Development Fee Study and Infrastructure Improvements Plan

Prepared for:

Town of Taylor, Arizona

Prepared by:

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Executive Summary

The Town of Taylor, Arizona has contracted with TischlerBise to calculate development fees for the following infrastructure categories:

- Parks & Recreation;
- Police;
- Fire;
- General Government; and
- Transportation.

DEVELOPMENT FEE OVERVIEW

Development fees are one-time payments used to construct system improvements needed to accommodate new development. A development fee represents new growth's fair share of capital facility needs. By law, development fees can only be used for *capital* improvements, not operating or maintenance costs. Development fees are subject to rigorous legal standards, which require the fulfillment of three key elements: demand, benefit and proportionality. First, to justify a fee for public facilities, it needs to be demonstrated that new development will create a **demand** for capital improvements. Second, new development must derive a **benefit** from the payment of the fees (i.e., in the form of public facilities constructed within a reasonable timeframe). Third, the fee paid by a particular type of development should not exceed its **proportional** share of the capital cost for system improvements.

The development fee methodologies established in this report show that:

- The capital facilities for which the fees are prepared are a consequence of new development,
- Development fees will substantially benefit new development; and that
- Development fees are proportionate and reasonably related to the capital facility service demands of new development.

Another general requirement common to development fee methodologies is the evaluation of credits. Two types of credits should be considered: **future revenue credits** and **site-specific credits**. Future revenue credits are necessary to avoid potential double payment situations arising from a one-time development fee payment plus the payment of other revenues that may also fund growth-related capital improvements.

Future revenue credits are dependent upon the development fee methodology used in the cost analysis. As new development will provide front-end funding of infrastructure, there is a potential for double payment of capital costs due to future principal payments on existing

debt for public facilities. A credit is not necessary for interest payments if interest costs are not included in the development fees.

The second type of credit is a site-specific credit for system improvements that have been included in the development fee calculations. Policies and procedures related to site-specific credits for system improvements should be addressed in the Town's development fee ordinance. However, the general concept is that developers may be eligible for site-specific credits or reimbursements *only if they provide system improvements that have been included in the development fee calculations*. Project improvements normally required as part of the development approval process are not eligible for credits against development fees.

INFRASTRUCTURE IMPROVEMENTS PLAN REQUIREMENTS

Arizona's development fee legislation requires that municipalities adopt an infrastructure improvements plan prior assessing new or modified development fees. Development fees for municipalities in Arizona are authorized by Arizona Revised Statutes (A.R.S.) 9-463.05. The complete legislation is included in Appendix 2 of this report. Subsection E states that, "for each necessary public service that is the subject of a development fee, the infrastructure improvements plan shall:

> 1. Estimate future necessary public services that will be required as a result of new development and the basis for the estimate.
>
> 2. Forecast the costs of infrastructure, improvements, real property, financing, other capital costs and associated appurtenances, equipment, vehicles, furnishings and other personalty that will be associated with meeting those future needs for necessary public services and estimate the time required to finance and provide the necessary public services."

Each development fee component in this report includes a corresponding Infrastructure Improvements Plan (IIP). Based on development projections, the IIP illustrates projected demand for public facilities, the amount of capital facility required to serve projected growth and the associated capital costs to new residential and nonresidential development.

DEVELOPMENT FEE AND IIP CALCULATION METHODOLOGIES

TischlerBise evaluated several possible methodologies to determine the best measure of the demand created by new development for additional infrastructure capacity. This report documents the appropriate methodology and demand indicators by type of development for each IIP. The report documents the relationship between the IIP and the development fees.

Specific capital costs have been identified using local data and current dollars. The general formula for calculating the development fees and corresponding IIP is shown in Figure 1. The formula used to calculate each development fee is diagrammed in a flow chart at the beginning of each section. Also, each fee category includes a summary table indicating the specific factors used to derive the development fee. These factors are also referred to as level-of-service (LOS) standards.

There are three basic methods used to calculate the various components of Taylor's IIP and development fees. A **plan-based method** is best suited for public facilities that have adopted plans or commonly accepted service delivery standards to guide capital improvements. Under the plan-based methodology, there are two approaches considered.

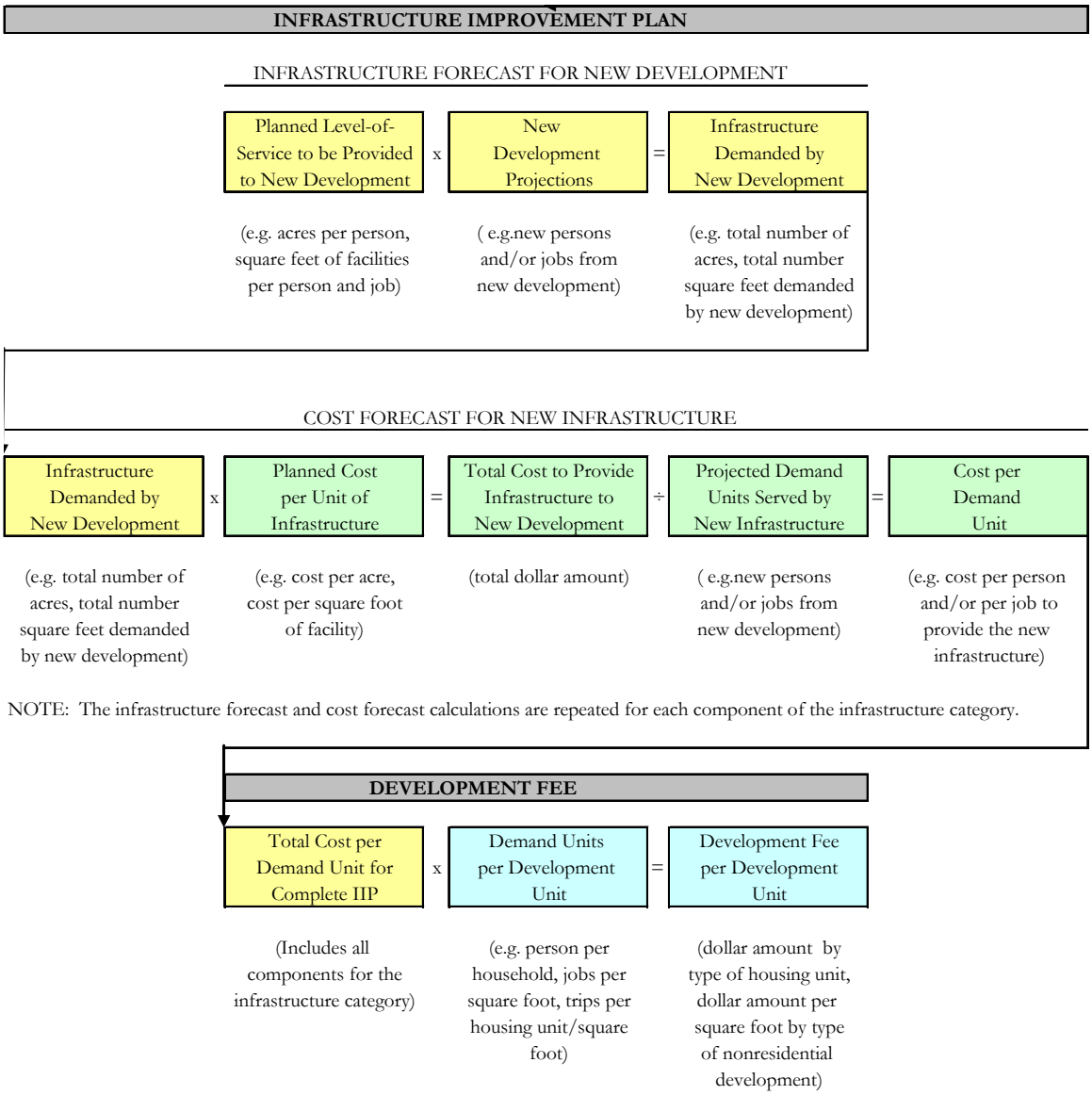
The average approach is used for projects that are the result of *both new and existing development*. The planned costs are allocated to both new and existing development which ensures that new growth only pays its share of the costs. The marginal approach is used for projects that are the result of *only new growth*. The planned costs are allocated to the net increase in new growth.

The **incremental expansion** method documents the current level-of-service (LOS) for each type of public facility. LOS standards are determined using the Town's current inventory of capital facilities and assets as well as current costs to construct or purchase comparable facilities or assets. However, Taylor will not use the funds for renewal and/or replacement of existing facilities. Rather the Town's intent is to use development fee revenue to expand or provide additional facilities, as needed to accommodate new development.

A third method, known as the **cost recovery** method, is best suited for facilities that have been oversized in anticipation of growth and have excess capacity available. New development would buy-in to the excess capacity of the facility. The rationale for the cost recovery approach is that new development will pay for its share of the useful life and remaining capacity of recently constructed facilities.

The generic formula used to calculate the IIP and development fee is diagrammed in Figure 1. The diagram starts in the upper left corner and progresses left-to-right and down through the lower right corner.

Figure 1. Infrastructure Improvement Plan (IIP) and Development Fee Formula



SUMMARY OF DEVELOPMENT FEE CALCULATIONS BY FACILITY CATEGORY

As noted above, TischlerBise, Inc. calculated the IIP and development fees for five types of public facilities in Taylor: parks and recreation, police, fire, general government and transportation. All types of development – residential and non-residential – create a demand for capital facilities. This analysis determines those capital needs – and the related costs – brought about by new development. The resulting IIP and maximum supportable development fee amount represents each type of land uses' fair share of the capital cost for different improvements. For parks and recreation, residential development is the only type of land use that directly drives the need for additional facilities. The need for police, fire, general government and transportation improvements, however, is brought about by both residential and non-residential development. Therefore, calculations for these development

fees are based on both residential and non-residential demand, with the resulting development fee amount reflecting each type of development's fair share of related costs.

The following summarizes the methodologies used in each fee category. Also presented is the maximum supportable development fee amount.

Parks and Recreation

The parks and recreation development fee is allocated to residential development. The fee utilizes the incremental-expansion method for all fee components. The development fee is calculated based on household size and the capital cost per person for parkland, park amenities, park recreational facilities, park vehicles/equipment and the parks and recreation component of the development fee study. The Town has no outstanding debt for park facilities, so a credit is not included for this fee. The maximum supportable development fee amounts for parks and recreation are: $2,364 for a single family housing unit and $2,191 for all other housing types.

Police

The police development fee calculates new growth's contribution for future police facilities, police vehicles/equipment, animal control facilities, animal control vehicles/equipment and the police component of the development fee study. The fee is based on the Town's proportionate share of Snowflake-Taylor Police Department facilities based on calls for service in Taylor. As demand for police facilities is driven by residents and businesses, the development fee is allocated to both new residential and nonresidential development. The Town has no outstanding debt for police facilities, so a credit is not included for this fee. The maximum supportable residential development fee amounts for police are: $402 for single family housing units and $373 for all other housing types. Non-residential development fees vary based on the use and/or size of the development.

Fire

The fire development fee calculate new growth's contribution for future fire facilities, land for fire facilities, fire vehicles/apparatus and the fire component of the development fee study. As demand for fire facilities is driven by residents and businesses, the development fee is allocated to both new residential and nonresidential development. A future principal payment credit is included as the Town has outstanding debt for fire apparatus. The maximum supportable residential development fee amounts for fire are: $1,774 for single family housing units and $1,644 for all other housing types. Non-residential development fees vary based on the use and/or size of the development.

General Government

The general government development fee uses the incremental-expansion method to calculate new growth's contribution for future general government facilities, land, vehicles/equipment and the general government facilities component of the development fee study. As demand for general government facilities is driven by residents and businesses, the development fee is allocated to both new residential and nonresidential development. The Town has no outstanding debt for general government facilities, so a credit is not included for this fee. The maximum supportable residential development fee amounts for general government facilities are: $270 for single family housing units and $250 for all other housing types. Non-residential development fees vary based on the use and/or size of the development.

Transportation

The plan-based method is used to calculate the Town's transportation development fee based on projects defined in the Town of Taylor Community Transportation Plan and the Southern Navajo/Apache County Sub-Regional Transportation Plan. The development fee provides the per development unit cost for the Town's planned expansion of its transportation system. Demand for the transportation system is driven by residents and businesses, so the development fee is allocated to both new residential and nonresidential development. The Town has no outstanding debt for road improvements, so a credit is not included for this fee. The maximum supportable development fee amounts for transportation are: $2,218 for single family housing units and $1,527 for all other housing types. Non-residential development fees vary based on the use and/or size of the development.

SUMMARY OF MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS

Figure 2 provides a schedule of the maximum supportable development fee amounts for residential and non-residential development in Taylor.

The development fees shown are for parks and recreation, police, fire, general government, and transportation. For a single family housing unit, the maximum supportable development fee amount is $7,028 and for all other housing units, $5,985. Non-residential development fees vary based on the use and/or size of the development. The maximum supportable development fee for a commercial/shopping center from 100,001-200,000 sq. ft. is $6,258 per 1,000 sq. ft., while the maximum supportable development fee for warehousing is $1,076 per 1,000 sq. ft. The maximum supportable development fee for a lodging room is $990.

Figure 2: Schedule of Maximum Supportable Development Fees

Residential - Per Housing Unit						
	Parks and Recreation	*Police*	*Fire*	*General Govt.*	*Transportation*	*Total*
Single Family	$2,364	$402	$1,774	$270	$2,218	$7,028
All Other Housing	$2,191	$373	$1,644	$250	$1,527	$5,985
Non-Residential - Per 1,000 Square Feet of Floor Area						
	Parks and Recreation	*Police*	*Fire*	*General Govt.*	*Transportation*	*Total*
Com / Shop Ctr 25,000 SF or less	N/A	$1,322	$656	$105	$7,939	$10,022
Com / Shop Ctr 25,001-50,000 SF	N/A	$1,149	$563	$90	$6,896	$8,699
Com / Shop Ctr 50,001-100,000 SF	N/A	$959	$492	$79	$5,760	$7,290
Com / Shop Ctr 100,001-200,000 SF	N/A	$821	$437	$70	$4,930	$6,258
Com / Shop Ctr 200,001-400,000 SF	N/A	$698	$394	$63	$4,190	$5,345
Office / Inst 25,000 SF or less	N/A	$393	$817	$131	$2,507	$3,848
Office / Inst 25,001-50,000 SF	N/A	$335	$770	$123	$2,138	$3,367
Office / Inst 50,001-100,000 SF	N/A	$286	$727	$117	$1,823	$2,951
Office / Inst 100,001 - 200,000 SF	N/A	$243	$687	$110	$1,553	$2,594
Business Park	N/A	$273	$622	$100	$1,743	$2,739
Light Industrial	N/A	$149	$455	$73	$952	$1,629
Warehousing	N/A	$106	$252	$40	$678	$1,076
Manufacturing	N/A	$82	$353	$57	$522	$1,013
Non-Residential - Per Room						
Lodging	N/A	$121	$87	$14	$769	$990

All costs in the development fee calculations are given in current dollars with no assumed inflation rate over time. If cost estimates change significantly, the fees should be recalculated.

It is difficult to compare development fee amounts from community to community. Differences in fee amounts can be attributed to a variety of factors including levels-of-service, community priorities and objectives, services for which the community is responsible for providing, and how a community procures and finances its capital improvements. Also, communities may have adopted less than 100% of the maximum, supportable development fees.

A note on rounding: Calculations throughout this report are based on an analysis conducted using Excel software. Results are discussed in the report using one-and two-digit places (in most cases), which represent rounded figures. However, the analysis itself uses figures carried to their ultimate decimal places; therefore the sums and products generated in the analysis may not equal the sum or product if the reader replicates the calculation with the factors shown in the report (due to the rounding of figures shown, not in the analysis).

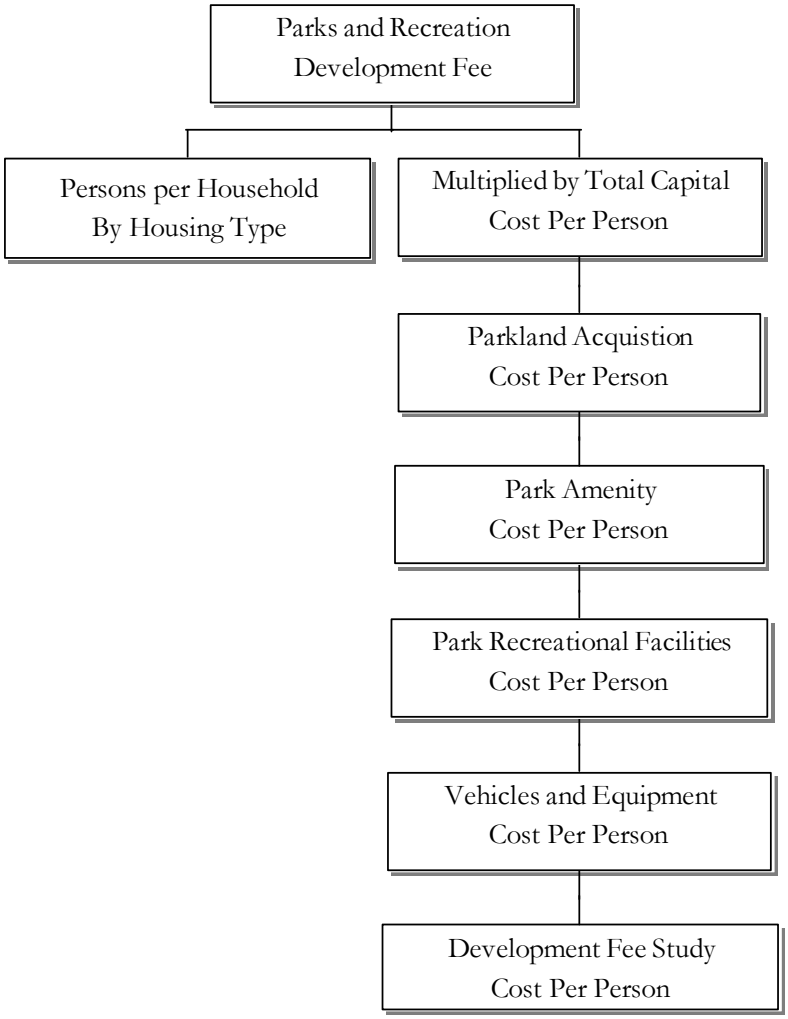
Parks and Recreation

METHODOLOGY

The components of this development fee include parkland, park amenities, park recreational facilities, park vehicles/equipment and the parks and recreation component of the development fee study. The incremental expansion methodology is used for all development fee components.

All capital costs have been allocated to residential development. Standards have been shown on a per capita basis. Persons per household is used to differentiate the development fees by type of housing unit (see Appendix 1 for demographic information). All components in this development fee have a Town wide service area.

Figure 3: Parks and Recreation Development Fee Methodology Chart



PARKLAND – INCREMENTAL EXPANSION

The parkland acquisition component of the parks and recreation development fee is calculated using the incremental expansion methodology. Figure 4 provides an inventory of the Town of Taylor's developed parkland. The current acquisition cost for parkland is estimated at $40,000 per acre. This estimate is provided by the Town of Taylor. This results in a total parkland value of approximately $942,000.

To calculate the level of service (LOS) for parkland, 23.6 developed acres is divided by the Town's peak population in 2007 of 4,724 persons (23.6 developed acres /4,747 persons = .0049 acres per person, or 4.96 acres per 1,000 persons). See the Appendix for detail on peak population. The parkland acquisition cost per person is calculated in a similar fashion, using the total parkland value of $942,000. This results in a parkland acquisition cost of $198.44 per person ($942,000/4,747 = $198.44).

Figure 4: Parkland Level of Service and Cost Standards

Parks	*Acres**	*Replace. Cost/Acre**	*Acquisition Cost*
Center St.	4.0		$160,000
Freeman Park	8.5		$340,000
Rodeo Grounds	11.1		$442,000
TOTAL	23.6	$40,000	$942,000

Peak Population in 2007	4,747
Acres per 1,000 residents	4.96
Land Cost Per Person	$198.44

**Source: Town of Taylor, AZ*

Figure 5 shows the Infrastructure Improvements Plan (IIP) for parkland acquisition. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons. Based on the LOS standard of 4.96 acres per 1,000 persons, this amount of residential development will require approximately 10.43 acres of parkland. The projected cost of this demanded infrastructure totals $417,076 over the next five years. This is the equivalent of $198.44 per person ($417,076/2,102 persons = $198.44).

Figure 5: Parkland Acquisition Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
						5-Year Total
Net Change	420	420	420	420	420	2,102

PARKLAND ACQUISITION

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Acres per Person	0.00	0.00	0.00	0.00	0.00	
						5-Year Total
Acres Demanded by New Development	2.09	2.09	2.09	2.09	2.09	10.43
Parkland Acquisition Cost per Acre	$40,000	$40,000	$40,000	$40,000	$40,000	
						5-Year Total
Parkland Acquisition Cost For New Res. Development	$83,409	$83,409	$83,409	$83,409	$83,409	$417,046

Parkland Acquisition Cost Per Person $198.44

PARK AMENITIES – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the park amenity component of the parks and recreation development fee. Figure 6 lists the park amenities by Town park, including baseball/softball fields, racquetball/basketball/volleyball courts, soccer fields, walking trails, playgrounds and concession stands. Also shown is the estimated cost per amenity unit. The source for the playground cost is the Town of Taylor based on its costs at Freeman Park. All other park amenity cost estimates are from the neighboring Town of Snowflake.

To calculate the LOS for park amenities, 17 amenities is divided by the Town's peak population in 2007 of 4,724 persons (17 amenities /4,747 persons = .003 amenities per person). See the Appendix for detail on peak population. The park amenity cost per person is calculated in a similar fashion, using the total amenity value of $1,834,687. This results in a park amenity cost of $386.49 per person ($1,834,687 /4,747 = $386.49).

Figure 6: Park Amenities Level of Service and Cost Standards

Parks	*Baseball, Softball Field*	*Racquetball Court*	*Basketball Court*	*Volleyball Court*	*Lighted Soccer Field*	*Walking Trail (mi.)*	*Play ground*	*Concession Stand*	*TOTAL*
Center St.	1	2	1				1	1	6
Freeman Park		2	1	1	2	0.6	1		8
Rodeo Grounds	3								3
TOTAL	4	4	2	1	2	0.60	2	1	17
Unit Price*	$343,443	$25,000	$30,000	$8,000	$52,066	$26,684	$48,887	$75,000	$609,079
Units x Price	$1,373,770	$100,000	$60,000	$8,000	$104,133	$16,010	$97,774	$75,000	$1,834,687

Peak Population in 2007	4,747
Amenities Per Capita	0.003
Cost Per Capita	$386.49

**Source: Cost for playground from Town of Taylor, AZ for Freeman Park. Other cost estimates from Town of Snowflake, AZ Parks and Recreation.*

Figure 7 shows the Infrastructure Improvements Plan (IIP) for park amenities. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons. Based on the LOS standard of .003 amenities per capita, this amount of residential development will require the development of approximately 7.35 amenities. The projected cost of this demanded infrastructure totals $812,260 over the next five years. This is the equivalent of $386.49 per person ($812,260/2,102 persons = $386.49).

Figure 7: Park Amenities Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
						5-Year Total
Net Change	420	420	420	420	420	2,102

PARK AMENITIES

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Amenities per Person	0.003	0.003	0.003	0.003	0.003	
						5-Year Total
Amenities Demanded by New Development	1.47	1.47	1.47	1.47	1.47	7.35
Cost per Amenity	$110,523	$110,523	$110,523	$110,523	$110,523	
						5-Year Total
Park Amenity Cost For New Res. Development	$162,452	$162,452	$162,452	$162,452	$162,452	$812,260

Park Amenity Cost Per Person	$386.49

PARK RECREATIONAL FACILITIES – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the recreational facilities cost component of the development fee. Figure 8 provides an inventory of current recreational facilities. Current replacement cost is estimated by the Town.

To calculate the LOS for park recreational facilities, 9,543 sq. ft. is divided by the Town's peak population in 2007 of 4,724 persons (9,543 sq. ft. /4,747 persons = 2.01 sq. ft. per person). See the Appendix for detail on peak population. The park recreational facilities cost per person is calculated in a similar fashion, using the total replacement cost of $372,800. This results in a park recreational facilities cost of $78.53 per person ($372,800/4,747 = $78.53).

Figure 8: Park Recreational Facilities Level of Service and Cost Standards

Facility	*Square Feet*	*Replace. Cost*	*Replacement Cost**
Ramada	1,643	$100	$164,300
Shelter adjacent to Ramada	1,600	$30	$48,000
Freeman Park Shelters	2,400	$20	$48,000
Rodeo Park Shelters	3,200	$30	$96,000
Rodeo Park Announcers Booth	200	$20	$4,000
Center St. Park Annoucers Booths	500	$25	$12,500
TOTAL/AVERAGE	9,543	$39	$372,800
		Peak Population in 2007	4,747
		Sq. Ft. per Capita	2.01
		Cost per Capita	$78.53

**Source: Town of Taylor, AZ*

Figure 9 shows the Infrastructure Improvements Plan (IIP) for park recreational facilities. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons. Based on the existing LOS standard of 2.01 sq. ft. per person, this amount of residential development will require approximately 4,225 sq. ft. The projected cost of this demanded infrastructure totals $165,048 over the next five years. This is the equivalent of $78.53 per person ($123,786/2,102 persons = $78.53).

Figure 9: Park Recreational Facilities Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
						5-Year Total
Net Change	420	420	420	420	420	2,102

PARK RECREATIONAL FACILITIES

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Sq. Ft. per Person	2.01	2.01	2.01	2.01	2.01	
						5-Year Total
Sq. Ft. Demanded by New Development	845	845	845	845	845	4,225
Cost per Sq. Ft.	$39	$39	$39	$39	$39	
						5-Year Total
Park Recreational Facilities Cost For New Res. Development	$33,010	$33,010	$33,010	$33,010	$33,010	$165,048

Park Recreational Facilities Cost Per Person $78.53

PARK VEHICLES/EQUIPMENT – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the vehicle/equipment cost component of the parks and recreation development fee. Figure 10 provides an inventory of current park vehicles/equipment. Current replacement cost for Town park vehicles/equipment is provided by the Town of Taylor.

To calculate the LOS for park vehicles/equipment, 6 vehicles is divided by the Town's peak population in 2007 of 4,724 persons (6 vehicles/4,747 persons = .0009 vehicles per person). See the Appendix for detail on peak population. The park vehicle/equipment cost per person is calculated in a similar fashion, using the total replacement cost of $100,000. This results in a park vehicles/equipment cost of $21.07 per person ($100,000/4,747 = $21.07).

Figure 10: Park Vehicles/Equipment Level of Service and Cost Standards

Type of Vehicle/Equipment	*Units in Service*	*Unit Replacement Cost**	*Total Replacement Cost*
1 Ton Pickup	1	$35,000	$35,000
1/2 Ton Pickup	1	$15,000	$15,000
Mower	2	$10,000	$20,000
Mower/Tractor	1	$20,000	$20,000
4 Wheel Vehicle	1	$10,000	$10,000
TOTAL/AVERAGE	6	$16,667	$100,000

Peak Population in 2007	4,747
Vehicles Per Capita	0.0013
Cost Per Capita	$21.07

**Source: Town of Taylor, AZ*

Figure 11 shows the Infrastructure Improvements Plan (IIP) for park vehicles and equipment. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons. Based on the existing LOS standard of .0013 vehicles/equipment per person, this amount of residential development will require approximately 2.66 vehicle/equipment. The projected cost of this demanded infrastructure totals $44,272 over the next five years. This is the equivalent of $21.07 per person ($44,272/2,102 persons = $21.07).

Figure 11: Park Vehicles/Equipment Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
						5-Year Total
Net Change	420	420	420	420	420	2,102

PARK VEHICLES AND EQUIPMENT

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Vehicles/Equipment per Person	0.001	0.001	0.001	0.001	0.001	
						5-Year Total
Vehicles/Equipment Demanded by New Development	0.53	0.53	0.53	0.53	0.53	2.66
Cost per Vehicle/Equipment	$16,667	$16,667	$16,667	$16,667	$16,667	
						5-Year Total
Park Vehicle/Equipment Cost For New Res. Development	$8,854	$8,854	$8,854	$8,854	$8,854	$44,272

Park Vehicle and Equipment Cost Per Person $21.07

PARKS AND RECREATION DEVELOPMENT FEE STUDY

The Town plans on updating its development fees study every five years to ensure the methodologies, assumptions, and cost factors used in the calculations are still valid and accurate. TischlerBise has included the cost of preparing this portion of the study in the parks and recreation development fee calculations in order to create a source of funding to conduct this regular update. The cost of this component ($8,820) is allocated to the projected increase in population over the next five years. This results in a development fee study cost per demand unit of $4.20 per person ($8,820/2,102 people).

PARKS AND RECREATION DEVELOPMENT FEE INPUT VARIABLES

Figure 12 shows level of service standards and cost factors for the Taylor parks and recreation development fees. Development fees for parks and recreation are based on household size (i.e., persons per household) and are charged to residential development. Level of service standards are based on current costs per person for parkland, park amenities, park recreational facilities, park vehicles/equipment and the parks and recreation component of the development fee study.

Figure 12: Parks and Recreation Development Fee Input Variables

INPUT VARIABLES	Residential	Nonresidential
Persons Per Household		
Single Family	3.43	
All Other Housing	3.18	
Level Of Service		
Park Land (Incremental-Expansion)		
Park Land Cost per Person		$198.44
Park Amenities (Incremental-Expansion)		
Park Amenities Cost per Person		$386.49
Recreational Facilities (Incremental-Expansion)		
Recreational Facilities Cost per Person		$78.53
Park Vehicles/Equipment (Incremental-Expansion)		
Park Vehicles/Equipment Cost Per Person		$21.07
Development Impact Fee Study		
Development Impact Fee Study Cost Per Person		$4.20
Total Capital Cost per Person		**$688.72**

MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS FOR PARKS AND RECREATION

Figure 13 contains a schedule of maximum supportable parks and recreation development fees for Taylor. The amounts are calculated by multiplying the persons per household for each type of unit by the total capital cost per person. For example, for a single family unit, the persons per household figure of 3.43 is multiplied by the total capital cost per person of $688.72 for a parks and recreation development fee amount of $2,364 per single family unit. The calculation is repeated for the all other housing category.

Figure 13: Parks and Recreation Development Fee Schedule

MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS	Residential
Development Fee per Housing Unit	
Single Family	$2,364
All Other Housing	$2,191

Police

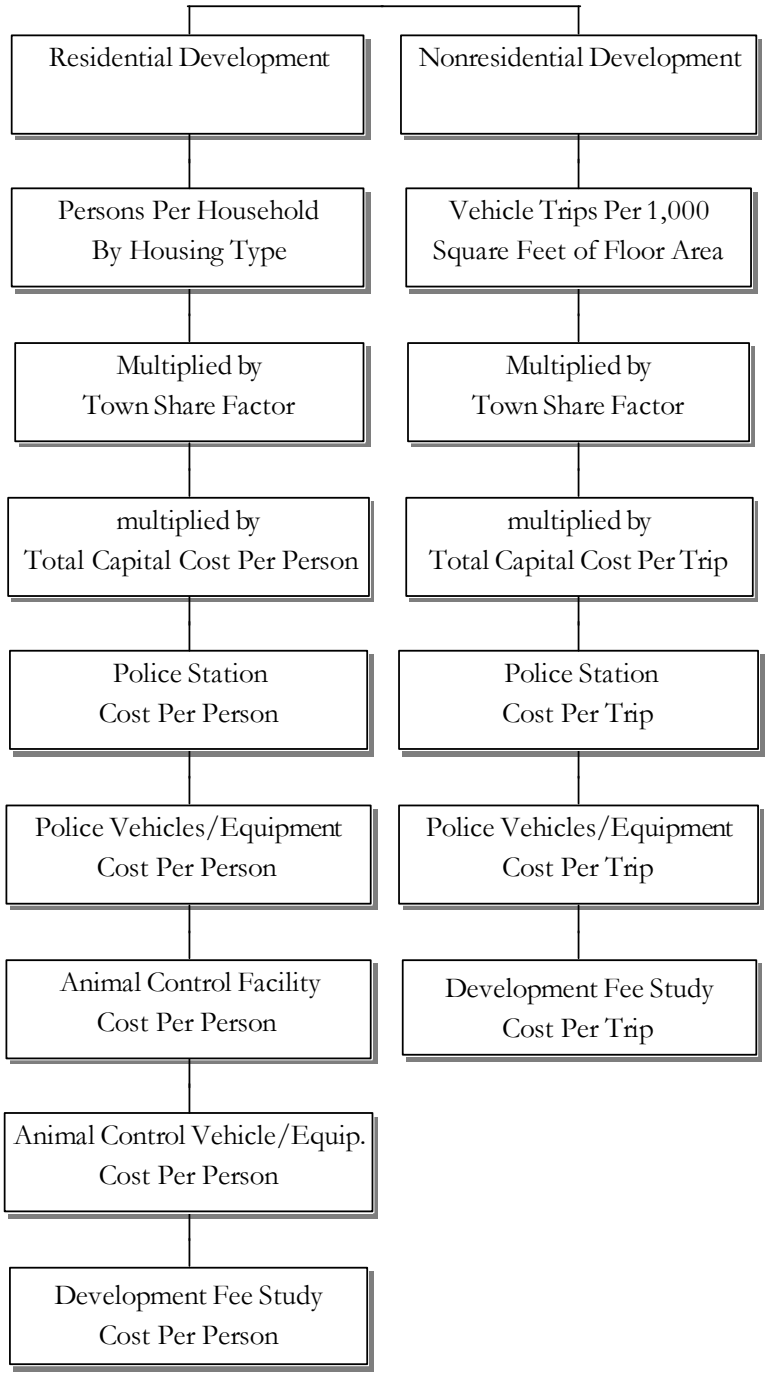
METHODOLOGY

The incremental expansion method is used to calculate all components of the police development fee, including police station, police vehicles/equipment, animal control facility, animal control vehicles/equipment and the police portion of the development fee study.

The Snowflake-Taylor Police Department serves both residential and non-residential development, providing protection to residents and businesses. As shown in Figure 14, this development fee is allocated on a per capita basis for residential development. For nonresidential development, the methodology allocates the capital cost on a per nonresidential vehicle trip basis. TischlerBise recommends using nonresidential vehicle trips as the best demand nonresidential demand indicator for police facilities and vehicles. Other possible nonresidential demand indicators, such as employment or floor area, do not accurately reflect the demand for police facilities. If employees per thousand square feet were used as the demand indicator, development fees would be too high for office/institutional development. If floor area were used as the demand indicator, development fees would be too high for industrial development.

The Police Department serves both the Towns of Taylor and Snowflake. Both Towns contribute toward the operation of the Department, including capital costs. The police development fee is calculated based on Taylor's share of capital assets which reflects the share of total calls for service within Taylor.

Figure 14: Police Development Fee Methodology Chart



TOWN SHARE FACTOR - TAYLOR

The Snowflake-Taylor Police Department provided data on calls for service by residential and nonresidential land uses for a sample period of one year, from January 1, 2006 – December 31, 2006 (excluding vehicle calls). Of the total calls to the Department in 2006, 51% of the calls were within Taylor. This town share factor is shown in Figure 15.

Figure 15: 2006 Snowflake-Taylor Police Department Calls for Service by Town

Town	Calls*	%
Taylor	4,036	51%
Snowflake	3,953	49%
TOTAL	**7,989**	**100%**

**Snowflake-Taylor Police Department. Excludes Vehicle Calls.*

PROPORTIONATE SHARE FACTOR – RESIDENTIAL/NON-RESIDENTIAL

Of the calls for service presented in Figure 15 for Taylor, The Snowflake-Taylor Police Department distinguished calls by residential and nonresidential land uses. These results (shown in Figure 16), are used to determine residential and nonresidential proportionate share factors. Of the 4,036 Taylor calls received during the sample period that can be assigned to a land use, 2,849 calls (71%) were to residential land uses and nonresidential uses accounted for 1,187 calls (29%).

Figure 16: Taylor Calls for Service by Land Use Type

Land Use Type	Calls*	%
Residential	2,849	71%
Nonresidential	1,187	29%
TOTAL	**4,036**	**100%**

**Snowflake-Taylor Police Department. Excludes Vehicle Calls.*

POLICE STATION – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the police station component of the police development fee. Figure 17 provides square footage and the replacement cost for the station. The source for replacement cost is Marshall-Swift for Jail-Police Station (Class D, Good).

To calculate the residential level of service, the total square footage of the police facility (5,000 sq. ft.) is first multiplied by the town share factor of 51% (see Figure 15). This figure is then multiplied by the residential proportionate share factor 71% (see Figure 16) and then divided by the 2007 peak population of 4,747 persons, resulting in .38 square feet per person. See the Appendix for detail on peak population. Nonresidential level of service is calculated by multiplying the total square footage by the town share factor of 51% (see Figure 15). This figure is then multiplied by the nonresidential proportionate share factor of 29% (see Figure 16) and divided by the number of nonresidential vehicle trips in the Town in 2007 (4,843 trips), providing for .15 sq. ft. per nonresidential average daily vehicle trip. See the Appendix for detail on nonresidential trip estimates.

The police facility cost per person is calculated in a similar fashion, using the total replacement cost of $654,268. This results in a police facility cost of $49.15 per person

(((($654,268 x 51%) x 71%)/4,747 = $49.15) and $20.07 per trip (((($654,268 x 51%) x 29%)/4,843 = $20.07).

Figure 17: Police Station Level of Service and Cost Standards

Facility	*Sq. Ft.*	*Replace. Cost/Sq. Ft.**	*Replacement Cost*
Police Station	5,000	$131	$654,268
TOTAL	5,000		$654,268

	Town Share	Proportionate Share	2007 Demand Units	Sq. Ft. per Demand Unit	Cost per Demand Unit
Residential	51%	71%	4,747 peak population	0.38	$49.15
Nonresidential		29%	4,843 nonres trips	0.15	$20.07

**Source: cost per sq. ft. from Marshall and Swift, Marshall Valuation Service, Jails-Police Station, Class D, Good.*

Figure 18 shows the Infrastructure Improvements Plan (IIP) for the police station. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons and 2,114 nonresidential trips. Based on the existing LOS standards of .38 sq. ft. per person and .15 sq. ft. per nonresidential trip, this amount of residential development will require approximately 789 sq. ft. and non-residential development will require 329 sq. ft. The projected cost of this demanded infrastructure totals $146,335 over the next five years. Of this, $103,297 is attributable to new residential development. This equates to $49.15 per person ($103,297/2,102 persons = $49.15). The remainder, $43,037, is attributable to new nonresidential development. This equates to $20.07 per nonresidential trip ($43,516/2,114 trips = $20.07).

Figure 18: Police Station Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
Nonresidential Average Weekday Vehicle Trip Proje	5,272	5,701	6,130	6,559	6,988	7,417
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102
Net Change in Nonresidential Trips	429	429	429	429	429	2,144

POLICE STATION

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Sq. Ft. per Person	0.38	0.38	0.38	0.38	0.38	
Incremental LOS-Sq. Ft. per Nonres Trip	0.15	0.15	0.15	0.15	0.15	
						5-Year Total
Sq. Ft. Demanded by New Res. Development	158	158	158	158	158	789
Sq. Ft. Demanded by New Nonres. Development	66	66	66	66	66	329
Cost per Sq. Ft.	$131	$131	$131	$131	$131	
						5-Year Total
Police Station Cost For New Res. Development	$20,659	$20,659	$20,659	$20,659	$20,659	$103,297
Police Station Cost For New Nonres. Development	$8,607	$8,607	$8,607	$8,607	$8,607	$43,037
TOTAL COSTS FOR NEW DEVELOPMENT	**$29,267**	**$29,267**	**$29,267**	**$29,267**	**$29,267**	**$146,335**

Police Station Cost Per Person	$49.15
Police Station Cost Per Nonres Trip	$20.07

POLICE VEHICLES/EQUIPMENT – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the vehicles/equipment component of the police development fee. Figure 19 provides an inventory of current police vehicles/equipment. Current replacement cost for vehicles/equipment is provided by the Snowflake-Taylor Police Dept.

To calculate the residential level of service, the 16 vehicles/equipment are first multiplied by the town share factor of 51% (see Figure 15). This figure is then multiplied by the residential proportionate share factor 71% (see Figure 16) and then divided by the 2007 peak population of 4,747, resulting in .0012 vehicles/equipment per person. See the Appendix for detail on peak population. Nonresidential level of service is calculated by multiplying vehicles/equipment by the town share factor of 51% (see Figure 15). This figure is then multiplied by the nonresidential proportionate share factor of 29% (see Figure 16) and divided by the number of nonresidential vehicle trips in the Town in 2007 (4,843 trips), providing for .0005 vehicles/equipment per nonresidential average daily vehicle trip. See the Appendix for detail on nonresidential trip estimates.

The police vehicle/equipment cost per person is calculated in a similar fashion, using the total replacement cost of $670,000. This results in a police vehicle/equipment cost of $50.33 per person (((($670,000 x 51%) x 71%)/4,747 = $50.33) and $20.55 per trip (((($670,000 x 51%) x 29%)/4,843 = $20.55).

Figure 19: Police Vehicles/Equipment Level of Service and Cost Standards

Type of Vehicle/Equipment	*Units in Service*	*Unit Replacement Cost**	*Total Replacement Cost*
Equipped Patrol Vehicle	15	$40,000	$600,000
Communications Equipment	1	$70,000	$70,000
TOTAL/AVERAGE	16	$41,875	$670,000

	Town Share	Proportionate Share	2007 Demand Units	Vehicles per Demand Unit	Cost per Demand Unit
Residential	51%	71%	4,747 peak population	0.0012	$50.33
Nonresidential		29%	4,843 nonres trips	0.0005	$20.55

**Source: Snowflake-Taylor Police Department. Patrol vehicle replacement cost includes cost to equip a new officer ($5,000).*

Figure 20 shows the Infrastructure Improvements Plan (IIP) for police vehicles/equipment. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons and 2,144 nonresidential trips. Based on the existing LOS standards of .0012 units per person and .0005 units per nonresidential trip, this amount of residential development will require approximately 2.53 units of vehicles/equipment and non-residential development will require 1.05 vehicles/equipment. The projected cost of this demanded infrastructure totals $149,853 over the next five years. Of this, $105,781 is attributable to new residential development. This equates to $50.33 per person ($105,781/2,102 persons = $50.33). The remainder, $44,072, is attributable to new nonresidential development. This equates to $20.55 per nonresidential trip ($44,072/2,144 trips = $20.55).

Figure 20: Police Vehicles/Equipment Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
Nonresidential Average Weekday Vehicle Trip Projections	5,272	5,701	6,130	6,559	6,988	7,417
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102
Net Change in Nonresidential Trips	429	429	429	429	429	2,144

POLICE VEHICLES AND EQUIPMENT

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Vehicles/Equipment per Person	0.0012	0.0012	0.0012	0.0012	0.0012	
Incremental LOS-Vehicles/Equipment per Nonres Trip	0.0005	0.0005	0.0005	0.0005	0.0005	
						5-Year Total
Vehicles/Equipment Demanded by New Res. Development	0.51	0.51	0.51	0.51	0.51	2.53
Vehicles/Equipment Demanded by New Nonres. Development	0.21	0.21	0.21	0.21	0.21	1.05
Cost per Vehicle/Equipment	$41,875	$41,875	$41,875	$41,875	$41,875	
						5-Year Total
Vehicles/Equipment Cost For New Res. Development	$21,156	$21,156	$21,156	$21,156	$21,156	$105,781
Vehicles/Equipment Cost For New Nonres. Development	$8,814	$8,814	$8,814	$8,814	$8,814	$44,072
TOTAL COSTS FOR NEW DEVELOPMENT	**$29,971**	**$29,971**	**$29,971**	**$29,971**	**$29,971**	**$149,853**

Police Vehicles/Equipment Cost Per Person	$50.33
Police Vehicles/Equipment Cost Per Nonres Trip	$20.55

ANIMAL CONTROL FACILITY – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the animal control facility component of the police development fee. Figure 21 provides square footage and the replacement cost for the facility. The source for replacement cost is Marshall-Swift for Kennels (Class D, Good).

The demand for animal control facilities is residential development. To calculate the level of service, the square footage of the animal control facility (1,280 sq. ft.) is first multiplied by the town share factor of 51% (see Figure 15). This figure is then multiplied by the residential proportionate share factor of 100% and then divided by the current peak population of 4,747 persons, resulting in .14 sq. ft. per person. See the Appendix for detail on peak population.

The animal control facility cost per person is calculated in a similar fashion, using the total replacement cost of $114,150. This results in an animal control facility cost of $12.15 per person (((($114,150 x 51%) x 100%)/4,747 = $12.15).

Figure 21: Animal Control Facility Level of Service and Cost Standards

Facility	*Sq. Ft.*	*Replace. Cost/Sq. Ft.**	*Replacement Cost*
Animal Control Facility	1,280	$89	$114,150
TOTAL	1,280		$114,150

	Town Share	Proportionate Share	2007 Demand Units	Sq. Ft. per Demand Unit	Cost per Demand Unit
Residential	51%	100%	4,747 peak population	0.14	$12.15

**Source: cost per sq. ft. from Marshall and Swift, Marshall Valuation Service, Kennels, Class D, Good.*

Figure 22 shows the Infrastructure Improvements Plan (IIP) for animal control facilities. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons. Based on the existing LOS standard of .14 sq. ft. per person, this amount of residential development will require approximately 286 sq. ft. The projected cost of this demanded infrastructure totals $25,531 over the next five years. This equates to $12.15 per person ($25,531/2,102 persons = $12.15).

Figure 22: Animal Control Facility Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102

ANIMAL CONTROL FACILITY

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Sq. Ft. per Person	0.1362	0.1362	0.1362	0.1362	0.1362	
						5-Year Total
Sq. Ft. Demanded by New Res. Development	57	57	57	57	57	286
Cost per Sq. Ft.	$89	$89	$89	$89	$89	
						5-Year Total
Animal Control Facility Cost For New Res. Development	$5,106	$5,106	$5,106	$5,106	$5,106	$25,531

Animal Control Facility Cost Per Person $12.15

ANIMAL CONTROL VEHICLES/EQUIPMENT – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the animal control vehicles/equipment component of the police development fee. Figure 23 provides an inventory of current animal control vehicles/equipment. Current replacement cost for vehicles/equipment is provided by the Snowflake-Taylor Police Dept.

The demand for animal control vehicles is residential development. To calculate the residential level of service, 1 animal vehicle is first multiplied by the town share factor of 51% (see Figure 15). This figure is then multiplied by the residential proportionate share

factor 100% and then divided by the 2007 peak population of 4,747, resulting in .0001 vehicles/equipment per person. See the Appendix for detail on peak population.

The animal control vehicle/equipment cost per person is calculated in a similar fashion, using the total replacement cost of $32,000. This results in an animal control vehicle/equipment cost of $3.41 per person (((($320,000 x 51%) x 100%)/4,747 = $3.41).

Figure 23: Animal Control Vehicles/Equipment Level of Service and Cost Standards

Type of Vehicle/Equipment	*Units in Service*	*Unit Replacement Cost**	*Total Replacement Cost*
Animal Control Vehicle	1	$32,000	$32,000
TOTAL	1		$32,000

	Town Share	Proportionate Share	2007 Demand Units	Vehicles per Demand Unit	Cost per Demand Unit
Residential	51%	100%	4,747 peak population	0.0001	$3.41

**Source: Snowflake-Taylor Police Department.*

Figure 24 shows the Infrastructure Improvements Plan (IIP) for animal control vehicles/equipment. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons. Based on the existing LOS standard of .0001 units per person, this amount of residential development will require approximately .22 units of vehicles/equipment. The projected cost of this demanded infrastructure totals $7,157 over the next five years. This equates to $3.41 per person ($7,157/2,102 people = $3.41).

Figure 24: Animal Control Vehicles/Equipment Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102

ANIMAL CONTROL VEHICLES AND EQUIPMENT

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Vehicles/Equipment per Person	0.0001	0.0001	0.0001	0.0001	0.0001	
						5-Year Total
Vehicles/Equipment Demanded by New Res. Development	0.04	0.04	0.04	0.04	0.04	0.22
Cost per Vehicle/Equipment	$32,000	$32,000	$32,000	$32,000	$32,000	
						5-Year Total
Vehicles/Equipment Cost For New Res. Development	$1,431	$1,431	$1,431	$1,431	$1,431	$7,157

Animal Control Vehicles/Equipment Cost Per Person $3.41

POLICE DEVELOPMENT FEE STUDY

The Town plans to update its development fees every five years to ensure the methodologies, assumptions, and cost factors used in the calculations are still valid and accurate. TischlerBise has included the cost of preparing this portion of the study in the development fee calculations in order to create a source of funding to conduct this regular update. The cost of this component ($9,270) is allocated to the projected increase in population and nonresidential trips over the next five years. This results in a development fee study cost per demand unit of $2.18 per person and per nonresidential trip ($9,270/4,246 people and nonresidential trips = $2.18).

POLICE DEVELOPMENT FEE INPUT VARIABLES

Figure 25 shows level of service standards and cost factors for police development fees for Taylor. Development fees for police are based on household size (i.e., persons per household) and average daily vehicle trips per 1,000 square feet of floor area for non-residential development. Level of service standards are based on current costs per demand unit for the police station, police vehicles/equipment, animal control facility, animal control vehicles/equipment and the police component of the development fee study.

Figure 25: Police Development Fee Input Variables

INPUT VARIABLES	Residential	Nonresidential
Persons Per Household		
Single Family	3.43	
All Other Housing	3.18	
Weekday Vehicle Trip Ends per 1,000 Square Feet		
Com / Shop Ctr 25,000 SF or less		110.32
Com / Shop Ctr 25,001-50,000 SF		86.56
Com / Shop Ctr 50,001-100,000 SF		67.91
Com / Shop Ctr 100,001-200,000 SF		53.28
Com / Shop Ctr 200,001-400,000 SF		41.80
Office / Inst 25,000 SF or less		18.35
Office / Inst 25,001-50,000 SF		15.65
Office / Inst 50,001-100,000 SF		13.34
Office / Inst 100,001-200,000 SF		11.37
Business Park		12.76
Light Industrial		6.97
Warehousing		4.96
Manufacturing		3.82
Weekday Vehicle Trip Ends per Room		
Lodging		5.63
Trip Adjustment Factors		
Com / Shop Ctr 25,000 SF or less		28%
Com / Shop Ctr 25,001-50,000 SF		31%
Com / Shop Ctr 50,001-100,000 SF		33%
Com / Shop Ctr 100,001-200,000 SF		36%
Com / Shop Ctr 200,001-400,000 SF		39%
All Other Nonresidential Development		50%
Cost Factors	Per Person	Per Trip
Police Station (Incremental Expansion)	$49.15	$20.07
Police Vehicles & Equipment (Incremental Expansion)	$50.33	$20.55
Animal Control Facility (Incremental Expansion)	$12.15	$0.00
Animal Control Vehicle (Incremental Expansion)	$3.41	$0.00
Development Impact Fee Study Cost	$2.18	$2.18
Total Capital Cost Per Demand Unit	**$117.22**	**$42.81**

MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS FOR POLICE

Figure 26 contains a schedule of the maximum supportable police development fees for Taylor. Residential development fee amounts are calculated by multiplying the persons per household for each type of housing by the total capital cost per person. For example, for a single family unit, the persons per household figure of 3.43 is multiplied by the total capital cost per person of $117.77 for a development fee amount of $404 per single family unit. The calculation is repeated for the all other housing type category. For non-residential development, average weekday vehicle trips per 1,000 sq. ft. are multiplied the applicable trip adjustment factor, then by the total capital cost per trip. For example, for a commercial/shopping center from 50,001 to 100,000 sq. ft., 67.91 trips per 1,000 sq. ft. is multiplied by the trip adjustment factor of 33% and then by $43.03 per trip for a total

development fee of $964 per 1,000 sq. ft. This calculation is repeated for the remaining nonresidential categories. Trip adjustment factors are discussed further in the Appendix.

Figure 26: Police Development Fee Schedule

MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS			
Residential	Per Housing Unit		
Single Family	$402		
All Other Housing	$373		
Nonresidential		Per 1,000 Sq. Ft.	
Com / Shop Ctr 25,000 SF or less		$1,322	
Com / Shop Ctr 25,001-50,000 SF		$1,149	
Com / Shop Ctr 50,001-100,000 SF		$959	
Com / Shop Ctr 100,001-200,000 SF		$821	
Com / Shop Ctr 200,001-400,000 SF		$698	
Office / Inst 10,001-25,000 SF		$393	
Office / Inst 25,001-50,000 SF		$335	
Office / Inst 50,001-100,000 SF		$286	
Office / Inst 100,001-200,000 SF		$243	
Business Park		$273	
Light Industrial		$149	
Warehousing		$106	
Manufacturing		$82	Per Room
Lodging			$121

Fire

METHODOLOGY

The incremental expansion method is used to calculate all components of the fire development fee, including fire stations, land for fire stations, fire vehicles/apparatus and the fire portion of the development fee study.

The Taylor Fire Department serves both residential and non-residential development, providing protection to residents and businesses. As shown in Figure 27, this development fee is allocated on a per capita basis for residential development. For nonresidential development, the development fee methodology allocates the capital cost on a per employee basis.

The Fire Department serves the Town of Taylor, along with areas outside the Town. The fire development fee is calculated based on the share of capital assets that corresponds with the share of calls for service within the Town limits.

Figure 27: Fire Development Fee Methodology Chart

TOWN SHARE FACTOR - TAYLOR

The Taylor Fire Department serves areas outside the Town Limits. The Fire Department provided calls for a sample period of one year, from November 2006 – November 2007. Of the total calls to the Department in the sample year, 65% of the calls were with Taylor town limits (143 calls in Taylor /221 total calls = 65%). This town share factor is used to determine those development-related capital costs associated with fire service in the Town.

PROPORTIONATE SHARE FACTOR – RESIDENTIAL/NON-RESIDENTIAL

The fire development fee uses a functional population concept to allocate capital costs to residential and nonresidential development. Figure 28 distinguishes time at home (2/3 of a day, 16 hours) versus time at work (1/3 of a day, 8 hours) and accounts for commuting patterns in the Town of Taylor.

According to 2000 Census data, 37% of residents in Taylor worked in 2000. This percentage was applied to the 2007 year-round population estimate of 4,495 for the Town, resulting in 1,648 resident workers in Taylor in 2007. The remaining 2,847 resident non-workers are considered to be in the Town 24 hours a day, generating 68,339 residential person hours. Seasonal residents are also considered to be in town 24 hours a day, generating 6,048 person hours. In 2000, the U.S. Census Bureau estimated that of the total employed residents, 31% of Town resident workers both lived and worked in the Town. Applying this share to the current labor force estimate for Taylor of 1,648, 518 residents of the Town are estimated to work in Taylor. The balance, 1,130 resident workers, commute out of Taylor for work. The time that these resident workers spend in the Town for residential functions (16/hours a day) is calculated at 26,361 residential person hours (8,286 + 18,075 = 26,361 residential person hours). Added to the person hours for non-working residents (68,339 person hours) and seasonal residents, this brings the total residential person hours to 100,748.

The 2007 employment estimate for Taylor is 832 jobs. As discussed above, 518 of these jobs are estimated to be Town residents working in Taylor. The balance, 314 jobs, are considered non-resident workers. The time spent at work (8 hours/day) is allocated to non-residential development, resulting in 6,656 non-residential person hours (4,143 + 2,513 = 6,656 non-residential person hours). Based on estimated person hours, the cost allocation for residential development is 94 percent, while nonresidential development accounts for 6 percent of the demand for fire facilities.

Figure 28: Proportionate Share Factors – Functional Population

			Demand	*Person*
Residential	*Demand Units in 2007*		*Hours/Day*	*Hours*
Seasonal Population (2007)[1]	252		24	6,048
Year-Round Population (2007)[1]	4,495			
Residents Not Working		2,847	24	68,339
Workers Living in Taylor[2]		1,648		
Residents Working in Taylor[3]		518	16	8,286
Residents Working outside of Taylor		1,130	16	18,075
			Residential Subtotal	100,748
				94%
Nonresidential				
Jobs Located in Taylor (2007) [4]	832			
Residents Working in Taylor[3]		518	8	4,143
Non-Resident Workers		314	8	2,513
			Nonresidential Subtotal	6,656
				6%
			TOTAL	107,404

[1] Source: Arizona Department of Economic Security (December 1, 2006). Seasonal population is the difference between year-round and peak population based on the peak occupancy rate per the 2000 Census.

[2,3] Source: Town residents working in Taylor based on data in Table P27 from STF3, Census 2000 detailing the proportion of residents working in the Town. Data presented in figure based on applying 2000 proportion of Town residents working in the Town to 2007 employment data.

[4] ESRI Business Information Solutions, 2007.

FIRE STATION – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the fire station component of the development fee. Figure 29 provides square footage and the replacement cost for the station. The source for replacement cost is the Town of Snowflake, based on the construction cost of its new fire station.

To calculate the residential level of service, the total square footage of the Taylor fire station (12,200 sq. ft.) is first multiplied by the town share factor of 65% (discussed in "Town Share Factor – Taylor"). This figure is then multiplied by the residential proportionate share factor of 94% (see Figure 28) and then divided by the 2007 peak population of 4,747 persons, resulting in 1.56 sq. ft. per person. See the Appendix for detail on peak population. Nonresidential level of service is calculated by multiplying the total square footage by the Town share factor of 65% (discussed in "Town Share Factor – Taylor"). This figure is then multiplied by the nonresidential proportionate share factor of 6% (see Figure 28) and

divided by the number of jobs in the Town in 2007 (832 jobs), providing for .59 sq. ft. per job. See the Appendix for detail on employment estimates.

The fire station cost per person is calculated in a similar fashion, using the total replacement cost of $1,817,800. This results in a fire station cost of $232.42 per person (((($1,817,800 x 65%) x 94%)/4,747 = $232.42) and $87.61 per job (((($1,817,800 x 65%) x 6%)/832 = $87.61).

Figure 29: Fire Station Level of Service and Cost Standards

Facility	*Sq. Ft.*	*Replace. Cost/Sq. Ft.**	*Replacement Cost*
Fire Station	12,200	$149	$1,817,800
TOTAL	12,200		$1,817,800

	Town Share**	Proportionate Share	2007 Demand Units	Sq. Ft. per Demand Unit	Cost per Demand Unit
Residential	65%	94%	4,747 peak population	1.56	$232.42
Nonresidential		6%	832 jobs	0.59	$87.61

**Source: Snowflake Fire Department. Cost for new fire station, including in-house labor and future build out costs.*

***The cost and level of service is reduced to reflect that the Town's service area is larger than the Town itself. The Fire Department serves areas outside the Town Limits, and the amounts are reduced to reflect the Town's share.*

Figure 30 shows the Infrastructure Improvements Plan (IIP) for the fire station. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons and 368 jobs. Based on the existing LOS standards of 1.56 sq. ft. per person and .59 sq. ft. per job, this amount of residential development will require approximately 3,278 sq. ft. and non-residential development will require 217 sq. ft. The projected cost of this demanded infrastructure totals $520,743 over the next five years. Of this, $488,471 is attributable to new residential development. This equates to $232.42 per person ($488,471/2,102 persons = $232.42). The remainder, $32,271, is attributable to new nonresidential development. This equates to $87.61 per job ($32,271/368 jobs = $87.61).

Figure 30: Fire Station Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
Employment Projections	906	979	1,053	1,127	1,200	1,274
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102
Net Change in Employment	74	74	74	74	74	368

FIRE STATION

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Sq. Ft. per Person	1.56	1.56	1.56	1.56	1.56	
Incremental LOS-Sq. Ft. per Job	0.59	0.59	0.59	0.59	0.59	
						5-Year Total
Sq. Ft. Demanded by New Res. Development	656	656	656	656	656	3,278
Sq. Ft. Demanded by New Nonres. Development	43	43	43	43	43	217
Cost per Sq. Ft.	$149	$149	$149	$149	$149	
						5-Year Total
Fire Station Cost For New Res. Development	$97,694	$97,694	$97,694	$97,694	$97,694	$488,471
Fire Station Cost For New Nonres. Development	$6,454	$6,454	$6,454	$6,454	$6,454	$32,271
TOTAL COSTS FOR NEW DEVELOPMENT	**$104,149**	**$104,149**	**$104,149**	**$104,149**	**$104,149**	**$520,743**

Fire Station Cost Per Person	$232.42
Fire Station Cost Per Job	$87.61

LAND FOR FIRE STATION – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the land component of the fire development fee. Figure 31 provides acreage and the acquisition cost for the fire station site area. The land acquisition cost estimate is provided by the Town of Taylor.

To calculate the residential level of service, the total acreage of the Taylor fire station site area (1 acre) is first multiplied by the town share factor of 65% (discussed in "Town Share Factor – Taylor"). This figure is then multiplied by the residential proportionate share factor of 94% (see Figure 28) and then divided by the 2007 peak population of 4,747 persons, resulting in .0001 acres per person. See the Appendix for detail on peak population. Nonresidential level of service is calculated by multiplying the total acreage by the Town share factor of 65% (discussed in "Town Share Factor – Taylor"). This figure is then multiplied by the nonresidential proportionate share factor of 6% (see Figure 28) and divided by the number of jobs in the Town in 2007 (832 jobs), providing for .00005 acres per job. See the Appendix for detail on employment estimates.

The land cost per person is calculated in a similar fashion, using the estimated land acquisition cost of $65,000/acre. This results in a land cost of $8.31 per person ((($65,000 x 65%) x 94%)/4,747 = $8.31) and $3.13 per job ((($65,000 x 65%) x 6%)/832 = $3.13).

Figure 31: Fire Station Land Level of Service and Cost Standards

Facility	*Acres**	*Acquisition Cost/Acre**	*Acquisition Cost*
Fire Station	1	$65,000	$65,000
TOTAL	1		$65,000

	Town Share**	Proportionate Share	2007 Demand Units	Acres per Demand Unit	Cost per Demand Unit
Residential	65%	94%	4,747 peak population	0.0001	$8.31
Nonresidential		6%	832 jobs	0.00005	$3.13

**Source: Town of Taylor, AZ*

***The cost and level of service is reduced to reflect that the Town's service area is larger than the Town itself. The Fire Department serves areas outside the Town Limits, and the amounts are reduced to reflect the Town's share.*

Figure 32 shows the Infrastructure Improvements Plan (IIP) for land. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons and 368 jobs. Based on the existing LOS standards of .0001 acres per person and .00005 acres per job, this amount of residential development will require approximately .27 acres and non-residential development will require .02 acres. The projected cost of this demanded infrastructure totals $18,620 over the next five years. Of this, $17,467 is attributable to new residential development. This equates to $8.31 per person ($17,467/2,102 persons = $8.31). The remainder, $1,154, is attributable to new nonresidential development. This equates to $3.13 per job ($1,154/368 jobs = $3.13).

Figure 32: Fire Station Land Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
Employment Projections	906	979	1,053	1,127	1,200	1,274
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102
Net Change in Employment	74	74	74	74	74	368

LAND FOR FIRE FACILITIES

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Acres per Person	0.0001	0.0001	0.0001	0.0001	0.0001	
Incremental LOS-Acres per Job	0.0000	0.00005	0.00005	0.00005	0.00005	
						5-Year Total
Acres Demanded by New Res. Development	0.05	0.05	0.05	0.05	0.05	0.27
Acres Demanded by New Nonres. Development	0.00	0.00	0.00	0.00	0.00	0.02
Cost per Acre	$65,000	$65,000	$65,000	$65,000	$65,000	
						5-Year Total
Land for Fire Facilities Cost For New Res. Development	$3,493	$3,493	$3,493	$3,493	$3,493	$17,467
Land for Fire Facilities Cost For New Nonres. Development	$231	$231	$231	$231	$231	$1,154
TOTAL COSTS FOR NEW DEVELOPMENT	**$3,724**	**$3,724**	**$3,724**	**$3,724**	**$3,724**	**$18,620**

Land for Fire Facilities Cost Per Person	$8.31
Land for Fire Facilities Cost Per Job	$3.13

FIRE VEHICLES/APPARATUS – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the vehicles/apparatus component of the fire development fee. Figure 33 provides an inventory of current fire vehicles/apparatus. Current replacement cost for vehicles/apparatus is provided by the Taylor Fire/EMS Department.

To calculate the residential level of service, the 12 vehicles/apparatus are first multiplied by the town share factor of 65% (discussed in "Town Share Factor – Taylor"). This figure is then multiplied by the residential proportionate share factor of 94% (see Figure 28) and then divided by the 2007 peak population of 4,747, resulting in .0015 vehicles/apparatus per person. See the Appendix for detail on peak population. Nonresidential level of service is calculated by multiplying vehicles/apparatus by the Town share factor of 65% (discussed in "Town Share Factor – Taylor"). This figure is then multiplied by the nonresidential proportionate share factor of 6% (see Figure 28) and divided by the number of jobs in the Town in 2007 (832 jobs), providing for .0006 vehicles/apparatus per job. See the Appendix for detail on employment estimates.

The fire vehicle/apparatus cost per person is calculated in a similar fashion, using the total replacement cost of $2,221,500. This results in a fire vehicle/apparatus cost of $284.04 per person (((($2,221,500 x 65%) x 94%)/4,747 = $284.04) and $107.07 per job (((($2,221,500 x 65%) x 6%)/832 = $107.07).

Figure 33: Fire Vehicles/Apparatus Level of Service and Cost Standards

Type of Vehicle/Apparatus	*Units in Service*	*Unit Replacement Cost**	*Total Replacement Cost*
Engine 411	1	$550,000	$550,000
Engine 412	1	$315,000	$315,000
Engine 413	1	$185,000	$185,000
Brush Truck	3	$165,000	$495,000
Ladder	1	$145,000	$145,000
Command Equip.	1	$60,000	$60,000
Tender	1	$47,000	$47,000
Misc. Equipment	3	$141,500	$424,500
TOTAL/AVERAGE	12	$185,125	$2,221,500

	Town Share**	Proportionate Share	2007 Demand Units	Vehicles Per Demand Unit	Cost per Demand Unit
Residential	65%	94%	4,747 peak population	0.0015	$284.04
Nonresidential		6%	832 jobs	0.0006	$107.07

**Source: Taylor, AZ Fire/EMS Department*

***The cost and level of service is reduced to reflect that the Town's service area is larger than the Town itself. The Fire Department serves areas outside the Town Limits, and the amounts are reduced to reflect the Town's share.*

Figure 34 shows the Infrastructure Improvements Plan (IIP) for fire vehicles/apparatus. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons and 368 jobs. Based on the existing LOS standards of .0015 units per person and .0006 units per job, this amount of residential development will require approximately 3.22 units of vehicles/apparatus and non-residential development will require .21 vehicles/apparatus. The projected cost of this demanded infrastructure totals $636,390 over the next five years. Of this, $596,952 is attributable to new residential

development. This equates to $284.04 per person ($596,952/2,102 persons = $284.04). The remainder, $39,438, is attributable to new nonresidential development. This equates to $107.07 per job ($39,438/368 jobs = $107.07).

Figure 34: Fire Vehicles/Apparatus Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
Employment Projections	906	979	1,053	1,127	1,200	1,274
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102
Net Change in Employment	74	74	74	74	74	368

FIRE VEHICLES AND APPARATUS

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Vehicles/Apparatus per Person	0.0015	0.0015	0.0015	0.0015	0.0015	
Incremental LOS-Vehicles/Apparatus per Job	0.0006	0.0006	0.0006	0.0006	0.0006	
						5-Year Total
Vehicles/Apparatus Demanded by New Res. Development	0.64	0.64	0.64	0.64	0.64	3.22
Vehicles/Apparatus Demanded by New Nonres. Development	0.04	0.04	0.04	0.04	0.04	0.21
Cost per Vehicle/Apparatus	$185,125	$185,125	$185,125	$185,125	$185,125	
						5-Year Total
Vehicles/Apparatus Cost For New Res. Development	$119,390	$119,390	$119,390	$119,390	$119,390	$596,952
Vehicles/Apparatus Cost For New Nonres. Development	$7,888	$7,888	$7,888	$7,888	$7,888	$39,438
TOTAL COSTS FOR NEW DEVELOPMENT	**$127,278**	**$127,278**	**$127,278**	**$127,278**	**$127,278**	**$636,390**

Fire Vehicles/Apparatus Cost Per Person	$284.04
Fire Vehicles/Apparatus Cost Per Job	$107.07

CREDIT FOR FUTURE PRINCIPAL PAYMENTS ON FIRE APPARATUS

As the Town has outstanding debt for fire apparatus, TischlerBise recommends a credit for future principal payments on this outstanding debt. Taylor staff provided the amount of debt and the principal payment schedule.

Figure 35 provides the credit calculation based on the principal payments to be made by the Town on the outstanding debt for fire apparatus. A credit is necessary since new development that pays development fees will also contribute to future principal payments on debt through property taxes. To account for the time value of money, annual principal payments per demand unit are discounted using a net present value formula based on the applicable discount rate.

Debt has been allocated to reflect the portion of outstanding principal to be borne by residential and non-residential property owners based on the proportionate share factors shown in Figure 28. The credit amount of $11.21 per person will be subtracted from the gross capital cost per person to derive a net capital cost per person. The credit amount of $4.22 per job will be subtracted from the gross capital cost per job to derive a net capital cost per job. Population and employment projections are discussed in detail in Appendix 1.

Figure 35: Credit for Future Principal Payments – Fire

Fiscal Year	*Total Principal*	*Residential Share - of Principal (94%)*	*Projected Peak Population*	*Payment/ Person*	*Nonresidential Share of Principal (6%)*	*Projected Employees*	*Payment/ Job*
2008	$21,377	$20,052	5,167	$3.88	$1,325	906	$1.46
2009	$22,121	$20,750	5,588	$3.71	$1,371	979	$1.40
2010	$22,890	$21,472	6,008	$3.57	$1,419	1,053	$1.35
2011	$23,678	$22,211	6,428	$3.46	$1,467	1,127	$1.30
TOTAL	**$90,066**	**$84,484**		**$14.62**	**$5,582**		**$5.51**
			Discount Rate	11.82%		Discount Rate	11.82%
			Net Present Value	$11.21		Net Present Value	$4.22

FIRE DEVELOPMENT FEE STUDY

The Town plans to update its development fees every five years to ensure the methodologies, assumptions, and cost factors used in the calculations are still valid and accurate. TischlerBise has included the cost of preparing this portion of the study in the development fee calculations in order to create a source of funding to conduct this regular update. The cost of this component ($8,370) is allocated to the projected increase in population and jobs over the next five years. This results in a development fee study cost per demand unit of $3.39 per person and per job ($8,370/2,470 people and jobs = $3.39).

FIRE DEVELOPMENT FEE INPUT VARIABLES

Figure 36 shows level of service standards and cost factors for fire development fees for Taylor. Development fees for fire are based on household size (i.e., persons per household) and employment per 1,000 square feet of floor area for non-residential development. Level of service standards are based on current costs per demand unit for the fire station, land for the fire station, fire vehicles/apparatus and the fire component of the development fee study.

Figure 36: Fire Development Fee Input Variables

INPUT VARIABLES	Residential	Nonresidential
Persons Per Household		
Single Family	3.43	
All Other Housing	3.18	
Employees Per 1,000 Square Feet of Floor Area		
820 Com / Shop Ctr 25,000 SF or less		3.33
820 Com / Shop Ctr 25,001-50,000 SF		2.86
820 Com / Shop Ctr 50,001-100,000 SF		2.50
820 Com / Shop Ctr 100,001-200,000 SF		2.22
820 Com / Shop Ctr over 200,001-400,000 SF		2.00
710 Office / Inst 25,000 SF or less		4.15
710 Office / Inst 25,001-50,000 SF		3.91
710 Office / Inst 50,001-100,000 SF		3.69
710 Office / Inst 100,001-200,000 SF		3.49
770 Business Park		3.16
110 Light Industrial		2.31
150 Warehousing		1.28
140 Manufacturing		1.79
Employees Per Room		
320 Lodging (per room)		0.44
Cost Factors	Per Person	Per Employee
Fire Station (Incremental Expansion)	$232.42	$87.61
Land (Incremental Expansion)	$8.31	$3.13
Fire Vehicles and Apparatus (Incremental Expansion)	$284.04	$107.07
Development Impact Fee Study	$3.39	$3.39
Gross Capital Cost Per Demand Unit	**$528.16**	**$201.20**
Less Principal Payment Per Demand Unit	-$11.21	-$4.22
Net Capital Cost Per Demand Unit	**$516.96**	**$196.98**

MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS FOR FIRE

Figure 37 contains a schedule of the maximum supportable fire development fees for Taylor. Residential development fee amounts are calculated by multiplying the persons per household for each type of housing by the net capital cost per person. For example, for a single family unit, the persons per household figure of 3.43 is multiplied by the net capital cost per person of $516.96 for a development fee amount of $1,774 per single family unit. The calculation is repeated for the all other housing type category. For non-residential development, employment per 1,000 sq. ft. is multiplied by the net capital cost per job. For example, for a commercial/shopping center from 50,001 to 100,000 sq. ft., 2.50 jobs per 1,000 sq. ft. is multiplied by $196.98 per job for a total development fee of $492 per 1,000 sq. ft. This calculation is repeated for the remaining nonresidential categories.

Figure 37: Fire Development Fee Schedule

MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS			
Residential	Per Housing Unit		
Single Family	$1,774		
All Other Housing	$1,644		
Nonresidential		Per 1,000 Sq. Ft.	
Com / Shop Ctr 25,000 SF or less		$656	
Com / Shop Ctr 25,001-50,000 SF		$563	
Com / Shop Ctr 50,001-100,000 SF		$492	
Com / Shop Ctr 100,001-200,000 SF		$437	
Com / Shop Ctr over 200,001-400,000 SF		$394	
Office / Inst 25,000 SF or less		$817	
Office / Inst 25,001-50,000 SF		$770	
Office / Inst 50,001-100,000 SF		$727	
Office / Inst 100,001-200,000 SF		$687	
Business Park		$622	
Light Industrial		$455	
Warehousing		$252	
Manufacturing		$353	Per Room
Lodging			$87

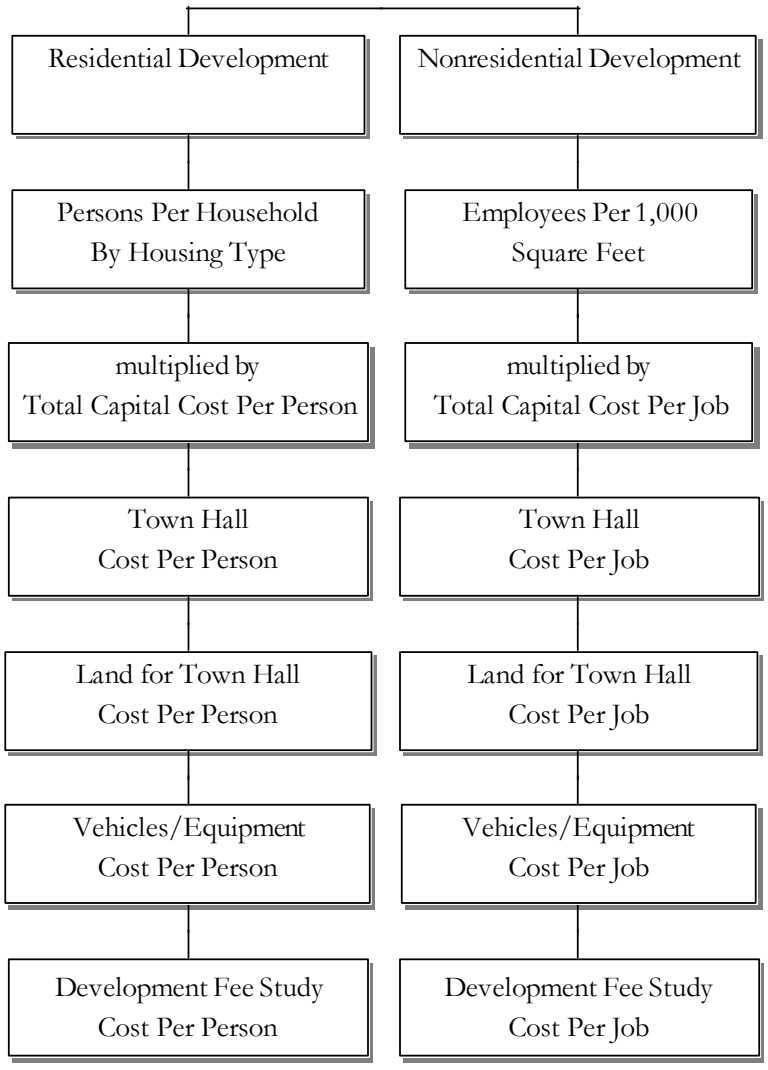
General Government

METHODOLOGY

The incremental expansion method is used to calculate all components of the general government development fee, including general government facilities, land, vehicles/equipment and the general government portion of the development fee study.

As shown in Figure 38, this development fee is allocated on a per capita basis for residential development. For nonresidential development, the development fee methodology allocates the capital cost on a per employee basis.

Figure 38: General Government Development Fee Methodology Chart



PROPORTIONATE SHARE FACTOR – RESIDENTIAL/NON-RESIDENTIAL

The fire development fee uses a functional population concept to allocate capital costs to residential and nonresidential development. Figure 28 distinguishes time at home (2/3 of a day, 16 hours) versus time at work (1/3 of a day, 8 hours) and accounts for commuting patterns in the Town of Taylor.

According to 2000 Census data, 37% of residents in Taylor worked in 2000. This percentage was applied to the 2007 year-round population estimate of 4,495 for the Town, resulting in 1,648 resident workers in Taylor in 2007. The remaining 2,847 resident non-workers are considered to be in the Town 24 hours a day, generating 68,339 residential person hours. Seasonal residents are also considered to be in town 24 hours a day, generating 6,048 person hours. In 2000, the U.S. Census Bureau estimated that of the total employed residents, 31% of Town resident workers both lived and worked in the Town. Applying this share to the current labor force estimate for Taylor of 1,648, 518 residents of the Town are estimated to work in Taylor. The balance, 1,130 resident workers, commute out of Taylor for work. The time that these resident workers spend in the Town for residential functions (16/hours a day) is calculated at 26,361 residential person hours (8,286 + 18,075 = 26,361 residential person hours). Added to the person hours for non-working residents (68,339 person hours) and seasonal residents, this brings the total residential person hours to 100,748.

The 2007 employment estimate for Taylor is 832 jobs. As discussed above, 518 of these jobs are estimated to be Town residents working in Taylor. The balance, 314 jobs, are considered non-resident workers. The time spent at work (8 hours/day) is allocated to non-residential development, resulting in 6,656 non-residential person hours (4,143 + 2,513 = 6,656 non-residential person hours). Based on estimated person hours, the cost allocation for residential development is 94 percent, while nonresidential development accounts for 6 percent of the demand for general government facilities.

Figure 39: Proportionate Share Factors – Functional Population

			Demand	Person
Residential	*Demand Units in 2007*		*Hours/Day*	*Hours*
Seasonal Population (2007)[1]	252		24	6,048
Year-Round Population (2007)[1]	4,495			
Residents Not Working		2,847	24	68,339
Workers Living in Taylor[2]		1,648		
Residents Working in Taylor[3]		518	16	8,286
Residents Working outside of Taylor		1,130	16	18,075
			Residential Subtotal	100,748
				94%
Nonresidential				
Jobs Located in Taylor (2007) [4]	832			
Residents Working in Taylor[3]		518	8	4,143
Non-Resident Workers		314	8	2,513
			Nonresidential Subtotal	6,656
				6%
			TOTAL	107,404

[1] Source: Arizona Department of Economic Security (December 1, 2006). Seasonal population is the difference between year-round and peak population based on the peak occupancy rate per the 2000 Census.

[2,3] Source: Town residents working in Taylor based on data in Table P27 from STF3, Census 2000 detailing the proportion of residents working in the Town. Data presented in figure based on applying 2000 proportion of Town residents working in the Town to 2007 employment data.

[4] ESRI Business Information Solutions, 2007.

TOWN HALL – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the facility component of the general government development fee. Figure 40 provides square footage and the replacement cost for Town Hall. Replacement cost is from Marshall Swift for government buildings (Class D, Good).

To calculate the residential level of service, the square footage of Town Hall (2,200 sq. ft.) is multiplied by the residential proportionate share factor of 94% (see Figure 39) and then divided by the 2007 peak population of 4,747 persons, resulting in .43 sq. ft. per person. See the Appendix for detail on peak population. Nonresidential level of service is calculated by multiplying the total square footage by the nonresidential proportionate share factor of 6% (see Figure 39) and dividing by the number of jobs in the Town in 2007 (832 jobs), providing for .16 sq. ft. per job. See the Appendix for detail on employment estimates.

The town hall cost per person is calculated in a similar fashion, using the total replacement cost of $304,371. This results in a town hall cost of $60.14 per person (($304,371 x 94%)/4,747 = $60.14) and $22.67 per job (($304,371 x 6%)/832 = $22.67).

Figure 40: Town Hall Level of Service and Cost Standards

Facility	*Sq. Ft.*	*Replace. Cost/Sq. Ft.**	*Replacement Cost*
Town Hall	2,200	$138	$304,371
TOTAL	2,200		$304,371

	Proportionate Share	2007 Demand Units		Sq. Ft. per Demand Unit	Cost per Demand Unit
Residential	94%	4,747	peak population	0.43	$60.14
Nonresidential	6%	832	jobs	0.16	$22.67

**Source: Marshall and Swift, Marshall Valuation Service, for Governmental Buildings, Class D, Good.*

Figure 41 shows the Infrastructure Improvements Plan (IIP) for town hall. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons and 368 jobs. Based on the existing LOS standards of .43 sq. ft. per person and .16 sq. ft. per job, this amount of residential development will require approximately 914 sq. ft. and non-residential development will require 60 sq. ft. The projected cost of this demanded infrastructure totals $134,752 over the next five years. Of this, $126,402 is attributable to new residential development. This equates to $60.14 per person ($126,402/2,102 persons = $60.14). The remainder, $8,351, is attributable to new nonresidential development. This equates to $22.67 per job ($8,351/368 jobs = $22.67).

Figure 41: Town Hall Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
Employment Projections	906	979	1,053	1,127	1,200	1,274
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102
Net Change in Employment	74	74	74	74	74	368

TOWN HALL

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Sq. Ft. per Person	0.43	0.43	0.43	0.43	0.43	
Incremental LOS-Sq. Ft. per Job	0.16	0.16	0.16	0.16	0.16	
						5-Year Total
Sq. Ft. Demanded by New Res. Development	183	183	183	183	183	914
Sq. Ft. Demanded by New Nonres. Development	12	12	12	12	12	60
Cost per Sq. Ft.	$138	$138	$138	$138	$138	
						5-Year Total
Town Hall Cost For New Res. Development	$25,280	$25,280	$25,280	$25,280	$25,280	$126,402
Town Hall Cost For New Nonres. Development	$1,670	$1,670	$1,670	$1,670	$1,670	$8,351
TOTAL COSTS FOR NEW DEVELOPMENT	**$26,950**	**$26,950**	**$26,950**	**$26,950**	**$26,950**	**$134,752**

Town Hall Cost Per Person	$60.14
Town Hall Cost Per Job	$22.67

LAND FOR TOWN HALL – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the land component of the general government development fee. Figure 42 provides acreage and the acquisition cost for the town hall site area. The land acquisition cost estimate is provided by the Town of Taylor.

To calculate the residential level of service, the total acreage of the town hall site area (.5 acre) is multiplied by the residential proportionate share factor of 94% (see Figure 39) and then divided by the 2007 peak population of 4,747 persons, resulting in .0001 acres per person. See the Appendix for detail on peak population. Nonresidential level of service is calculated by multiplying the nonresidential proportionate share factor of 6% (see Figure 39) and dividing by the number of jobs in the Town in 2007 (832 jobs), providing for .00004 acres per job. See the Appendix for detail on employment estimates.

The land cost per person is calculated in a similar fashion, using the estimated land acquisition cost of $32,500. This results in a land cost of $6.42 per person (($32,500 x 94%)/4,747 = $6.42) and $2.42 per job (($32,500 x 6%)/832 = $2.42).

Figure 42: Town Hall Land Level of Service and Cost Standards

Facility	*Acres**	*Acquisition Cost/Acre**	*Acquisition Cost*
Town Hall	0.50	$65,000	$32,500
TOTAL	0.50		$32,500

	Proportionate Share	2007 Demand Units		Acres per Demand Unit	Cost per Demand Unit
Residential	94%	4,747	peak population	0.0001	$6.42
Nonresidential	6%	832	jobs	0.00004	$2.42

**Source: Town of Taylor, AZ*

Figure 43 shows the Infrastructure Improvements Plan (IIP) for land. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons and 368 jobs. Based on the existing LOS standards of .0001 acres per person and .00004 acres per job, this amount of residential development will require approximately .21 acres and non-residential development will require .01 acres. The projected cost of this demanded infrastructure totals $14,389 over the next five years. Of this, $13,497 is attributable to new residential development. This equates to $6.42 per person ($13,497/2,102 persons = $6.42). The remainder, $892, is attributable to new nonresidential development. This equates to $2.42 per job ($892/368 jobs = $2.42).

Figure 43: Town Hall Land Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
Employment Projections	906	979	1,053	1,127	1,200	1,274
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102
Net Change in Employment	74	74	74	74	74	368

LAND FOR TOWN HALL

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Acres per Person	0.0001	0.0001	0.0001	0.0001	0.0001	
Incremental LOS-Acres per Job	0.00004	0.00004	0.00004	0.00004	0.00004	
						5-Year Total
Acres Demanded by New Res. Development	0.04	0.04	0.04	0.04	0.04	0.21
Acres Demanded by New Nonres. Development	0.00	0.00	0.00	0.00	0.00	0.01
Cost per Acre	$65,000	$65,000	$65,000	$65,000	$65,000	
						5-Year Total
Land for Town Hall Cost For New Res. Development	$2,699	$2,699	$2,699	$2,699	$2,699	$13,497
Land for Town Hall Cost For New Nonres. Development	$178	$178	$178	$178	$178	$892
TOTAL COSTS FOR NEW DEVELOPMENT	**$2,878**	**$2,878**	**$2,878**	**$2,878**	**$2,878**	**$14,389**

Land for Town Hall Cost Per Person	$6.42
Land for Town Hall Cost Per Job	$2.42

VEHICLES/EQUIPMENT – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the vehicles/equipment component of the general government development fee. Figure 44 provides an inventory of current general government vehicles/equipment. Current replacement cost for vehicles/equipment is provided by the Town of Taylor.

To calculate the residential level of service, the 2 vehicles/equipment are multiplied by the residential proportionate share factor of 94% (see Figure 39) and then divided by the 2007 peak population of 4,747, resulting in .0004 vehicles/equipment per person. See the Appendix for detail on peak population. Nonresidential level of service is calculated by multiplying vehicles/equipment by the nonresidential proportionate share factor of 6% (see Figure 39) and dividing by the number of jobs in the Town in 2007 (832 jobs), providing for .0001 vehicles/equipment per job. See the Appendix for detail on employment estimates.

The general government vehicle/equipment cost per person is calculated in a similar fashion, using the total replacement cost of $45,000. This results in a vehicle/equipment cost of $8.89 per person (($45,000 x 94%)/4,747 = $8.89) and $3.35 per job (($45,000 x 6%)/382 = $3.35).

Figure 44: General Government Vehicles/Equipment Level of Service and Cost Standards

Type of Vehicle/Equipment	*Units in Service*	*Unit Replacement Cost**	*Total Replacement Cost*
Pickup Truck	1	$25,000	$25,000
SUV	1	$20,000	$20,000
TOTAL/AVERAGE	2	$22,500	$45,000

	Proportionate Share	2007 Demand Units	Vehicles Per Demand Unit	Cost per Demand Unit
Residential	94%	4,747 peak population	0.0004	$8.89
Nonresidential	6%	832 jobs	0.0001	$3.35

**Source: Town of Taylor, AZ*

Figure 45 shows the Infrastructure Improvements Plan (IIP) for general government vehicles/equipment. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figures listed above. Over the next five years, there is a projected increase of 2,102 persons and 368 jobs. Based on the existing LOS standards of .0004 units per person and .0002 units per job, this amount of residential development will require approximately .83 units of vehicles/equipment and non-residential development will require .05 vehicles/equipment. The projected cost of this demanded infrastructure totals $19,923 over the next five years. Of this, $18,688 is attributable to new residential development. This equates to $8.89 per person ($18,688/2,102 persons = $8.89). The remainder, $1,235, is attributable to new nonresidential development. This equates to $3.35 per job ($1,235/368 jobs = $3.35).

Figure 45: General Government Vehicles/Equipment Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Peak Population Projections	5,167	5,588	6,008	6,428	6,849	7,269
Employment Projections	906	979	1,053	1,127	1,200	1,274
						5-Year Total
Net Change in Population	420	420	420	420	420	2,102
Net Change in Employment	74	74	74	74	74	368

GENERAL GOVERNMENT VEHICLES AND EQUIPMENT

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Vehicles/Equipment per Person	0.0004	0.0004	0.0004	0.0004	0.0004	
Incremental LOS-Vehicles/Equipment per Job	0.0001	0.0001	0.0001	0.0001	0.0001	
						5-Year Total
Vehicles/Equipment Demanded by New Res. Development	0.17	0.17	0.17	0.17	0.17	0.83
Vehicles/Equipment Demanded by New Nonres. Development	0.01	0.01	0.01	0.01	0.01	0.05
Cost per Vehicle/Equipment	$22,500	$22,500	$22,500	$22,500	$22,500	
						5-Year Total
Vehicles/Equipment Cost For New Res. Development	$3,738	$3,738	$3,738	$3,738	$3,738	$18,688
Vehicles/Equipment Cost For New Nonres. Development	$247	$247	$247	$247	$247	$1,235
TOTAL COSTS FOR NEW DEVELOPMENT	**$3,985**	**$3,985**	**$3,985**	**$3,985**	**$3,985**	**$19,923**

General Government Vehicles/Equipment Cost Per Person	$8.89
General Government Vehicles/Equipment Cost Per Job	$3.35

GENERAL GOVERNMENT DEVELOPMENT FEE STUDY

The Town plans to update its development fees every five years to ensure the methodologies, assumptions, and cost factors used in the calculations are still valid and accurate. TischlerBise has included the cost of preparing this portion of the study in the development fee calculations in order to create a source of funding to conduct this regular update. The cost of this component ($7,740) is allocated to the projected increase in population and jobs over the next five years. This results in a development fee study cost per demand unit of $3.13 per person and per job ($7,740/2,470 people and jobs = $3.13).

GENERAL GOVERNMENT DEVELOPMENT FEE INPUT VARIABLES

Figure 46 shows level of service standards and cost factors for general government development fees for Taylor. Development fees for general government are based on household size (i.e., persons per household) and employment per 1,000 square feet of floor area for non-residential development. Level of service standards are based on current costs per demand unit for town hall, land for town hall, vehicles/equipment and the general government component of the development fee study.

Figure 46: General Government Development Fee Input Variables

INPUT VARIABLES	Residential	Nonresidential
Persons Per Household		
Single Family	3.43	
All Other Housing	3.18	
Employees Per 1,000 Square Feet of Floor Area		
820 Com / Shop Ctr 25,000 SF or less		3.33
820 Com / Shop Ctr 25,001-50,000 SF		2.86
820 Com / Shop Ctr 50,001-100,000 SF		2.50
820 Com / Shop Ctr 100,001-200,000 SF		2.22
820 Com / Shop Ctr over 200,001-400,000 SF		2.00
710 Office / Inst 25,000 SF or less		4.15
710 Office / Inst 25,001-50,000 SF		3.91
710 Office / Inst 50,001-100,000 SF		3.69
710 Office / Inst 100,001-200,000 SF		3.49
770 Business Park		3.16
110 Light Industrial		2.31
150 Warehousing		1.28
140 Manufacturing		1.79
Employees Per Room		
320 Lodging (per room)		0.44
Cost Factors	Per Person	Per Employee
Buildings (Incremental Expansion)	$60.14	$22.67
Land (Incremental Expansion)	$6.42	$2.42
Vehicles & Equipment (Incremental Expansion)	$8.89	$3.35
Development Impact Fee Study	$3.13	$3.13
Total Capital Cost Per Demand Unit	**$78.59**	**$31.58**

MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS FOR GENERAL GOVERNMENT

Figure 47 contains a schedule of the maximum supportable general government development fees for Taylor. Residential development fee amounts are calculated by multiplying the persons per household for each type of housing by the total capital cost per person. For example, for a single family unit, the persons per household figure of 3.43 is multiplied by the total capital cost per person of $78.59 for a development fee amount of $2,709 per single family unit. The calculation is repeated for the all other housing type category. For non-residential development, employment per 1,000 sq. ft. is multiplied by the total capital cost per job. For example, for a commercial/shopping center from 50,001 to 100,000 sq. ft., 2.50 jobs per 1,000 sq. ft. is multiplied $31.58 per job for a total development fee of $79 per 1,000 sq. ft. This calculation is repeated for the remaining nonresidential categories.

Figure 47: General Government Development Fee Schedule

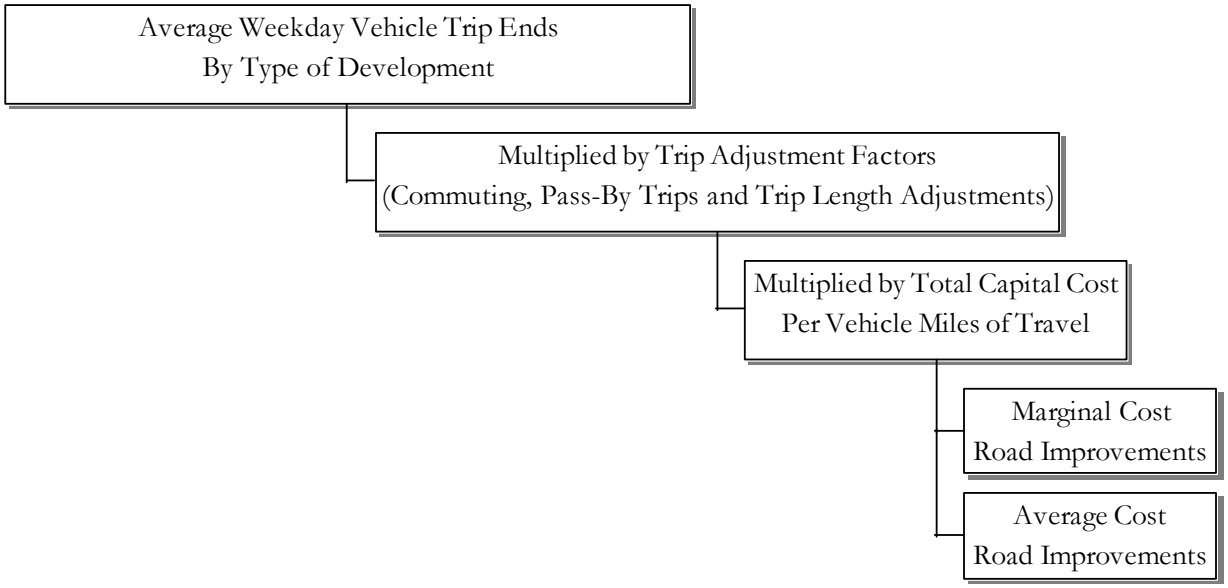
MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS			
Residential	Per Housing Unit		
Single Family	$270		
All Other Housing	$250		
Nonresidential		Per 1,000 Sq. Ft.	
Com / Shop Ctr 25,000 SF or less		$105	
Com / Shop Ctr 25,001-50,000 SF		$90	
Com / Shop Ctr 50,001-100,000 SF		$79	
Com / Shop Ctr 100,001-200,000 SF		$70	
Com / Shop Ctr over 200,001-400,000 SF		$63	
Office / Inst 25,000 SF or less		$131	
Office / Inst 25,001-50,000 SF		$123	
Office / Inst 50,001-100,000 SF		$117	
Office / Inst 100,001-200,000 SF		$110	
Business Park		$100	
Light Industrial		$73	
Warehousing		$40	
Manufacturing		$57	Per Room
Lodging			$14

Transportation

METHODOLOGY

The Town of Taylor transportation development fee is derived using a plan-based methodology linked to the Town of Taylor Community Transportation Plan (November 2007) and the Southern Navajo/Apache County Sub-Regional Transportation Plan (September 2007). Both reports were prepared by Wilson and Co. As shown in Figure 48, trip generation rates by type of development are multiplied by the total capital cost per vehicle miles of travel (VMT) to yield the transportation development fees. The methodology includes trip adjustment factors for commuting patterns, pass-by trips and average trip length variation by type of land use.

Figure 48: Transportation Development Fee Methodology



VEHICLE TRIPS

Vehicle trip generation rates are from the reference book Trip Generation (Institute of Transportation Engineers, 2003). Taylor's transportation development fees are based on average weekday vehicle trip ends. A vehicle trip end represents a vehicle either entering or exiting a development (as if a traffic counter were placed across a driveway). To calculate the development fees, trip generation rates are adjusted to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor is 50%. As discussed further below, the development fee methodology includes additional

adjustments to make the fees proportionate to the infrastructure demand for particular types of development.

Adjustment for Journey-To-Work Commuting

Residential development has a higher trip adjustment factor of 61% to account for commuters leaving Taylor for work (see calculation in Figure 49). According to the National Household Travel Survey (see Table 29, Federal Highway Administration, 2001) home-based work trips are typically 31% of production trips (i.e., all out-bound trips, which are 50% of all trip ends). Also, Census 2000 data from Table P27 in Summary File 3 indicates that 69% of Taylor's workers travel outside the Town for work. In combination, these factors (0.31 x 0.50 x 0.69 = 0.11) account for 11% of production trips. The total adjustment factor for residential includes attraction trips (50% of trip ends) plus the journey-to-work commuting adjustment (11% of production trips) for a total of 61%.

Figure 49: Trip Adjustment for Journey to Work Commuting

Share of Home Based Trips for Work	31%
Outbound Trips	50%
Workers Traveling Outside Taylor for Work	69%
Journey to Work Commuting Adj.	**11%**
Attraction Trips	50%
Journey to Work Commuting Adj.	11%
Residential Adjustment Factor	**61%**

Source: National Household Transportation Survey (2001) and U.S. Census Table P27.

Adjustment for Pass-by Trips

A simple trip adjustment factor of 50% has been applied to the office, public sector and goods production categories. The commercial/retail category has a trip factor of less than 50% because this type of development attracts vehicles as they pass-by on arterial and collector roads. For example, when someone stops at a convenience store on their way home from work, the convenience store is not their primary destination. As documented in Trip Generation, there is an inverse relationship between shopping center size and pass-by trips. Therefore, appropriate trip adjustment factors have been calculated according to shopping center size. For this type of development, the trip adjustment factor is less than 50 percent because retail uses attract vehicles as they pass by. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For example, the ITE Manual indicates that on average 45% of the vehicles entering shopping centers under 25,000 square feet are passing by on the way to some other primary destination and 55% of the attraction trips have the shopping center as their primary destination. Therefore, the adjusted trip factor is 28% (0.55 x 0.50).

Figure 50: Commercial/Shopping Center Trip Rates and Pass-By Adjustments

Floor Area in thousands (KSF)	Commercial Pass-by Trips*	Commercial Trip Adj Factor**	Weekday - 2003 Data			
			Shopping Centers (ITE 820)		***General Office*** (ITE 710)	
			Trip Ends	Rate/KSF	Trip Ends	Rate/KSF
10	52%	24%	1,520	152.03	227	22.66
25	45%	28%	2,758	110.32	459	18.35
50	39%	31%	4,328	86.56	782	15.65
100	34%	33%	6,791	67.91	1,334	13.34
200	29%	36%	10,656	53.28	2,275	11.37
400	23%	39%	16,722	41.80	3,879	9.70
800	18%	41%	26,239	32.80	6,615	8.27

Source: Trip Generation, Institute of Transportation Eng

* Based on data published by ITE in Trip Generation Handbook (2004), the best trendline correlation between pass-by trips and floor area is a logarithmic curve with the equation ((-7.6812*LN(KSF)) + 69.293).

** To convert trip ends to vehicle trips, the standard adjustment factor is 50%. Due to pass-by trips, commercial trip adjustment factors are lower, as derived from the following formula (0.50*(1-passby pct)).

GROWTH-RELATED DEMAND FOR TRANSPORTATION IMPROVEMENTS

The Town of Taylor Community Transportation Plan (November 2007) and the Southern Navajo/Apache County Sub-Regional Transportation Plan identify transportation improvements needed to accommodate new growth in the Town through 2030. These improvements will expand the street network by 6 lane miles, at an average cost of $1.2 million per lane mile. The transportation improvements are classified as either marginal-cost or average-cost projects. In combination, these growth-related capacity projects have a total cost of $131 per vehicle mile of travel.

Figure 51 summarizes the cost of system improvements that will be needed to accommodate projected increases in traffic through 2030. The top portion of the Figure lists those growth-related projects needed to accommodate new development. Because these projects would not be constructed if the Town were to stop growing, construction cost are allocated to the net increase in VMT from 2007-2030. These growth-related capacity projects have a total cost of $56 per vehicle mile of travel.

The bottom portion of Figure 51 presents road expansion projects that will benefit both current and future development. The average cost allocation to projected VMT in 2030 ensures that new development will only pay for its proportionate share. For this project, improvements cost $75 per vehicle mile of travel.

Figure 51: Planned Transportation Improvements

A. Capacity Project That Benefits Future Development (Marginal)

*Project Name & Location**	*Lane Miles*	*Estimated Project Cost*	*Potential State or County Contributions*	*Total Local Share*
Willow Ln. (or Center St.) Extention - Bourdon Ranch Rd. to Bourdon Ranch Rd. Extension	2.00	$2,540,000	$0	$2,540,000
TOTAL	**2.00**	**$2,540,000**	**$0**	**$2,540,000**
			Increase in VMT 2007-2030	45,133
			Average Cost Per VMT	**$56**

B. Capacity Project That Benefits Current and Future Development (Average)

*Project Name & Location***	*Lane Miles*	*Estimated Project Cost*	*Potential State or County Contributions*	*Total Local Share*
Paper Mill Rd. (from Freeman Hollow Rd. to SR 77)	4.00	$5,080,000	$0	$5,080,000
TOTAL	**4.00**	**$5,080,000**	**$0**	**$5,080,000**
			Average Weekday VMT in 2030	66,977
			Average Cost Per VMT	**$75**
TOTAL	**6.00**			**$7,620,000**
			Cost Per Lane Mile	**$1,270,000**
			Cost Per VMT	**$131**

**Southern Navajo/Apache County Sub-Regional Transportation Plan, Wilson and Co., September 2007. Costs include planning, design, construction management and right-of-way.*

***Town of Taylor, AZ, Community Transportation Plan, Wilson and Co., November, 2007. Includes portion within Town of Taylor (one mile of planned 3.33 mile improvement).*

VEHICLE TRIPS FROM DEVELOPMENT IN TAYLOR

In addition to the cost per lane mile, development fees are determined by lane capacity and travel demand factors such as the amount of new development, trip generation rates and average trip length. Figure 52 summarizes projected travel demand data for Taylor through the year 2030. Trip generation rates and trip adjustment factors, as used in the development fee calculations, convert projected development into average weekday vehicle trips, indicated by grey shading in the middle section of Figure 52. At the bottom of the table are data on projected Vehicle Miles of Travel (VMT) and the need for additional lane miles. A Vehicle Mile of Travel (VMT) is simply a measurement unit equal to one vehicle traveling one mile. In the aggregate, VMT is the product of vehicle trips multiplied by the average trip length.

Lane Capacity

The transportation development fee is based on a lane capacity standard of 7,250 vehicles per lane, which is the maximum volume for a collector road per the Southern Navajo/Apache County Sub-Regional Transportation Plan (Figure 2.1).

Average Trip Length

Knowing the increase in vehicle trips, lane-miles need to accommodate future travel and lane capacity, it is possible to derive the average trip length. The average trip length on planned improvements is determined through a series of iterations using spreadsheet software because the VMT calculations include the same adjustment factors used in the development fee calculations (i.e., residential journey-to-work and commercial pass-by adjustments and average trip length adjustment by type of land use (see below)). Given the projected number of vehicle trips (see Figure 52), lane capacity standard and projected need for 6 lane miles of additional road capacity (see Figure 51), TischlerBise derived an average trip length on planned system improvements in Taylor of 1.77 miles.[1]

Figure 52: Projected Travel Demand and Road Needs

					Five-Year Increments				Cumulative
Taylor, AZ	2007	2008	2009	2010	2015	2020	2025	2030	Increase
DEMAND DATA									
SF UNITS	916	1,006	1,097	1,187	1,639	2,091	2,543	2,995	
ALL OTHER HOUSING UNITS	504	539	573	608	781	954	1,127	1,300	
RETAIL/COMM KSF	110	120	129	139	188	236	285	333	
OFFICE KSF	20	22	24	26	35	44	53	62	
PUBLIC SECTOR KSF	9	10	11	11	15	19	23	27	
GOODS PRODUCTION KSF	145	158	171	184	248	312	376	441	
SF TRIPS	5,315	5,839	6,364	6,888	9,510	12,132	14,754	17,376	
ALL OTHER HOUSING TRIPS	2,053	2,194	2,336	2,477	3,182	3,887	4,592	5,298	
RETAIL/COMM TRIPS	4,006	4,361	4,716	5,071	6,844	8,618	10,392	12,165	
OFFICE TRIPS	230	251	271	291	393	495	597	699	
PUBLIC SECTOR TRIPS	101	110	119	128	173	218	262	307	
GOODS PRODUCTION TRIPS	506	551	595	640	864	1,088	1,312	1,536	
TOTAL TRIPS	12,212	13,306	14,400	15,495	20,966	26,438	31,909	37,381	
COLLECTOR ROAD VMT	21,844	23,806	25,769	27,731	37,543	47,354	57,166	66,977	
ANL COLLECTOR ROAD LN MI		0.3	0.2	0.3	0.3	0.2	0.2	0.2	6.00
ANL COLLECTOR ROAD COST (Millions)		$0.4	$0.3	$0.4	$0.4	$0.3	$0.3	$0.3	$7.6
LN MI PER 10,000 VMT	1.33	1.34	1.32	1.33	1.33	1.33	1.33	1.33	

Average Trip Length Adjustment by Type of Land Use

The average trip length is weighted to account for trip length variation by type of land use. As documented by the National Household Travel Survey (see Table 6 in the 2001 publication by the Federal Highway Administration), vehicle trips from residential development, for home-based work trips, social and recreation purposes, are approximately

[1] The basis formula for calculating the average trip length is to multiply the lane miles by the capacity and divide by the number of trips.

122% of the average trip length. Conversely, shopping trips associated with commercial development are roughly 68% of the average trip length while other nonresidential development typically account for trips that are 75% of the average trip length.

PUBLIC WORKS YARD FACILITIES – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the public works yard facility component of the transportation development fee. Figure 53 shows the square footage and replacement cost for the Town's public works facilities. Replacement cost is from Marshall Swift for shed office structures (Class S, Average). The total replacement cost is estimated at $359,532 for a per trip cost of $29.44.

Figure 53: Public Works Yard Level of Service and Cost Standards

Facility	*Sq. Ft.*	*Replace. Cost/Sq. Ft.**	*Replacement Cost*
Storage	4,500	$42	$190,340
Equipment Bays	4,000	$42	$169,191
TOTAL	8,500		$359,532

Vehicle Trips in 2007	12,212
Sq. Ft. Per Trip	0.70
Cost Per Trip	$29.44

**Source: cost per sq. ft. from Marshall and Swift, Marshall Valuation Service, Shed Office Structures, Class S, Average.*

Figure 54 shows the Infrastructure Improvements Plan (IIP) for public works yard facilities. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figure listed above. Over the next five years, there is a projected increase of 3,327 residential average daily vehicle trips and 2,144 nonresidential average daily vehicle trips. Based on the existing LOS standard of .70 sq. ft. per trip, this amount of residential development will require approximately 2,316 sq. ft. and non-residential development will require 1,493 sq. ft. The projected cost of this demanded infrastructure totals $161,092 over the next five years. This equates to $29.44 per trip ($161,092/5,471 trips = $29.44).

Figure 54: Public Works Yard Facilities Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Average Daily Vehicle Trip Projections - Residential	8,034	8,699	9,364	10,030	10,695	11,361
Average Daily Vehicle Trip Projections - Nonresidential	5,272	5,701	6,130	6,559	6,988	7,417
						5-Year Total
Net Change in Average Daily Vehicle Trips from New Res. Development	665	665	665	665	665	3,327
Net Change in Average Daily Vehicle Trips from New Nonres. Development	429	429	429	429	429	2,144

PUBLIC WORKS FACILITIES

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Sq. Ft. per Average Daily Vehicle Trip	0.70	0.70	0.70	0.70	0.70	
						5-Year Total
Sq. Ft. Demanded by New Res. Development	463	463	463	463	463	2,316
Sq. Ft. Demanded by New Nonres. Development	299	299	299	299	299	1,493
Cost per Sq. Ft.	$42	$42	$42	$42	$42	
						5-Year Total
Public Works Facility Cost For New Res. Development	$19,592	$19,592	$19,592	$19,592	$19,592	$97,959
Public Works Facility Cost For New Nonres. Development	$12,626	$12,626	$12,626	$12,626	$12,626	$63,132
TOTAL COSTS FOR NEW DEVELOPMENT	**$32,218**	**$32,218**	**$32,218**	**$32,218**	**$32,218**	**$161,092**

LAND FOR PUBLIC WORKS YARD FACILITIES – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the land component of the transportation development fee. Figure 55 shows the acreage and estimated acquisition cost for the Town's public works yard site area. The estimate of land acquisition cost is provided by the Town of Taylor. The total acquisition cost is estimated at $130,000 for a per trip cost of $10.65.

Figure 55: Public Works Yard Land Level of Service and Cost Standards

Facility	*Acres**	*Acquisition Cost/Acre**	*Acquisition Cost*
Storage	2	$65,000	$130,000
TOTAL	2		$130,000

Vehicle Trips in 2007	12,212
Acres Per Trip	0.0002
Cost Per Trip	$10.65

**Source: Town of Taylor, AZ*

Figure 56 shows the Infrastructure Improvements Plan (IIP) for land for public work yard facilities. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figure listed above. Over the next five years, there is a projected increase of 3,327 residential average daily vehicle trips and 2,144 nonresidential average daily vehicle trips. Based on the existing LOS standard of .0002 acres per trip, this amount of residential development will require approximately .54 acres and non-residential

development will require .35 acres. The projected cost of this demanded infrastructure totals $58,248 over the next five years. This equates to $10.65 per trip ($58,248/5,471 trips = $10.65).

Figure 56: Public Works Yard Land Facilities Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Average Daily Vehicle Trip Projections - Residential	8,034	8,699	9,364	10,030	10,695	11,361
Average Daily Vehicle Trip Projections - Nonresidential	5,272	5,701	6,130	6,559	6,988	7,417
						5-Year Total
Net Change in Average Daily Vehicle Trips from New Res. Development	665	665	665	665	665	3,327
Net Change in Average Daily Vehicle Trips from New Nonres. Development	429	429	429	429	429	2,144

LAND FOR PUBLIC WORKS FACILITIES

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Acres per Average Daily Vehicle Trip	0.0002	0.0002	0.0002	0.0002	0.0002	
						5-Year Total
Acres Demanded by New Res. Development	0.11	0.11	0.11	0.11	0.11	0.54
Acres Demanded by New Nonres. Development	0.07	0.07	0.07	0.07	0.07	0.35
Cost per Acre	$65,000	$65,000	$65,000	$65,000	$65,000	
						5-Year Total
Public Works Facility Land Cost For New Res. Development	$7,084	$7,084	$7,084	$7,084	$7,084	$35,420
Public Works Facility Land Cost For New Nonres. Development	$4,566	$4,566	$4,566	$4,566	$4,566	$22,828
TOTAL COSTS FOR NEW DEVELOPMENT	**$11,650**	**$11,650**	**$11,650**	**$11,650**	**$11,650**	**$58,248**

Land for Public Works Facility Cost Per Vehicle Trip $10.65

TRANSPORTATION VEHICLES AND EQUIPMENT – INCREMENTAL EXPANSION

The incremental expansion methodology is used to derive the vehicles and equipment component of the transportation development fee. Figure 57 provides an inventory of the Town's vehicles and equipment. Current replacement cost for transportation vehicles and equipment was provided by the Town. Vehicle and equipment value is estimated at $695,000 for a per trip cost of $56.91.

Figure 57: Transportation Vehicles and Equipment and Level of Service and Cost Standards

Type of Vehicle/Equipment	*Units in Service*	*Unit Replacement Cost**	*Total Replacement Cost*
Grader	1	$250,000	$250,000
Backhoe	1	$70,000	$70,000
Sweeper	1	$30,000	$30,000
Dump Truck	2	$85,000	$170,000
Pickup Broom	1	$80,000	$80,000
Jetter	1	$35,000	$35,000
Water Truck	1	$35,000	$35,000
Pickup	1	$25,000	$25,000
TOTAL/AVERAGE	9	$77,222	$695,000

Vehicle Trips in 2007	12,212
Vehicles Per Trip	0.0007
Cost Per Trip	$56.91

**Source: Town of Taylor, AZ*

Figure 58 shows the Infrastructure Improvements Plan (IIP) for transportation vehicles/equipment. The IIP is calculated using the development projections from Appendix 1 at the back of the report and the LOS and cost figure listed above. Over the next five years, there is a projected increase of 3,327 residential average daily vehicle trips and 2,144 nonresidential average daily vehicle trips. Based on the existing LOS standard of .0007 vehicles/equipment per trip, this amount of residential development will require approximately 2.45 vehicles/equipment and non-residential development will require 1.58 vehicles/equipment. The projected cost of this demanded infrastructure totals $311,402 over the next five years. This equates to $56.91 per trip ($311,402/5,471 trips = $56.91).

Figure 58: Transportation Vehicles/Equipment Infrastructure Improvements Plan

NEW DEVELOPMENT PROJECTIONS

	2008	*2009*	*2010*	*2011*	*2012*	*2013*
Average Daily Vehicle Trip Projections - Residential	8,034	8,699	9,364	10,030	10,695	11,361
Average Daily Vehicle Trip Projections - Nonresidential	5,272	5,701	6,130	6,559	6,988	7,417
						5-Year Total
Net Change in Average Daily Vehicle Trips from New Res. Development	665	665	665	665	665	3,327
Net Change in Average Daily Vehicle Trips from New Nonres. Development	429	429	429	429	429	2,144

TRANSPORTATION VEHICLES AND EQUIPMENT

	2008	*2009*	*2010*	*2011*	*2012*	
Incremental LOS-Vehicles/Equipment per Average Daily Vehicle Trip	0.0007	0.0007	0.0007	0.0007	0.0007	
						5-Year Total
Vehicles/Equipment Demanded by New Res. Development	0.49	0.49	0.49	0.49	0.49	2.45
Vehicles/Equipment Demanded by New Nonres. Development	0.32	0.32	0.32	0.32	0.32	1.58
Cost per Vehicle/Equipment	$77,222	$77,222	$77,222	$77,222	$77,222	
						5-Year Total
Vehicles/Equipment Cost For New Res. Development	$37,872	$37,872	$37,872	$37,872	$37,872	$189,362
Vehicles/Equipment Cost For New Nonres. Development	$24,408	$24,408	$24,408	$24,408	$24,408	$122,039
TOTAL COSTS FOR NEW DEVELOPMENT	**$62,280**	**$62,280**	**$62,280**	**$62,280**	**$62,280**	**$311,402**

Transportation Vehicles/Equipment Cost Per Vehicle Trip $56.91

TRANSPORTATION DEVELOPMENT FEE STUDY

The Town plans to update its development fees every five years to ensure the methodologies, assumptions, and cost factors used in the calculations are still valid and accurate. TischlerBise has included the cost of preparing this portion of the study in the transportation development fee calculations in order to create a source of funding to conduct this regular update. The cost of this component ($12,780) is allocated to the projected increase in residential and non-residential vehicle trips over the next five years. This results in a development fee study cost per demand unit of $2.34 per vehicle trip ($12,780/5,472 vehicle trips).

TRANSPORTATION INPUT VARIABLES

Figure 59 shows the factors used to derive the transportation development fees for the Town of Taylor. The total capital cost per average trip length by type of development is derived from level-of-service components shown near the bottom of Figure 59. The capital cost of the average length trip is the product of the average trip length multiplied by the trip length adjustment factor and the capital cost per vehicle mile of travel plus the cost per trip for public works yard facilities, land, vehicles and equipment and the transportation component of the development fee study. For example, the total capital cost of the average length trip from residential development is calculated as follows: the average trip length in Taylor on planned improvements of 1.77 miles is multiplied by the residential trip length adjustment of 122% and then by the capital cost per VMT of $131, generating a cost per average residential trip length of $283. To this is added the cost per trip for public work yard facilities of $29.44, land of $10.65 and transportation vehicles and equipment of $56.91 and for the development fee study of $2.34. This brings the total cost for a residential average trip length to $382.22. This calculation is repeated for commercial/shopping centers and other nonresidential categories.

Figure 59: Transportation Input Variables

INPUT VARIABLES	Residential	Commercial/ Shopping Centers	Other Nonres
Residential			
Weekday Vehicle Trips per Housing Unit			
Single Family Detached	9.57		
All Other Housing	6.59		
Nonresidential			
Weekday Vehicle Trips per 1,000 Square Feet			
Com / Shop Ctr 25,000 SF or less		110.32	
Com / Shop Ctr 25,001-50,000 SF		86.56	
Com / Shop Ctr 50,001-100,000 SF		67.91	
Com / Shop Ctr 100,001-200,000 SF		53.28	
Com / Shop Ctr 200,001-400,000 SF		41.80	
Office / Inst 25,000 SF or less			18.35
Office / Inst 25,001-50,000 SF			15.65
Office / Inst 50,001-100,000 SF			13.34
Office / Inst 100,001-200,000 SF			11.37
Business Park			12.76
Light Industrial			6.97
Warehousing			4.96
Manufacturing			3.82
Lodging			5.63
Trip Adjustment Factors	61%		50%
Com / Shop Ctr 25,000 SF or less		28%	
Com / Shop Ctr 25,001-50,000 SF		31%	
Com / Shop Ctr 50,001-100,000 SF		33%	
Com / Shop Ctr 100,001-200,000 SF		36%	
Com / Shop Ctr 200,001-400,000 SF		39%	
Level of Service			
Average Trip Length (miles)	1.77	1.77	1.77
Average Trip Length Adjustment	122%	68%	75%
Capital Cost Per VMT	$131	$131	$131
Road Yard Facility Cost Per Trip	$29.44	$29.44	$29.44
Land for Road Yard Facility Cost Per Trip	$10.65	$10.65	$10.65
Vehicle and Equipment Cost Per Trip	$56.91	$56.91	$56.91
Development Fee Study	$2.34	$2.34	$2.34
Total Capital Cost for an Average Trip Length	**$382.22**	**$257.01**	**$273.24**

MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS FOR TRANSPORTATION

Figure 60 shows the schedule of maximum supportable development fee amounts for transportation in the Town of Taylor. The amounts are calculated by multiplying the vehicle trip ends for each type of development by the trip adjustment factor by the total capital cost per average trip length. For example, for a single family unit, the vehicle trip rate of 9.57 is multiplied by the adjustment factor of 61% and then multiplied by the total capital cost of $382.22 for a development fee amount of $2,218 per single family unit. The calculation is repeated for the all other housing unit category. Transportation development fees for nonresidential development are shown on a per 1,000 square feet of floor area basis and by room for lodging. Trip adjustment factors are discussed further in the Appendix.

Figure 60: Maximum Supportable Transportation Development Fee Schedule

MAXIMUM SUPPORTABLE DEVELOPMENT FEE AMOUNTS				
Residential	Per Housing Unit			
Single Family Detached	$2,218			
All Other Housing	$1,527			
Nonresidential - Commercial/Shopping Centers		Per 1,000 Sq. Ft.		
Com / Shop Ctr 25,000 SF or less		$7,939		
Com / Shop Ctr 25,001-50,000 SF		$6,896		
Com / Shop Ctr 50,001-100,000 SF		$5,760		
Com / Shop Ctr 100,001-200,000 SF		$4,930		
Com / Shop Ctr 200,001-400,000 SF		$4,190		
Other Nonresidential			Per 1,000 Sq. Ft.	
Office / Inst 25,000 SF or less			$2,507	
Office / Inst 25,001-50,000 SF			$2,138	
Office / Inst 50,001-100,000 SF			$1,823	
Office / Inst 100,001-200,000 SF			$1,553	
Business Park			$1,743	
Light Industrial			$952	
Warehousing			$678	
Manufacturing			$522	Per Room
Lodging				$769

Appendix 1: Demographic Estimates and Development Projections

As specified in Task 1 of our Work Scope, TischlerBise has prepared documentation on current demographic *estimates* and development *projections* that will be used in the Taylor Development Impact Fee Study. The following sections will review in detail the residential and non-residential demand factors that will be used to calculate development fees for the Town of Taylor.

PERSONS PER HOUSEHOLD

A differentiation by type of housing is necessary to make residential development fees proportionate and reasonably related to the demand for public facilities. Persons per household is an important demographic factor that helps account for variations in service demand by type of housing. The best source of this data is the 2000 U.S. Census, Summary File 3. The data for Taylor is shown in Figure A1 below. Two housing unit categories are recommended based on the demographic characteristics of Taylor: single-family and all other housing types. Single-family units have on average 3.43 persons per household (PPH) and all other housing types have an average PPH of 3.18.

Figure A1: Persons Per Household in Taylor

Units in Structure	*Renter & Owner Combined*			
	Persons	*Hsehlds*	*Hsg Units*	*PPH*
1-Detached	1,944	565	646	3.44
1-Attached	9	4	4	2.25
Two	37	17	17	2.18
3-4	66	13	13	5.08
5-9	16	13	13	1.23
10-19	0	0	0	0.00
20-49	31	11	11	2.82
50 or more	0	0	0	0.00
Mobile Homes	1,097	335	346	3.27
Other	3	4	4	0.75
Total SF3 Sample Data	3,203	962	1,054	3.33
100-Percent Data	3,176	946	1,041	3.36
			Vacant HU	92
			Occupancy Rate	91%

Persons Per Household by Type - 2000

	Persons	*Hsehlds*	*Hsg Units*	*PPH*	*Hhld Mix*	*Hsg Mix*
Single Family	1,953	569	650	3.43	59%	62%
All Other Housing	1,250	393	404	3.18	41%	38%
Total Less Group Quarters	3,203	962	1,054	3.33	100%	100%
Group Quarters	0					
Sample Difference		(16)	(13)			
TOTAL	3,203	946	1,041			

Notes to Tables

Source: 2000 U.S. Census, Summary File 3: Tables P1, P3, P9, H1, H3, H8, H30, H32, H33

2007 HOUSING UNIT ESTIMATE

To estimate housing units in 2007, TischlerBise reviewed the Town's building permit data for residential construction over the past 6 years. From 2001 through May 2007, the Town added 366 single family housing units. This results in an average of 49 housing units per year over the 2001-2006 period. This is shown below in Figure A2.

Figure A2: Taylor Residential Building Permits, 2000-2007

								YTD		*Annual Average*
	2000	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*Total*	*2000-2006*
Single Family	23	24	42	42	47	36	34	18	266	35
All Other Housing	0	0	0	19	4	51	21	5	100	14
Total	23	24	42	61	51	87	55	23	366	49

Adding these new housing units to the existing stock of 1,054 housing units in 2000 (shown in Figure A1), the total number of housing units in the Town is estimated at 1,420 in 2007 (916 single family and 504 all other housing types). The Town expects that future housing construction will be significantly higher than recent trends. The Town estimates at least 125

new housing units per year for the foreseeable future. Based on the current mix of housing (72% single family and 18% all other housing), the Town would add 90 new single family units and 35 multi-family, manufactured housing or other homes. Based on an annual average of 125 new units a year, Figure A3 presents housing unit growth through 2020 by housing type.

Figure A3: Taylor Housing Unit Projections Through 2020

		Base Year			*Five-Year Increments*		
HOUSING UNITS	*Annual Increase*	*2007*	*2008*	*2009*	*2010*	*2015*	*2020*
Single Family	90	916	1,006	1,097	1,187	1,639	2,091
All Other Housing	35	504	539	573	608	781	954
TOTAL	**125**	**1,420**	**1,545**	**1,670**	**1,795**	**2,420**	**3,045**

POPULATION ESTIMATES AND PROJECTIONS

State of Arizona Population Estimate

The State's Department of Economic Security estimates a year-round population for the Town of Taylor of 4,495 persons as of December 1, 2006.

Year-Round Population Projections

The State's population estimate is used for year-round 2007 population. To project future year-round population, TischlerBise multiplied the number of housing units shown in Figure A3 by the 2000 Census year-round occupancy rate of 91% (shown in Figure A1). As shown in Figure A4, this generates the number of year-round households in the Town. Next, persons per household by housing type (from Figure A1) is multiplied by additional year-round households by housing type, and then added to existing year-round population. For example, in 2008, 1,545 housing units is multiplied by 91% occupancy rate, generating a year-round household estimate of 1,410 (919 households in single-family housing and 492 households in all other housing). The change in households from 2007 to 2008 is then multiplied by the 2000 persons per household for each housing type (shown in Figure A1), and added to the 2007 population, resulting in a total estimated year-round population in 2008 of 4,879 persons.

Figure A4: Year Round Household and Population Estimates and Projections

					Five-Year Increments		
YEAR ROUND HOUSEHOLDS	*Year-Round Occupancy*	*2007*	*2008*	*2009*	*2010*	*2015*	*2020*
Single Family		836	919	1,001	1,084	1,496	1,908
All Other Housing		460	492	523	555	713	871
TOTAL	**91%**	**1,296**	**1,410**	**1,524**	**1,638**	**2,209**	**2,779**

					Five-Year Increments		
YEAR-ROUND POPULATION	*Persons per Household*	*2007*	*2008*	*2009*	*2010*	*2015*	*2020*
Single Family	3.43	3,250	3,533	3,816	4,099	5,515	6,931
All Other Housing	3.18	1,245	1,345	1,446	1,546	2,049	2,552
TOTAL		**4,495**	**4,879**	**5,262**	**5,646**	**7,564**	**9,482**

Peak Population

The population of Taylor grows during certain times of the year as residential units are used for seasonal, recreational or occasional use. This causes increased service demands on the Town, requiring that it plan its capital facilities to meet this peak period of demand. Thus, calculations are also made of peak housing occupancy and peak household population. As the Town has summer events at its park facilities that attract close to double the Town's population, the Town's peak occupancy rate is considered 100%.

TischlerBise uses the peak housing occupancy rate of 100% to estimate 2007 peak population and prepare projections for future years. To do this, TischlerBise multiplied the number of housing units shown in Figure A3 by the peak occupancy rate of 100%. As shown in Figure A5, this generates the number of peak households in the Town. Next, persons per household by housing type (from Figure A1) is multiplied by peak households by housing type to determine peak population. For example, in 2008, 1,545 housing units are multiplied by 100% peak occupancy rate, generating a peak household estimate of 1,545 (1,006 single-family households and 539 all other housing). These figures are then multiplied by the 2000 persons per household for each housing type (shown in Figure A1), resulting in a total estimated peak population in 2008 of 5,167 persons. As the Town must build capital facilities to meet this peak demand, the projected peak population for 2007 (4,747 persons) is used to calculate the Town's levels of service for the various capital facilities included in the development fee study.

Figure A5: Peak Household and Population Estimates and Projections

					Five-Year Increments		
PEAK HOUSEHOLDS	*Peak Occupancy*	*2007*	*2008*	*2009*	*2010*	*2015*	*2020*
Single Family		916	1,006	1,097	1,187	1,639	2,091
All Other Housing		504	539	573	608	781	954
TOTAL	**100.0%**	**1,420**	**1,545**	**1,670**	**1,795**	**2,420**	**3,045**

					Five-Year Increments		
PEAK POPULATION	*Persons per Household*	*2007*	*2008*	*2009*	*2010*	*2015*	*2020*
Single Family	3.43	3,144	3,454	3,764	4,075	5,626	7,177
All Other Housing	3.18	1,603	1,713	1,823	1,933	2,484	3,035
TOTAL		**4,747**	**5,167**	**5,588**	**6,008**	**8,110**	**10,211**

NONRESIDENTIAL ESTIMATES AND PROJECTIONS

In addition to data on residential development, the calculation of development fees requires data on nonresidential construction in Taylor. In lieu of current data on non-residential development in the Town, TischlerBise estimated non-residential square footage using a 2007 employment estimate by ESRI Business Information Solutions. To convert the employment estimate to gross floor area of nonresidential development, average square feet per employee multipliers are used. These multipliers are also used to calculate the number of average weekday vehicle trips from nonresidential development in Taylor.

Figure A6 show square footage per employee by land use type and size. These multipliers are derived from national data published by the Institute of Transportation Engineers (ITE) and the Urban Land Institute (ULI). The multipliers used in the Taylor study reflect existing

development in the Town, anticipating that future development will be of similar scale, and are highlighted in grey.

Figure A6: Floor Area Per Employee and Nonresidential Trip Rates

ITE Code	*Land Use / Size*	*Demand Unit*	*Wkdy Trip Ends Per Dmd Unit**	*Wkdy Trip Ends Per Employee**	*Emp Per Dmd Unit***	*Sq Ft Per Emp*
Commercial / Shopping Center						
820	10K gross leasable area	1,000 Sq Ft	152.03	na	3.33	300
821	25K gross leasable area	1,000 Sq Ft	110.32	na	3.33	300
820	50K gross leasable area	1,000 Sq Ft	86.56	na	2.86	350
820	100K gross leasable area	1,000 Sq Ft	67.91	na	2.50	400
820	200K gross leasable area	1,000 Sq Ft	53.28	na	2.22	450
820	400K gross leasable area	1,000 Sq Ft	41.80	na	2.00	500
General Office						
710	10K gross floor area	1,000 Sq Ft	22.66	5.06	4.48	223
710	25K gross floor area	1,000 Sq Ft	18.35	4.43	4.15	241
710	50K gross floor area	1,000 Sq Ft	15.65	4.00	3.91	256
710	100K gross floor area	1,000 Sq Ft	13.34	3.61	3.69	271
710	200K gross floor area	1,000 Sq Ft	11.37	3.26	3.49	287
Industrial						
770	Business Park***	1,000 Sq Ft	12.76	4.04	3.16	317
151	Mini-Warehouse	1,000 Sq Ft	2.50	56.28	0.04	22,512
150	Warehousing	1,000 Sq Ft	4.96	3.89	1.28	784
140	Manufacturing	1,000 Sq Ft	3.82	2.13	1.79	558
110	Light Industrial	1,000 Sq Ft	6.97	3.02	2.31	433
Other Nonresidential						
720	Medical-Dental Office	1,000 Sq Ft	36.13	8.91	4.05	247
620	Nursing Home	bed	2.37	6.55	0.36	na
610	Hospital	1,000 Sq Ft	17.57	5.20	3.38	296
565	Day Care	student	4.48	28.13	0.16	na
530	High School	student	1.71	19.74	0.09	na
520	Elementary School	student	1.29	15.71	0.08	na
520	Elementary School	1,000 Sq Ft	14.49	15.71	0.92	1,084
320	Lodging	room	5.63	12.81	0.44	na

* Trip Generation, Institute of Transportation Engineers, 2003.

** Employees per demand unit calculated from trip rates, except for Shopping Center data, which are derived from Development Handbook and Dollars and Cents of Shopping Centers, published by the Urban Land Institute.

*** According to ITE, a Business Park is a group of flex-type buildings served by a common roadway system. The tenant space includes a variety of uses with an average mix of 20-30% office/commercial and 70-80% industrial/warehousing.

JOB & NONRESIDENTIAL SQUARE FOOTAGE ESTIMATES

TischlerBise obtained employment data for jobs located in the Town in 2007 from ESRI Business Information Solutions. These estimates indicate that 832 persons are employed in the areas of commercial/retail, office, public sector and goods production in the Town in 2007. Using the highlighted employment density multipliers in the far right column of Figure A6, the number of jobs for each category was converted into nonresidential square footage. As shown in Figure A7, TischlerBise estimates 284,000 square feet of nonresidential floor area in Taylor in 2007.

Figure A7: Job and Nonresidential Square Footage Estimates

		*2007 Jobs**	*Pct at Nonres Locations*	*Square Feet Per Employee***	*2007 Nonres Floor Area (rounded)*
Commercial/Retail					
Retail Trade		316			
Services (50%)***		50			
	Subtotal	366	44%	300	110,000
Office					
Finance, Insurance and Real Estate		34			
Services (50%)***		50			
Other		7			
	Subtotal	91	11%	223	20,000
Public Sector					
Government		40			
	Subtotal	40	5%	223	9,000
Goods Production					
Agriculture & Mining		1			
Construction		200			
Manufacturing		49			
Transportation		35			
Communication		1			
Electric, Gas, Water, Sanitary Services		3			
Wholesale Trade		46			
	Subtotal	335	40%	433	145,000
TOTAL at Nonresidential Locations		832	100%		284,000

**ESRI Business Information Solutions, 2007.*

** ITE, *Trip Generation Manual*.

****Services includes the following industries: automotive services, motion pictures and amusements, health services, legal services, education institutions and libraries, and other services.*

JOB & NONRESIDENTIAL SQUARE FOOTAGE PROJECTIONS

Figure A8 lists the projected number and type of jobs in Taylor as well as projected nonresidential square footage over the next thirteen years.

To project the future number of jobs in the Town, TischlerBise assumed the 2007 ratio of nonresidential development to residential development would remain constant and the number of jobs would increase proportionally. The Town's 2007 job to peak population ratio is .18 (832 jobs/4,747 persons in peak periods). This ratio is used to project the future number of jobs in the Town based on the peak population projections from Figure A5.

Using the employment density multipliers from Figure A6, the projected number and type of future jobs are converted into nonresidential square footage projections in Figure A8.

Figure A8: Job and Nonresidential Square Footage Projections

		Base Year			Five-Year Increments		
	Year =>	**2007**	**2008**	**2009**	**2010**	**2015**	**2020**
Jobs							
Peak Population		4,747	5,167	5,588	6,008	8,110	10,211
Jobs		832	906	979	1,053	1,421	1,790
% annual change			8.9%	8.1%	7.5%	5.5%	4.3%
Jobs: Peak Population Ratio		0.18	0.18	0.18	0.18	0.18	0.18
Employment							
TOTAL Jobs in City	*Job mix*	832	906	979	1,053	1,421	1,790
Commercial/Retail	*44%*	366	398	431	463	625	787
Office	*11%*	91	99	107	115	155	196
Public Sector	*5%*	40	44	47	51	68	86
Goods Production	*40%*	335	365	394	424	572	721
Nonresidential Floor Area (1,000 SF)							
	SF/Employee						
Commercial/Retail	*300*	110	120	129	139	188	236
Office	*223*	20	22	24	26	35	44
Public Sector	*223*	9	10	11	11	15	19
Goods Production	*433*	145	158	171	184	248	312
TOTAL Floor Area		284	309	335	360	486	611

AVERAGE DAILY VEHICLE TRIP ESTIMATES

Figure A9 below provide a summary of the residential and nonresidential vehicle trip calculations used in this analysis.

Average Weekday Vehicle Trip Ends are from the reference book, Trip Generation, published by the Institute of Transportation Engineers (ITE), in 2003. A "trip end" represents a vehicle either entering or exiting a development (as if a traffic counter were placed across a driveway). Trip rates have been adjusted to avoid overestimating the number of actual trips because one vehicle trip is counted in the trip rates of both the origination and destination points. A simple factor of 50% has been applied to the office, public sector and goods production categories. The residential category has a factor greater than 50% due to journey-to-work trips outside the Town of Taylor. The commercial/retail category has a trip factor of less than 50% because this type of development attracts vehicles as they pass-by on arterial and collector roads. For example, when someone stops at a convenience store on their way home from work, the convenience store is not their primary destination. The ITE Manual indicates that on average 52% of the vehicles entering shopping centers under 10,000 square feet are passing by on the way to some other primary destination and 48% of the attraction trips have the shopping center as their primary destination. Therefore, the adjusted trip factor is 24% (0.48 x 0.50).

There is an average of 12,216 vehicle trips generated by existing development in Taylor on an average weekday. As the table below indicates, residential development generates 7,368 vehicle trips and nonresidential development generates 4,847 vehicle trips on an average weekday.

Figure A9: Average Daily Trips

Residential Vehicle Trips on an Average Weekday (2007)

Residential Units	*Assumptions*	
Single Family	916	
All Other Housing	504	
Average Weekday Vehicle Trip Ends per Unit*	Trip Rate	Trip Factor
Single Family	9.57	61%
All Other Housing	6.72	61%
Residential Vehicle Trip Ends of an Average Weekday		
Single Family	5,315	
All Other Housing	2,053	
Total Residential Trips	**7,368**	

Nonresidential Vehicle Trips on an Average Weekday

Nonresidential Gross Floor Area (1,000 sq. ft.)**	*Assumptions*	
Retail/Commercial	110	
Office	20	
Public Sector	9	
Goods Production	145	
Average Weekday Vehicle Trips Ends per 1,000 Sq. Ft.*	Trip Rate	Trip Factor
Retail/Commercial	152.03	24%
Office	22.66	50%
Public Sector	22.66	50%
Goods Production	6.97	50%
Nonresidential Vehicle Trips on an Average Weekday		
Retail/Commercial	4,014	
Office	227	
Public Sector	102	
Goods Production	505	
Total Nonresidential Trips	**4,847**	

TOTAL TRIPS	**12,216**

**Trip rates are from the Institute of Transportation Engineers (ITE) Trip Generation Manual (2003)*

***Floor area estimates were derived using sq. ft. per employee factors from ULI and ITE*

SUMMARY OF DEVELOPMENT PROJECTIONS 2007-2020

Annual demographic and development projections for the development impact fee study are summarized in Figure A10 below. The Town of Taylor is projected to add approximately 125 housing units and 420 persons (in peak periods) per year over the next thirteen years. From 2007 to 2020, TischlerBise projects an average annual increase in employment of 74 jobs and approximately 25,000 square feet of nonresidential floor area. However, actual nonresidential construction is often built in irregular intervals compared to residential development, with minor construction followed by larger projects.

Figure A10: Development Projections 2007-2020

	Base Year	*Five-Year Increments*					2007-2020	
	2007	2008	2009	2010	2015	2020	*Total Increase*	*Annual Increase*
Housing Units	1,420	1,545	1,670	1,795	2,420	3,045	1,500	125
Year-Round Population	4,495	4,879	5,262	5,646	7,564	9,482	4,604	384
Peak Population	4,747	5,167	5,588	6,008	8,110	10,211	5,044	420
Jobs	832	906	979	1,053	1,421	1,790	884	74
Nonresidential Sq. Ft. (1,000's)	284	309	335	360	486	611	302	25
Ave Wkdy Res. Vehicle Trips	7,368	8,034	8,699	9,364	12,692	16,019	7,985	665
Ave Wkdy Nonres Vehicle Trips	4,843	5,272	5,701	6,130	8,274	10,419	5,146	429
Housing Units								
Single Family	916	1,006	1,097	1,187	1,639	2,091	1,085	90
All Other Housing	504	539	573	608	781	954	415	35
								0
Jobs								0
Retail/Commercial	366	398	431	463	625	787	389	32
Office	91	99	107	115	155	196	97	8
Public Sector	40	44	47	51	68	86	43	4
Goods Production	335	365	394	424	572	721	356	30
Nonresidential SF (1,000's)								
Retail/Commercial	110	120	129	139	188	236	117	10
Office	20	22	24	26	35	44	22	2
Public Sector	9	10	11	11	15	19	9	1
Goods Production	145	158	171	184	248	312	154	13
Ave Wkdy Vehicle Trips								
Single Family	5,315	5,839	6,364	6,888	9,510	12,132	6,293	524
All Other Housing	2,053	2,194	2,336	2,477	3,182	3,887	1,693	141
Retail/Commercial	4,006	4,361	4,716	5,071	6,844	8,618	4,257	355
Office	230	251	271	291	393	495	245	20
Public Sector	101	110	119	128	173	218	107	9
Goods Production	506	551	595	640	864	1,088	537	45
TOTAL	12,212	13,306	14,400	15,495	20,966	26,438	13,132	1,094

Appendix 2: Arizona Development Fee Legislation

Development fees for municipalities in Arizona are authorized by Arizona Revised Statutes (A.R.S.) 9-463.05. The legislation is provided below.

A. A municipality may assess development fees to offset costs to the municipality associated with providing necessary public services to a development, including the costs of infrastructure, improvements, real property, engineering and architectural services, financing, other capital costs and associated appurtenances, equipment, vehicles, furnishings and other personalty.

B. Development fees assessed by a municipality under this section are subject to the following requirements:

1. Development fees shall result in a beneficial use to the development.

2. Monies received from development fees assessed pursuant to this section shall be placed in a separate fund and accounted for separately and may only be used for the purposes authorized by this section. Monies received from a development fee identified in an infrastructure improvements plan adopted or amended pursuant to subsection D of this section shall be used to provide the same category of necessary public service for which the development fee was assessed. Interest earned on monies in the separate fund shall be credited to the fund.

3. The schedule for payment of fees shall be provided by the municipality. The municipality shall provide a credit toward the payment of a development fee for the required dedication of public sites, improvements and other necessary public services included in the infrastructure improvements plan and for which a development fee is assessed, to the extent the public sites, improvements and necessary public services are provided by the developer. The developer of residential dwelling units shall be required to pay development fees when construction permits for the dwelling units are issued, or at a later time if specified in a development agreement pursuant to section 9-500.05. If a development agreement provides for fees to be paid at a time later than the issuance of construction permits, the deferred fees shall be paid no later than fifteen days after the issuance of a certificate of occupancy. The development agreement shall provide for the value of any deferred fees to be supported by appropriate security, including a surety bond, letter of credit or cash bond.

4. The amount of any development fees assessed pursuant to this section must bear a reasonable relationship to the burden imposed upon the municipality to provide additional necessary public services to the development. The municipality, in determining the extent of the burden imposed by the development, shall consider, among other things, the contribution made or to be made in the future in cash or by taxes, fees or assessments by the property owner towards the capital costs of the necessary public service covered by the development fee.

5. If development fees are assessed by a municipality, such fees shall be assessed in a nondiscriminatory manner.

6. In determining and assessing a development fee applying to land in a community facilities district established under title 48, chapter 4, article 6, the municipality shall take into account all public infrastructure provided by the district and capital costs paid by the district for

necessary public services and shall not assess a portion of the development fee based on the infrastructure or costs.

C. A municipality shall give at least sixty days' advance notice of intention to assess a new or modified development fee and shall release to the public a written report that identifies the methodology for calculating the amount of the development fee, explains the relationship between the development fee and the infrastructure improvements plan, includes documentation that supports the assessment of a new or modified development fee and identifies any index or indices to be used for automatic adjustment of the development fee pursuant to subsection F of this section and the timing of those adjustments. The municipality shall conduct a public hearing on the proposed new or modified development fee at any time after the expiration of the sixty day notice of intention to assess a new or modified development fee and at least thirty days prior to the scheduled date of adoption of the new or modified fee by the governing body. A development fee assessed pursuant to this section shall not be effective until seventy-five days after its formal adoption by the governing body of the municipality. Nothing in this subsection shall affect any development fee adopted prior to July 24, 1982.

D. Before the assessment of a new or modified development fee, the governing body of the municipality shall adopt or amend an infrastructure improvements plan. The municipality shall conduct a public hearing on the infrastructure improvements plan at least thirty days before the adoption or amendment of the plan. The municipality shall release the plan to the public, make available to the public the documents used to prepare the plan and provide public notice at least sixty days before the public hearing, subject to the following:

1. An infrastructure improvements plan may be adopted concurrently with the report required by subsection C of this section, and the municipality may provide for and schedule the notices and hearings required by this subsection together with the notices and hearings required by subsection C of this section.

2. A municipality may amend an infrastructure improvements plan without a public hearing if the amendment addresses only elements of necessary public services that are included in the existing infrastructure improvements plan. The municipality shall provide public notice of those amendments at least fourteen days in advance of their effective date.

E. For each necessary public service that is the subject of a development fee, the infrastructure improvements plan shall:

1. Estimate future necessary public services that will be required as a result of new development and the basis for the estimate.

2. Forecast the costs of infrastructure, improvements, real property, financing, other capital costs and associated appurtenances, equipment, vehicles, furnishings and other personalty that will be associated with meeting those future needs for necessary public services and estimate the time required to finance and provide the necessary public services.

F. A municipality may automatically adjust a development fee on an annual basis without a public hearing if the adjustment is based on a nationally recognized index applicable to the cost of the necessary public service that is the subject of the development fee and the adjustment mechanism is identified in the report required by subsection C of this section. The municipality shall provide public notice of those adjustments at least thirty days in advance of their effective date.

G. Each municipality that assesses development fees shall submit an annual report accounting for the collection and use of the fees. The annual report shall include the following:

1. The amount assessed by the municipality for each type of development fee.

2. The balance of each fund maintained for each type of development fee assessed as of the beginning and end of the fiscal year.

3. The amount of interest or other earnings on the monies in each fund as of the end of the fiscal year.

4. The amount of development fee monies used to repay:

(a) Bonds issued by the municipality to pay the cost of a capital improvement project that is the subject of a development fee assessment.

(b) Monies advanced by the municipality from funds other than the funds established for development fees in order to pay the cost of a capital improvement project that is the subject of a development fee assessment.

5. The amount of development fee monies spent on each capital improvement project that is the subject of a development fee assessment and the physical location of each capital improvement project.

6. The amount of development fee monies spent for each purpose other than a capital improvement project that is the subject of a development fee assessment.

H. Within ninety days following the end of each fiscal year, each municipality shall submit a copy of the annual report to the city clerk. Copies shall be made available to the public on request. The annual report may contain financial information that has not been audited.

I. A municipality that fails to file the report required by this section shall not collect development fees until the report is filed.

J. Any action to collect a development fee shall be commenced within two years after the obligation to pay the fee accrues.

K. For the purposes of this section, "infrastructure improvements plan" means one or more written plans that individually or collectively identify each public service that is proposed to be the subject of a development fee and otherwise complies with the requirements of this section, and may be the municipality's capital improvements plan.

Sec. 2. Applicability

Section 9-463.05, Arizona Revised Statutes, as amended by this act, applies to development fees adopted or amended on or after the effective date of this act and shall not affect development fees duly adopted or amended before the effective date of this act. The effective date is September 19, 2007.