of-way requires acquisition of developed parcels.

The unit cost assumptions are explained further in **Appendix A**. Appendix A also shows detailed calculations of the project costs for each segment.

Table 8.3: Planned Road Segment Improvements

Seg. No.	Segment	From	To	Existing Lanes	Future Classification	Length (ft)	City of
							Coachella Share
1	Ave 48 ^{1,6}	Van Buren St	Grapefruit Blvd	2	6-Lane Modified Major Arterial	2,250	50%
2	Dillon Rd	Shadow View Blvd	I-10 EB Ramps	4	6-Lane Major Arterial	2,200	100%
3	Dillon Rd ⁷	I-10 EB Ramps	Ave 44	2	6-Lane Major Arterial	5,500	50%
4	Shadow View Blvd	Dillon Rd	Tyler St	0	4-Lane Secondary Arterial	6,400	100%
5	Ave 50	Avenida de Oro	E of Kenmore St	2	4-Lane Primary Arterial	900	100%
6	Ave 50	Grapefruit Blvd	SR-86	2	6-Lane Major Arterial	5,000	100%
7	Ave 50	SR-86	End of Existing Rd	2	6-Lane Major Arterial	11,000	100%
8	Ave 50	Existing Rd	I-10	0	6-Lane Major Arterial	8,000	100%
9	McNaughton Pkwy	I-10	0.25 mi. N of I-10	0	6-Lane Major Arterial	1,320	100%
10	Ave 52	Van Buren St	Frederick St	2	6-Lane Major Arterial	2,640	100%
11	Ave 52	Frederick St	Harrison St	4	6-Lane Major Arterial	2,640	100%
12	Ave 52	Harrison St	Shady Lane	2	6-Lane Major Arterial	2,640	100%
13	Ave 52	Shady Lane	Grapefruit Blvd	4	6-Lane Major Arterial	2,000	100%
14	Ave 52 ²	Grapefruit Blvd	SR-86	4	8-Lane Enhanced Major	6,000	100%
15	Ave 52	SR-86	Fillmore St	2	6-Lane Major Arterial	6,200	100%
16	Ave 52 ³	Fillmore St	Coachella Canal	2	6-Lane Major Arterial	6,350	50%
17	Ave 54 ⁴	Van Buren St	Harrison St	2	6-Lane Major Arterial	5,280	50%
18	Ave 54	Tyler St	east of Tyler St	2	6-Lane Major Arterial	1,320	100%
19	Ave 54	west of Fillmore St	Fillmore St	2	4-Lane Secondary Arterial	3,600	100%
20	Airport Blvd ⁵	Van Buren St	Harrison St	2	6-Lane Major Arterial	5,280	20%
21	Airport Blvd ³	E of Grapefruit (City lim.)	SR-86S	2	6-Lane Major Arterial	1,340	50%
22	Airport Blvd ³	SR-86S	E of SR-86S (City lim.)	2	4-Lane Primary Arterial	1,700	50%
23	Grapefruit Blvd	Ave 48	Harrison St	4	6-Lane Major Arterial	5,280	100%
24	Grapefruit Blvd	Ave 52	Tyler St	2	6-Lane Major Arterial	1,350	100%
25	Grapefruit Blvd	Tyler St	Ave 54	2	4-Lane Primary Arterial	5,300	100%
26	Grapefruit Blvd ³	Ave 54	Ave 55	2	4-Lane Primary Arterial	3,600	50%
27	Van Buren St	Ave 48	Ave 52	2	6-Lane Modified Major Arterial	10,700	100%
28	Van Buren St ³	Ave 52	Ave 54	2	6-Lane Modified Major Arterial	5,200	50%
29	Van Buren St ⁶	Ave 54	Ave 55	2	6-Lane Modified Major Arterial	2,640	30%
30	Van Buren St ⁴	Ave 55	Airport Blvd	2	6-Lane Modified Major Arterial	2,640	30%
31	Harrison St	Grapefruit Blvd	Ave 52	4	6-Lane Major Arterial	6,500	100%
32	Harrison St	Ave 52	Ave 54	4	6-Lane Major Arterial	5,280	100%
33	Tyler St	Shadow View Blvd	Ave 50	0	6-Lane Major Arterial	5,280	100%
34	Tyler St	Grapefruit Blvd	Ave 54	2	4-Lane Primary Arterial	4,250	100%
35	Polk St	Ave 48	Ave 50	0	6-Lane Major Arterial	5,280	100%
36	Polk St	Ave 50	Ave 52	0	2-Lane Collector	4,100	100%
37	Mitchell Dr	Van Buren St	Grapefruit Blvd	0	2-Lane Collector	3,250	100%
38	Vista del Norte	McNaughton Pkwy	Polk St	0	2-Lane Collector	15,500	100%
39	Vista del Sur	McNaughton Pkwy	Polk St	0	2-Lane Collector	14,500	100%
40	Ave 44 ³	Harrison St	Dillon Rd	2	4-Lane Secondary Arterial	5,450	50%
41	Ave 48	Tyler St	Polk St	0	6-Lane Major Arterial	5,280	100%
42	Frederick St	Mitchell Dr	Ave 49	0	4-Lane Secondary Arterial	1,300	100%
43	Vista Del Sur	Camp Court	Dillon Rd	0	2-Lane Collector	1,400	100%

¹ TUMF plans to fund increase to six lanes on this section.

² Existing street is four lanes from Grapefruit to Hernandez St (approx. 4,500 ft.), and two lanes from Hernandez St. to SR-86S (approx. 1,500 ft.).

³ On City boundary. Fifty percent City responsibility because half of improvement is within City limits.

⁴ Borders Augustine Indian land. Percentage shown represents City's fair share of project responsibility based on traffic analysis by Urban Crossroads.

⁵ Borders Augustine Indian land and on City boundary. Percentage shown represents City's fair share of project responsibility based on traffic analysis by Urban Crossroads.

⁶ The recommended median reduction, combined with the anticipated right of way of the south (City) side of the street, will allow construction of three through lanes in each direction of travel.

⁷ Traffic generated by development in the City of Indio contributes to the need for this improvement. Percentage shown represents City of Coachella's fair share of project responsibility based on traffic analysis by Urban Crossroads.

Sources: Urban Crossroads, "City-Wide Traffic Study, City of Coachella," March 20, 2007, Table 6-2; Urban Crossroads, "City of Coachella Public Facilities Financing Program Traffic Engineering Support Roadway Refinements," August 8, 2008; MuniFinancial; Willdan Engineering.

Table 8.4: Planned Roadway Project Costs

Seg. No.	Segment	From	To	Construction Cost ¹	Right-of-Way Cost ²	TOTAL COST
1	Ave 48	Van Buren St	Grapefruit Blvd	\$ 1,549,500	\$ 45,000	\$ 1,594,500
2	Dillon Rd	Shadow View Blvd	I-10 EB Ramps	2,905,000	-	2,905,000
3	Dillon Rd	I-10 EB Ramps	Ave 44	7,262,400	-	7,262,400
4	Shadow View Blvd	Dillon Rd	Tyler St	5,909,100	2,816,000	8,725,100
5	Ave 50	Avenida de Oro	E of Kenmore St	634,400	18,000	652,400
6	Ave 50	Grapefruit Blvd	SR-86	6,602,200	1,100,000	7,702,200
7	Ave 50	SR-86	End of Existing Rd	14,524,800	2,420,000	16,944,800
8	Ave 50	Existing Rd	I-10	10,563,500	5,920,000	16,483,500
9	McNaughton Pkwy	I-10	0.25 mi. N of I-10	1,743,000	976,800	2,719,800
10	Ave 52	Van Buren St	Frederick St	3,486,000	580,800	4,066,800
11	Ave 52	Frederick St	Harrison St	3,486,000	3,820,000	7,306,000
12	Ave 52	Harrison St	Shady Lane	3,486,000	7,510,800	10,996,800
13	Ave 52	Shady Lane	Grapefruit Blvd	2,640,900	-	2,640,900
14	Ave 52	Grapefruit Blvd	SR-86	11,615,800	1,840,000	13,455,800
15	Ave 52	SR-86	Fillmore St	8,186,700	1,364,000	9,550,700
16	Ave 52	Fillmore St	Coachella Canal	8,384,800	1,397,000	9,781,800
17	Ave 54	Van Buren St	Harrison St	6,971,900	1,161,600	8,133,500
18	Ave 54	Tyler St	east of Tyler St	1,743,000	290,400	2,033,400
19	Ave 54	west of Fillmore St	Fillmore St	3,323,900	-	3,323,900
20	Airport Blvd	Van Buren St	Harrison St	6,971,900	1,161,600	8,133,500
21	Airport Blvd	E of Grapefruit (Cty lim.)	SR-86S	1,769,400	294,800	2,064,200
22	Airport Blvd	SR-86S	E of SR-86S (Cty lim.)	1,198,300	34,000	1,232,300
23	Grapefruit Blvd	Ave 48	Harrison St	6,971,900	-	6,971,900
24	Grapefruit Blvd	Ave 52	Tyler St	1,782,600	297,000	2,079,600
25	Grapefruit Blvd	Tyler St	Ave 54	3,736,000	106,000	3,842,000
26	Grapefruit Blvd	Ave 54	Ave 55	2,537,700	-	2,537,700
27	Van Buren St	Ave 48	Ave 52	16,465,400	-	16,465,400
28	Van Buren St	Ave 52	Ave 54	8,001,900	624,000	8,625,900
29	Van Buren St	Ave 54	Ave 55	4,062,500	-	4,062,500
30	Van Buren St	Ave 55	Airport Blvd	4,062,500	316,800	4,379,300
31	Harrison St	Grapefruit Blvd	Ave 52	8,582,800	-	8,582,800
32	Harrison St	Ave 52	Ave 54	6,971,900	-	6,971,900
33	Tyler St	Shadow View Blvd	Ave 50	6,971,900	739,200	7,711,100
34	Tyler St	Grapefruit Blvd	Ave 54	2,995,800	85,000	3,080,800
35	Polk St	Ave 48	Ave 50	6,971,900	739,200	7,711,100
36	Polk St	Ave 50	Ave 52	2,523,700	-	2,523,700
37	Mitchell Dr	Van Buren St	Grapefruit Blvd	2,000,500	-	2,000,500
38	Vista del Norte	McNaughton Pkwy	Polk St	9,540,700	6,200,000	15,740,700
39	Vista del Sur	McNaughton Pkwy	Polk St	8,925,200	5,800,000	14,725,200
40	Ave 44	Harrison St	Dillon Rd	5,032,000	-	5,032,000
41	Ave 48	Tyler St	Polk St	6,971,900	3,907,200	10,879,100
42	Frederick St	Mitchell Dr	Ave 49	1,200,300	572,000	1,772,300
43	Vista Del Sur	Camp Court	Dillon Rd	861,700	560,000	1,421,700
Total				\$232,129,300	\$ 52,697,200	\$284,826,500

¹ Construction costs include \$1 million per lane mile for roadway construction; \$55 per linear foot for full 22-foot curbed median, \$45 per linear foot for reduced 16-foot curbed median on Ave 48 from Van Buren St to Grapefruit Blvd, and \$189 per linear foot for striped median on Van Buren St and secondary arterials; and 25 percent contingency.

² Land costs estimated at \$10 per square foot. Acquisition costs for existing houses estimated at \$290,000 per house. Acquisition costs for existing businesses estimated at \$290,000 per business.

Sources: Tables A.1. and A.2.

Reconciliation of City General Plan and TUMF Facilities Costs

New development throughout the Coachella Valley is subject to a regional traffic impact fee known as the Transportation Uniform Mitigation Fee (TUMF). The TUMF is based on a comprehensive list of capacity improvements to arterials throughout the region. Several of the TUMF projects overlap with those included in the City's planned project list. The City's Streets and Transportation Facilities Impact Fee should not include funding for project costs that are also included in the TUMF program.

Table 8.5, below, shows the cost of the improvements that will be funded through the TUMF, but would otherwise be funded with City impact fee revenue. For consistency, the costs are based on this study's cost assumptions and are not based on TUMF documentation. Although the Coachella Valley Association of Governments (CVAG) is continually updating and revising the TUMF cost estimates, the costs shown in the TUMF documentation are presently less current than those shown in this report.

The TUMF program is designed to fund only 75 percent of the costs of its transportation improvement projects. The remaining 25 percent is the responsibility of the local agency to fund. This approach is based on the assumption that the remaining share of project costs will be funded through local agencies conditioning development projects to dedicate right-of-way and/or construct improvements.

This study includes the 25 percent local agency share of TUMF project costs in the fee program. Doing so ensures that the City will have full funding for the improvements the City plans to fund with impact fee revenue. Nevertheless, it is reasonable to expect that some dedications of roadways and/or right-of-way will occur. These dedications will warrant impact fee credits equal to the value of the dedications, consistent with the cost assumptions contained in this report.

Table 8.5: Planned Improvements Included in TUMF

Seg. No.	Segment	From	To	TUMF		Total TUMF Cost
				Construction Cost	TUMF Right-of-Way Cost	
1	Ave 48	Van Buren St	Grapefruit Blvd	\$ 1,549,500	\$ 45,000	\$ 1,594,500
2	Dillon Rd	Shadow View Blvd	I-10 EB Ramps	2,905,000	-	2,905,000
3	Dillon Rd	I-10 EB Ramps	Ave 44	7,262,400	-	7,262,400
4	Shadow View Blvd	Dillon Rd	Tyler St	-	-	-
5	Ave 50	Avenida de Oro	E of Kenmore St	634,400	18,000	652,400
6	Ave 50	Grapefruit Blvd	SR-86	6,602,200	1,100,000	7,702,200
7	Ave 50	SR-86	End of Existing Rd	14,524,800	2,420,000	16,944,800
8	Ave 50	Existing Rd	I-10	10,563,500	5,920,000	16,483,500
9	McNaughton Pkwy	I-10	0.25 mi. N of I-10	-	-	-
10	Ave 52	Van Buren St	Frederick St	3,486,000	580,800	4,066,800
11	Ave 52	Frederick St	Harrison St	3,486,000	-	3,486,000
12	Ave 52	Harrison St	Shady Lane	3,486,000	7,510,800	10,996,800
13	Ave 52	Shady Lane	Grapefruit Blvd	2,640,900	-	2,640,900
14	Ave 52	Grapefruit Blvd	SR-86	7,922,600	1,840,000	9,762,600
15	Ave 52	SR-86	Fillmore St	-	-	-
16	Ave 52	Fillmore St	Coachella Canal	-	-	-
17	Ave 54	Van Buren St	Harrison St	6,971,900	1,161,600	8,133,500
18	Ave 54	Tyler St	east of Tyler St	1,743,000	290,400	2,033,400
19	Ave 54	west of Fillmore St	Fillmore St	3,323,900	-	3,323,900
20	Airport Blvd	Van Buren St	Harrison St	6,971,900	1,161,600	8,133,500
21	Airport Blvd	E of Grapefruit (Cty lim.)	SR-86S	1,769,400	294,800	2,064,200
22	Airport Blvd	SR-86S	E of SR-86S (Cty lim.)	-	-	-
23	Grapefruit Blvd	Ave 48	Harrison St	6,971,900	-	6,971,900
24	Grapefruit Blvd	Ave 52	Tyler St	1,782,600	297,000	2,079,600
25	Grapefruit Blvd	Tyler St	Ave 54	3,736,000	106,000	3,842,000
26	Grapefruit Blvd	Ave 54	Ave 55	2,537,700	-	2,537,700
27	Van Buren St	Ave 48	Ave 52	16,465,400	-	16,465,400
28	Van Buren St	Ave 52	Ave 54	-	-	-
29	Van Buren St	Ave 54	Ave 55	-	-	-
30	Van Buren St	Ave 55	Airport Blvd	-	-	-
31	Harrison St	Grapefruit Blvd	Ave 52	8,582,800	-	8,582,800
32	Harrison St	Ave 52	Ave 54	6,971,900	-	6,971,900
33	Tyler St	Shadow View Blvd	Ave 50	-	-	-
34	Tyler St	Grapefruit Blvd	Ave 54	-	-	-
35	Polk St	Ave 48	Ave 50	-	-	-
36	Polk St	Ave 50	Ave 52	-	-	-
37	Mitchell Dr	Van Buren St	Grapefruit Blvd	-	-	-
38	Vista del Norte	McNaughton Pkwy	Polk St	-	-	-
39	Vista del Sur	McNaughton Pkwy	Polk St	-	-	-
40	Ave 44	Harrison St	Dillon Rd	5,032,000	-	5,032,000
41	Ave 48	Tyler St	Polk St	-	-	-
42	Frederick St	Mitchell Dr	Ave 49	-	-	-
43	Vista Del Sur	Camp Court	Dillon Rd	-	-	-
Total				\$ 137,923,700	\$ 22,746,000	\$ 160,669,700
Amount Not Funded by TUMF (25%)						\$ 40,167,425

Sources: Tables 8.4, A-3, and A-4.

The cost of projects in the City fee program, net of available TUMF funding, is shown in Table 8.6. This cost includes two components. First, the cost of improvements not included in the TUMF program is calculated for each segment by subtracting the cost of improvements to be funded by the TUMF from the total cost of each segment's improvements. In addition, the 25 percent of each TUMF improvement not funded by the TUMF program is added to the City fee program cost for each segment. For segments where other jurisdictions are responsible for a portion of project costs, only City of Coachella fair share cost is included in the fee program.

Table 8.6: Cost of Planned Improvements Remaining for City Fee Program

Seg. No.	Segment	A Total Cost	B Total TUMF Cost	C = A - B Remaining Cost	D = 0.25 * B Unfunded Share (25%) of TUMF Project	E City of Coachella Share	F = (C + D) * E City of Coachella Cost
1	Ave 48	\$ 1,594,500	\$ 1,594,500	\$ -	\$ 398,625	50%	\$ 199,300
2	Dillon Rd	2,905,000	2,905,000	-	726,250	100%	726,300
3	Dillon Rd	7,262,400	7,262,400	-	1,815,600	50%	907,800
4	Shadow View Blvd	8,725,100	-	8,725,100	-	100%	8,725,100
5	Ave 50	652,400	652,400	-	163,100	100%	163,100
6	Ave 50	7,702,200	7,702,200	-	1,925,550	100%	1,925,600
7	Ave 50	16,944,800	16,944,800	-	4,236,200	100%	4,236,200
8	Ave 50	16,483,500	16,483,500	-	4,120,875	100%	4,120,900
9	McNaughton Pkwy	2,719,800	-	2,719,800	-	100%	2,719,800
10	Ave 52	4,066,800	4,066,800	-	1,016,700	100%	1,016,700
11	Ave 52	7,306,000	3,486,000	3,820,000	871,500	100%	4,691,500
12	Ave 52	10,996,800	10,996,800	-	2,749,200	100%	2,749,200
13	Ave 52	2,640,900	2,640,900	-	660,225	100%	660,200
14	Ave 52	13,455,800	9,762,600	3,693,200	2,440,650	100%	6,133,900
15	Ave 52	9,550,700	-	9,550,700	-	100%	9,550,700
16	Ave 52	9,781,800	-	9,781,800	-	50%	4,890,900
17	Ave 54	8,133,500	8,133,500	-	2,033,375	50%	1,016,700
18	Ave 54	2,033,400	2,033,400	-	508,350	100%	508,400
19	Ave 54	3,323,900	3,323,900	-	830,975	100%	831,000
20	Airport Blvd	8,133,500	8,133,500	-	2,033,375	20%	406,700
21	Airport Blvd	2,064,200	2,064,200	-	516,050	50%	258,000
22	Airport Blvd	1,232,300	-	1,232,300	-	50%	616,200
23	Grapefruit Blvd	6,971,900	6,971,900	-	1,742,975	100%	1,743,000
24	Grapefruit Blvd	2,079,600	2,079,600	-	519,900	100%	519,900
25	Grapefruit Blvd	3,842,000	3,842,000	-	960,500	100%	960,500
26	Grapefruit Blvd	2,537,700	2,537,700	-	634,425	50%	317,200
27	Van Buren St	16,465,400	16,465,400	-	4,116,350	100%	4,116,400
28	Van Buren St	8,625,900	-	8,625,900	-	50%	4,313,000
29	Van Buren St	4,062,500	-	4,062,500	-	30%	1,218,800
30	Van Buren St	4,379,300	-	4,379,300	-	30%	1,313,800
31	Harrison St	8,582,800	8,582,800	-	2,145,700	100%	2,145,700
32	Harrison St	6,971,900	6,971,900	-	1,742,975	100%	1,743,000
33	Tyler St	7,711,100	-	7,711,100	-	100%	7,711,100
34	Tyler St	3,080,800	-	3,080,800	-	100%	3,080,800
35	Polk St	7,711,100	-	7,711,100	-	100%	7,711,100
36	Polk St	2,523,700	-	2,523,700	-	100%	2,523,700
37	Mitchell Dr	2,000,500	-	2,000,500	-	100%	2,000,500
38	Vista del Norte	15,740,700	-	15,740,700	-	100%	15,740,700
39	Vista del Sur	14,725,200	-	14,725,200	-	100%	14,725,200
40	Ave 44	5,032,000	5,032,000	-	1,258,000	50%	629,000
41	Ave 48	10,879,100	-	10,879,100	-	100%	10,879,100
42	Frederick St	1,772,300	-	1,772,300	-	100%	1,772,300
43	Vista Del Sur	1,421,700	-	1,421,700	-	100%	1,421,700
Total		\$ 284,826,500	\$ 160,669,700	\$ 124,156,800	\$ 40,167,425	87%	\$ 143,640,700

Source: Tables 8.3, 8.4 and 8.5; Urban Crossroads; MuniFinancial.

Interchanges and Grade Separations

In addition to the road segment improvements described above, the Urban Crossroads study and the City of Coachella have identified the need for several highway interchanges and grade separations to accommodate traffic generated by new development. Table 8.7 shows the estimated cost of interchanges and grade separations included in the impact fee program.

Intersections and grade separations are not included in the bifurcation policy and will be fully funded with impact fee revenue.

Estimated costs for these structures come from a variety of sources. Where available, Caltrans Project Study Reports (PSRs) were used. Estimates of the cost to construct the SR-86S/Avenue 50 and SR-86S/Avenue 52 interchanges are based on PSRs for each interchange. The Project Study Reports were prepared in 2005, and the cost estimates were updated for changes in highway construction costs using the Caltrans Cost Index for Selected Highway Construction Items. The City of Coachella provided an estimate of \$36.8 million (2007\$) to construct the I-10/McNaughton Boulevard interchange. Cost estimates in the Coachella Valley Regional Arterial Cost Estimate (RACE), which was used to calculate the cost basis for the TUMF, were used for the four grade separations on Grapefruit Boulevard. As with the Caltrans PSRs, the RACE was prepared in 2005 and cost estimates were updated for inflation using the Caltrans Cost Index.

As with some of the road segment improvements, these interchanges and grade separations are included on the list of projects to be funded with TUMF revenue. As noted above, the TUMF will fund only 75 percent of the cost of each improvement project. The remaining 25 percent of the interchange cost is included in the cost basis for the City's traffic impact fee. Some of the grade separations are on the City boundary; therefore, only a portion of the improvement cost is included in the impact fee program. If an interchange is on the City boundary, 50 percent of the remaining improvement costs are included in the City program because the interchange will be approximately half in the City.

Table 8.7: Traffic Structures

	A	B	C = A - B	D = 0.25 * B	E	F = (C + D) * E
	City Planned Project Cost	TUMF Planned Project Cost	Remaining Cost	Unfunded Share (25%) of TUMF Project	City of Coachella Share	City of Coachella Cost
<i>Interchanges</i>						
I-10/McNaughton Blvd ¹	\$ 36,750,000	\$ 36,750,000	\$ -	\$ 9,187,500	100%	\$ 9,187,500
SR-86S/Ave 50 (Tyler St) ²	28,425,788	28,425,788	-	7,106,447	100%	7,106,400
SR-86S/Ave 52 ²	20,014,134	20,014,134	-	5,003,534	100%	5,003,500
Subtotal - Interchanges	\$ 85,189,923	\$ 85,189,923	\$ -	\$ 21,297,481		\$ 21,297,400
<i>Grade Separations³</i>						
Grapefruit Blvd/Ave 48 ⁴	\$ 5,052,190	\$ 5,052,190	\$ -	\$ 1,263,048	50%	\$ 631,500
Grapefruit Blvd/Ave 50	5,052,190	5,052,190	-	1,263,048	100%	1,263,000
Grapefruit Blvd/Ave 52	5,052,190	5,052,190	-	1,263,048	100%	1,263,000
Subtotal - Grade Separations	\$ 15,156,570	\$ 15,156,570	\$ -	\$ 3,789,143		\$ 3,157,500
Total	\$ 100,346,493	\$ 100,346,493	\$ -	\$ 50,173,246		\$ 24,454,900

¹ Cost based on City of Coachella estimate.

² Cost based on Caltrans Project Study Report, which was prepared in 2005. Estimated cost adjusted for inflation based on change in Caltrans Transportation Cost Index from 2005 annual value of 268.3 to 3rd Quarter 2007 value of 309.9 average for last twelve months.

³ Cost for grade separations based on CVAG Regional Arterial Cost Estimate, which was prepared in 2005. Estimated cost adjusted for inflation based on change in Caltrans Transportation Cost Index from 2005 annual value of 268.3 to 3rd Quarter 2007 value of 309.9 average for last twelve months.

⁴ On City boundary. Fifty percent City responsibility because half of improvement is within City limits.

Sources: City of Coachella; Caltrans Project Study Report for SR 86S/Avenue 50 Interchange, June 2005; Caltrans Project Study Report for SR 86S/Avenue 52 Interchange, June 2005; Coachella Valley Association of Governments, "Coachella Valley RACE Update 2005," Table 2-6; California Department of Transportation Cost Index for Selected Highway Construction Items: Urban Crossroads; MuniFinancial.

Bridges

The Urban Crossroads study also addressed the need for bridge improvements to accommodate growth. **Table 8.8** calculates the funding needed for bridges in the road segments included in the City's impact fee program. Bridge costs are based on unit costs developed in the RACE in 2005 and updated for changes in highway construction costs using the Caltrans Cost Index. More details about the estimation of bridge costs are shown in **Table A.5** in Appendix A. Bridges are not included in the proposed bifurcation policy and will be fully funded with impact fee revenue.

As with some of the road segments, the TUMF program includes widening of some of the bridges also included in the City's fee program. For the bridges in both programs, the TUMF is based on building fewer lanes than the City plans; thus, the TUMF plans to fund only a portion of the planned bridges. In addition, the TUMF program plans to fund only 75 percent of the cost of projects included in the program. The cost of the bridge widening projects not included in the TUMF program and the remaining 25 percent of the cost of projects that are included in the TUMF program remain to be funded. Some of these bridges are on the City boundary. For these spans, only a portion remaining of the improvement cost is included in the impact fee program.

Table 8.8: Bridges

	A	B	C = A - B	D = 0.25 * B	E	F = (C + D) * E
	City Planned Bridge Cost	TUMF Planned Bridge Cost	Remaining Cost	Unfunded Share (25%) of TUMF Project	City of Coachella Share	City of Coachella Cost
Vista del Sur over Coachella Canal	\$ 1,326,460	N/A	\$ 1,326,460	N/A	100%	\$ 1,326,500
Ave 50 over Coachella Canal	3,183,781	2,316,107	867,674	579,027	100%	867,700
Ave 50 over Whitewater River	3,183,781	2,316,107	867,674	579,027	100%	867,700
Ave 52 over Whitewater River	4,051,454	2,316,107	1,735,348	579,027	100%	1,735,300
Airport Blvd over Whitewater River ¹	3,183,781	N/A	3,183,781	N/A	50%	1,591,900
Total			\$ 7,980,936	\$ 1,737,080		\$ 6,389,100

¹ On City boundary. Fifty percent City responsibility because half of improvement is within City limits.

Sources: Table A.6; Urban Crossroads; MuniFinancial.

ALLOCATING FACILITY COSTS TO NEW DEVELOPMENT

Table 8.9 shows the street facilities cost standard, in terms of a cost per P.M peak-hour trip. The project list upon which the facilities cost standard is based is designed to include all traffic improvements needed through full buildout of the City's General Plan. Due to the planned TUMF funding and the proposed bifurcation policy, only a portion of the total cost of the needed improvements is included in the fee program.

Full buildout of the General Plan is expected to occur after the 2030 planning horizon used in this study. As shown in Table 8.2, 49 percent of the new trip demand associated with full buildout of the General Plan is estimated to be generated by 2030, and the remaining 51

percent will be generated after 2030. Thus, 49 percent of the project costs are allocated to trips generated through 2030 and are included in the cost basis for the impact fee.

Table 8.9: Streets and Transportation Facilities Cost Standard

	City of Coachella Cost
Road Construction	\$ 143,640,700
Interchanges	24,454,900
Bridges	6,389,100
Total Cost of Citywide Improvements	\$ 174,484,700
Share of Buildout Trip Demand Generated by 2030	49%
Cost Attributable to Growth Through 2030	\$ 85,497,503
Growth in P.M. Peak Trips (2007-2030)	29,091
Cost per P.M. Peak Trip	\$ 2,938.97

Sources: Tables 8.2 and 8.6 through 8.8; MuniFinancial.

FEE SCHEDULE

The maximum justified fee based on the proposed bifurcation policy for street facilities is shown in **Table 8.10**. The City may adopt any fee up to those shown in the table. If the City adopts a lower fee, it should consider reducing the fee for each land use by the same percentage. This approach would ensure that each new development project funds the same fair share of costs to improve the City's transportation system.

Table 8.10: Streets and Transportation Facilities Impact Fee

Land Use	A	B	C = A x B		E = C + D	
	Cost Per Trip	Trip Demand Factor	Base Fee ¹	Admin ²	Total Fee ¹	Fee per Sq. Ft.
<i>Residential</i>						
Single Family	\$ 2,938.97	1.12	\$ 3,291.65	\$ 65.83	\$ 3,357.48	
Multi-family	2,938.97	0.58	1,704.60	34.09	1,738.69	
<i>Nonresidential</i>						
Commercial	\$ 2,938.97	1.54	\$ 4,526.01	\$ 90.52	\$ 4,616.53	\$ 4.62
Office	2,938.97	1.82	5,348.93	106.98	5,455.91	5.46
Industrial	2,938.97	1.25	3,673.71	73.47	3,747.18	3.75

¹ Fee per dwelling unit for residential land uses and per 1,000 square feet for nonresidential uses.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 8.1 and 8.8; MuniFinancial.

USE OF FEE REVENUES

The City intends to use the street facilities impact fee to construct the road segment and intersection improvements detailed in this chapter. The City fee will not be used to fund any improvements that are already funded through the TUMF. In accordance with the proposed bifurcation policy, funding of the locally required street improvements will be provided by adjacent development and other sources. Should future facility plans or cost estimates change significantly, the City should revisit these calculations to ensure that a nexus remains between the amount of the fee and the facilities needed to accommodate new development.

9. IMPLEMENTATION

IMPACT FEE PROGRAM ADOPTION PROCESS

Impact fee program adoption procedures are found in the *California Government Code* section 66016. Adoption of an impact fee program requires the City Council to follow certain procedures including holding a public meeting. Fourteen day mailed public notice is required for those registering for such notification. Data, such as an impact fee report, must be made available at least 10 days prior to the public meeting. The City's legal counsel should inform the City of any other procedural requirements as well as advice regarding adoption of an enabling ordinance and/or a resolution. After adoption there is a mandatory 60-day waiting period before the fees go into effect. This procedure must also be followed for fee increases.

IDENTIFY NON-FEE REVENUE SOURCES

The use of the system plan approach for calculating facility standards can identify revenue deficiencies attributable to the existing service population. As fees are only imposed under the *Act* to fund new development's fair portion of facilities, the City should consider how deficiencies might be supplemented through the use of alternative funding sources. This issue applies to general government, fire, library, and parks facilities for the City of Coachella because these fees were calculated using the system plan standard, which allocates planned improvement costs equitably between new development and existing development. **Table 9.1** shows the non-fee funding needed to provide the planned general government, fire, library, and park facilities. Potential sources of revenue include existing or new general fund revenues or the use of existing or new taxes. Any new special tax would require two-thirds voter approval, while new assessments or property-related charges would require majority property-owner approval.

Table 9.1: Master Plan Funding Needs

	Fee Funding	Non-Fee Funding	Total
General Government	\$ 35,367,196	\$ 18,832,504	\$ 54,199,700
Fire	28,128,576	7,156,824	35,285,400
Parks	137,622,004	31,824,674	169,446,678
Library	8,338,609	2,786,291	11,124,900
Total	\$ 209,456,385	\$ 60,600,293	\$ 270,056,678

Sources: Tables 3.5, 4.7, 6.6, 6.8 and 7.6.

INFLATION ADJUSTMENT

Appropriate inflation indices should be identified in a fee ordinance including an adjustment to the fee annually. Separate indices for land and construction costs may be used. Calculating the land cost index may require the periodic use of a property appraiser. The construction cost index can be based on the City's recent capital project experience or can be taken from any reputable source, such as the *Engineering News-Record*. To calculate prospective fee increases, each index should be weighed against its share of total planned facility costs represented by land or construction, as appropriate.

REPORTING REQUIREMENTS

The City should comply with the annual and five-year reporting requirements of the *Act*. For facilities to be funded by a combination of public fees and other revenues, identification of the source and amount of these non-fee revenues is essential. Identification of the timing of receipt of other revenues to fund the facilities is also important.

FEE ACCOUNTING

The City should deposit fee revenues into separate restricted fee accounts for each of the fee categories identified in this report. Fees collected for a given facility category should only be expended on new facilities of that same category.

PROGRAMMING REVENUES AND PROJECTS WITH THE CIP

The City should maintain a Capital Improvements Plan (CIP) to adequately plan for future infrastructure needs. The CIP should commit all projected fee revenues and fund balances to specific projects. These should represent the types of facilities needed to serve growth and described in this report. The use of the CIP in this manner documents a reasonable relationship between new development and the use of those revenues. The CIP also provides the documentation necessary for the City to hold funds in a project account for longer than five years if necessary to collect sufficient monies to complete a project.

With or without a CIP, the City may decide to alter the scope of the planned projects or to substitute new projects as long as those new projects continue to represent an expansion of the City's facilities. If the total cost of facilities varies from the total cost used as a basis for the fees, the City should consider revising the fees accordingly.