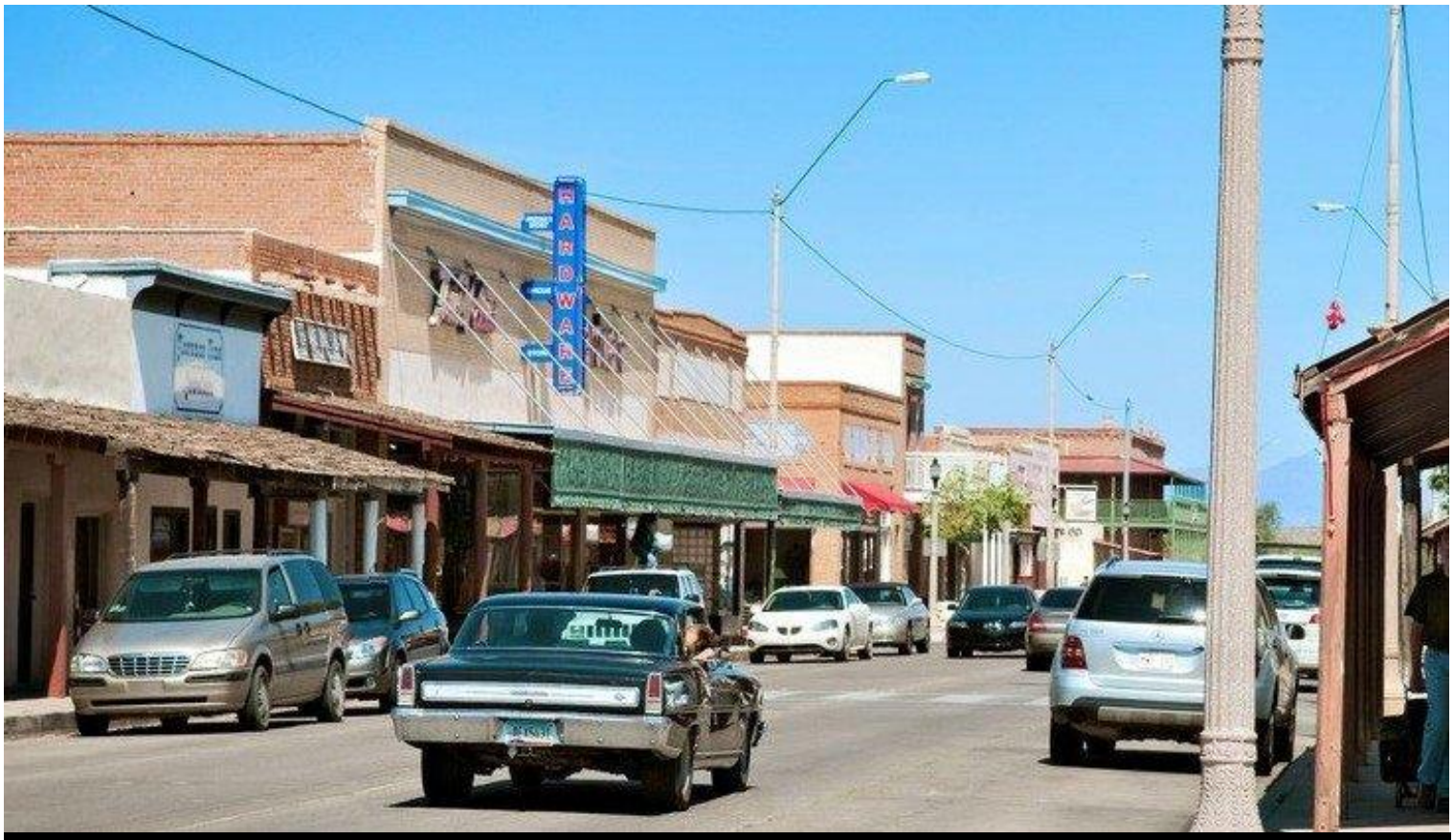

2013-2023
Land Use Assumptions, Infrastructure Improvements Plan and Impact Fee Study

for the Town of Florence, Arizona

prepared by

duncan associates

Public Review Draft
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EXECUTIVE SUMMARY

This study provides the land use assumptions, infrastructure improvements plans and impact fee analysis required to update the Town's impact fees for roads, parks, libraries, fire, police, water and wastewater facilities in compliance with the newly-revised State impact fee enabling act.

Background

The Town of Florence originally adopted water and wastewater impact fees in 2003. Impact fees for roads, general government, fire, police, parks, library and sanitation were adopted in 2005. The most recent comprehensive update of the fees occurred in 2007, based on a study by MuniFinancial. The fees were updated for inflation in 2008 and 2009.

The Arizona Legislature imposed a moratorium on any new or increased impact fees beginning September 1, 2009. In 2011, the legislature passed Senate Bill (SB) 1525, which was signed by the governor on April 26, 2011. SB 1525 constituted a major overhaul of Arizona's enabling act for municipalities. Among the most salient provisions of relevance to Florence, the amended enabling act:

- Prohibits the collection of impact fees for the following after January 1, 2012:
  - general government facilities;
  - sanitation facilities;
  - library materials and equipment;
  - parks over 30 acres;
- Mandates that service areas provide a "substantial nexus" between the facilities and development in the area;
- Requires that impact fees be reduced to account for any "excess" construction tax; and
- Requires that fees be updated by August 1, 2014 to be in compliance with all of the provisions of SB 1525.

To comply with the immediate requirements of SB 1525, the Town ceased collecting library, general government and sanitation fees, and reduced fire and police fees, on January 1, 2012. While library fees are still authorized, the Town does not currently own a library facility, and had based its fees on its existing level of service for circulation materials and equipment. Since those cost components are no longer authorized, the Town suspended the collection of library fees until they could be updated with a new study.

This study is intended to bring the Town's impact fees into full compliance with all of the requirements of SB 1525.

Major Changes

The major recommended changes to the Town's impact fee system are briefly described as follows.

Parks. The limitation of park impact fees to parks no larger than 30 acres and the requirement that service areas demonstrate a "substantial nexus" basically rule out the continuation of a Town-wide service area for parks. This study proposes the creation of one park service area, encompassing approximately 23 square miles. The Town would cease collecting park impact fees in areas outside this service area.

Library. The exclusion of library materials and equipment by SB 1525 means that the Town has no existing level of service for eligible library facilities, since it does not currently have a Town-owned library (the current library is temporarily located in a school building). This creates an existing deficiency. In order to reinstate a library impact fee, the Town would need to commit to funding the deficiency and providing a library facility over the next ten years. This study assumes that the Town will construct a library of at least 10,000 square feet (the maximum size that can be paid for with impact fees). Projected impact fees, along with the current library impact fee account balance, would cover about 46% of the cost, and the remaining cost would need to come from non-impact fee revenues.

Roads. The updated road impact fees have been limited to arterials and major collectors. Since these facilities are designed to move traffic long distances, a single Town-wide service area meets the "substantial nexus" requirement and continues to be appropriate for the Town's road impact fees. In addition, the fees are reduced to account for "excess" construction tax revenues anticipated to be generated by new development. While the Town does not earmark these revenues for road improvements, this is the only fee that is potentially large enough to absorb the reduction. Because of the major road improvements already funded by the Merrill Ranch Community Facilities Districts (CFDs), lower road impact fees would be charged to new development in the CFDs.

Fire. Fire fees would be lower in the Merrill Ranch CFDs, due to the fact that the Town plans to fund a portion of a new fire station with CFD bonds, which would be retired by property owners in the CFDs.

Water and Wastewater. Water and wastewater have been divided into two service areas, North and South of the Gila River. While fees for a typical residential customer are going down significantly, the meter capacity ratios have been updated, resulting in lower reductions and in some cases even increases for some of the larger meters. The cost of most master planned lines have been included, so that developers who build such lines (16" or larger water transmission lines and 10" or larger wastewater interceptors) to serve their projects will need to be given credit for the full cost of the line, not just the over-sizing beyond what is required to serve their projects. No fees would be charged for new customers in the North Florence Improvement District, since these properties are paying off the debt for the Town's purchase of the North Florence water and wastewater systems. Ten-year revenue projections of $1.69 million for water and $0.58 million for wastewater have been based on historical customer growth over the last ten years, which implicitly assumes that the Anthem/Merrill Ranch area will continue to be served by Johnson Utilities rather than the Town. Even if the Town does begin to provide utility service to that area, revenues are not likely to be

much higher, since water and wastewater fees will likely need to be reduced or eliminated to provide offsets for improvements funded by the Community Facilities Districts.

Comparative Fees

Current and updated non-utility fees are shown in Table 1. As noted above, park fees would no longer be assessed outside the park service area. Road and fire fees would be lower within the Merrill Ranch CFDs to account for CFD funding of major road and fire improvements. Development in the CFDs would also not pay park fees, since the area is outside the park service area.

Table 1. Current and Updated Non-Utility Fees

	Roads			Fire				Total Non-Utility Fees non-CFD		
Land Use	non-CFD	in CFD	Parks*	non-CFD	in CFD	Police	Library	Parks	non-Parks	in CFD
Updated Fees										
Single-Family (unit)	$2,086	$641	$1,417	$917	$607	$607	$203	$5,230	$3,813	$2,058
Multi-Family (unit)	$1,313	$403	$1,148	$743	$492	$492	$164	$3,860	$2,712	$1,551
Commercial (1000 sf)	$3,141	$964	$170	$660	$437	$437	$24	$4,432	$4,262	$1,862
Institutional (1,000 sf)	$1,733	$532	$198	$605	$401	$401	$28	$2,965	$2,767	$1,362
Industrial (1000 sf)	$1,015	$312	$128	$202	$134	$134	$18	$1,497	$1,369	$598
Current Fees										
Single-Family (unit)	$583	$583	$857	$1,096	$1,096	$913	$0	$3,449	$3,449	$3,449
Multi-Family (unit)	$410	$410	$617	$788	$788	$657	$0	$2,472	$2,472	$2,472
Commercial (1000 sf)	$2,618	$2,618	$162	$629	$629	$171	$0	$3,580	$3,580	$3,580
Institutional (1,000 sf)	$2,618	$2,618	$162	$629	$629	$171	$0	$3,580	$3,580	$3,580
Industrial (1000 sf)	$425	$425	$92	$362	$362	$98	$0	$977	$977	$977
Percent Change										
Single-Family (unit)	258%	10%	65%	-16%	-45%	-34%	n/a	52%	11%	-40%
Multi-Family (unit)	220%	-2%	86%	-6%	-38%	-25%	n/a	56%	10%	-37%
Commercial (1000 sf)	20%	-63%	5%	5%	-31%	156%	n/a	24%	19%	-48%
Institutional (1,000 sf)	-34%	-80%	22%	-4%	-36%	135%	n/a	-17%	-23%	-62%
Industrial (1000 sf)	139%	-27%	39%	-44%	-63%	37%	n/a	53%	40%	-39%

* updated park fees would not be charged outside of the park service area

Source: Current fees from Town of Florence, *Annual Report of Development Impact Fees, Reported as of June 30, 2012*; updated fees from Table 28 (roads), Table 39 (parks), Table 47 (libraries), Table 60 (fire), and Table 70 (police).

Current and updated utility fees are compared in Table 2. Updated water and wastewater impact fees would not be charged in the North Florence Improvement District. The combined updated water and wastewater fees would be lower than current fees for most meter sizes and types.

Table 2. Current and Updated Utility Fees

		Water			Wastewater			Total
Meter Size	Type	Current	Updated	Change	Current	Updated	Change	Change
5/8"x3/4"	Disc-Resid.	$3,330	$1,980	-41%	$4,105	$2,140	-48%	-45%
5/8"x3/4"	Disc-Other	$3,330	$1,980	-41%	$4,105	$2,782	-32%	-36%
1"	Disc	$5,550	$4,950	-11%	$6,841	$7,062	3%	-3%
1 1/2"	Disc	$11,101	$9,900	-11%	$13,684	$14,338	5%	-2%
2"	Disc	$22,201	$15,840	-29%	$27,369	$22,898	-16%	-22%
3"	Compound	$35,522	$31,680	-11%	$43,789	$45,582	4%	-3%
3"	Turbine	$35,522	$34,650	-2%	$43,789	$49,862	14%	7%
4"	Compound	$55,503	$49,500	-11%	$68,422	$71,262	4%	-3%
4"	Turbine	$55,503	$59,400	7%	$68,422	$85,600	25%	17%
6"	Compound	$111,007	$99,000	-11%	$136,843	$142,738	4%	-2%
6"	Turbine	$111,007	$123,750	11%	$136,843	$178,262	30%	22%
8"	Turbine	$266,415	$178,200	-33%	$328,422	$256,800	-22%	-27%
10"	Turbine	$421,825	$287,100	-32%	$522,154	$413,662	-21%	-26%
12"	Turbine	$555,031	$425,700	-23%	$684,213	$613,538	-10%	-16%

Notes: Updated fees are not charged in the North Florence Improvement District
Source: Current fees from Town of Florence, *Annual Report of Development Impact Fees, Reported as of June 30, 2012*; updated fees from Table 85 (water) and Table 102 (wastewater).

For a new single-family unit, the total of both utility and non-utility impact fees would be lower than current fees for new utility customers located outside the North Florence Improvement District (which pays no utility impact fees), and for non-utility customers in the Merrill Ranch CFDs, as shown in Table 3. Total updated fees would be higher than current total fees for non-utility customers or development in the North Florence Improvement District, since those developments do not pay utility impact fees and would not benefit from the reductions of the utility fees.

Table 3. Total Fees for New Single-Family Unit

	Town Utility Costomers			Non-Utility Customers		
	Within Park Service Area	Outside Park Service Area	N Florence Imp. Dist.	Merrill Ranch CFDs	Outside CFDs Non-Parks	Outside CFDs Parks
Updated Total Fees	$9,350	$7,933	$5,230	$2,058	$3,813	$5,230
– Current Total Fees	-$10,884	-$10,884	-$3,449	-$3,449	-$3,449	-$3,449
Fee Change	-$1,534	-$2,951	$1,781	-$1,391	$364	$1,781
Percent Change	-14%	-27%	52%	-40%	11%	52%

Source: Table 1 and Table 2.

LEGAL FRAMEWORK

Impact fees are a way for local governments to require new developments to pay a proportionate share of the infrastructure costs they impose on the community. In contrast to traditional "negotiated" developer exactions, impact fees are charges that are assessed on new development using a standard formula based on objective characteristics, such as the number and type of dwelling units constructed. The fees are one-time, up-front charges, with the payment usually made at the time of building permit issuance. Impact fees require each new development project to pay its pro-rata share of the cost of new capital facilities required to serve that development.

Arizona's enabling act for municipalities is codified in Sec. 9-463.05, Arizona Revised Statutes (ARS). In 2011, the legislature passed SB 1525, which was signed by the governor on April 26, 2011. SB 1525 constituted a major overhaul of Arizona's enabling act for municipalities. This section summarizes some of the major provisions of the new state act.

Eligible Facilities

Prior to SB 1525, municipalities could assess impact fees for any "necessary public services" (which was not defined) that constituted "costs to the municipality." SB 1525 amended the statute to limit the types of facilities for which impact fees can be assessed. Authorized facilities for which impact fees can be assessed, after January 1, 2012, are limited to the following defined "necessary public services:"

> *"Necessary public service" means any of the following facilities that have a life expectancy of three or more years and that are owned and operated by or on behalf of the municipality:*
>
> *(a) Water facilities, including the supply, transportation, treatment, purification and distribution of water, and any appurtenances for those facilities.*
>
> *(b) Wastewater facilities, including collection, interception, transportation, treatment and disposal of wastewater, and any appurtenances for those facilities.*
>
> *(c) Storm water, drainage and flood control facilities, including any appurtenances for those facilities.*
>
> *(d) Library facilities of up to ten thousand square feet that provide a direct benefit to development, not including equipment, vehicles or appurtenances.*
>
> *(e) Street facilities located in the service area, including arterial or collector streets or roads that have been designated on an officially adopted plan of the municipality, traffic signals and rights-of-way and improvements thereon.*
>
> *(f) Fire and police facilities, including all appurtenances, equipment and vehicles. Fire and police facilities do not include a facility or portion of a facility that is used to replace services that were once provided elsewhere in the municipality, vehicles and equipment used to provide administrative services, helicopters or airplanes or a facility that is used for training firefighters or officers from more than one station or substation.*

> *(g) Neighborhood parks and recreational facilities on real property up to thirty acres in area, or parks and recreational facilities larger than thirty acres if the facilities provide a direct benefit to the development. Park and recreational facilities do not include vehicles, equipment or that portion of any facility that is used for amusement parks, aquariums, aquatic centers, auditoriums, arenas, arts and cultural facilities, bandstand and orchestra facilities, bathhouses, boathouses, clubhouses, community centers greater than three thousand square feet in floor area, environmental education centers, equestrian facilities, golf course facilities, greenhouses, lakes, museums, theme parks, water reclamation or riparian areas, wetlands, zoo facilities or similar recreational facilities, but may include swimming pools.*
>
> *(h) Any facility that was financed and that meets all of the requirements prescribed in subsection R of this section.* (Sec. 9-463.05.S.5, ARS)

No longer authorized are fees for general government facilities, sanitation facilities, library buildings larger than 10,000 square feet and library books or equipment, parks larger than 30 acres and community centers larger than 3,000 square feet. No changes were made to authorized improvements for road, stormwater drainage, water or wastewater facilities, other than the new requirement that eligible facilities must have a life expectancy of at least three years.

Compliance Deadlines

Municipalities may continue to collect fees for unauthorized facilities after January 1, 2012 if the fees were pledged to retire debt for such facilities prior to June 1, 2011. However, the Town of Florence had not pledged fee revenue in this sense for any of its development impact fees. Consequently, the Town ceased collecting general government, sanitation and library fees, and reduced its fire and police impact fees to remove unauthorized components on January 1, 2012.

SB 1525 added numerous new requirements related to how impact fees are calculated. Land use assumptions (growth projections) must be prepared for each service area, covering at least a ten-year period. Many new requirements were added for the infrastructure improvements plan (IIP) and the impact fee analysis. However, compliance with these is not required until August 1, 2014:

> *A development fee that was adopted before January 1, 2012 may continue to be assessed only to the extent that it will be used to provide a necessary public service for which development fees can be assessed pursuant to this section and shall be replaced by a development fee imposed under this section on or before August 1, 2014. (9-463.05K, ARS)*

Significant changes were made to the requirements for adopting updated infrastructure improvements plans and fee schedules. These requirements are effective as of January 1, 2012, but only apply to the updated IIP and impact fee schedules that must be in place by August 1, 2014.

Provisions were also added relating to refunds. However, these provisions only apply to fees collected after August 1, 2014.

Other changes, however, are effective as of January 1, 2012. These include new provisions or amendments to previous provisions related to developer credits, the locking-in of fee schedules for 24 months following development approval, and annual reporting requirements. In addition, the expenditure of impact fees collected after January 1 is restricted to facilities authorized by SB 1525

(and repayment of pledged debt for unauthorized facilities, although this is not an option for Florence).

Service Areas

Service areas are a key requirement for impact fees under SB 1525. A service area is defined as "any specified area within the boundaries of a municipality in which development will be served by necessary public services or facility expansions and within which a substantial nexus exists between the necessary public services or facility expansions and the development being served as prescribed in the infrastructure improvements plan." Land use assumptions (growth projections) and an infrastructure improvements plan (list of capital improvements and impact fee analysis) must be prepared for each service area.

It should be noted that multiple service areas are not mandated by SB 1525. A service area may include all of the area within the Town limits, or within the Town's water and wastewater service area, as long as it can be shown that developments located anywhere within the service area will be served by or benefit from improvements in the service area.

Service Units

In impact fee analysis, demand for facilities must be expressed in terms of a common unit of measurement, called a "service unit." SB 1525 defines a service unit as "a standardized measure of consumption, use, generation or discharge attributable to an individual unit of development calculated pursuant to generally accepted engineering or planning standards for a particular category of necessary public services or facility expansions." The service units used in the Town's 2007 impact fee study are compared with the recommended service units in Table 4. The recommended service units are described in the individual facility sections of this report. All of the service units can be translated into Equivalent Dwelling Units (EDUs), based on the demand relative to that generated by a typical single-family dwelling unit.

Table 4. Current and Recommended Service Units

Type of Fee	Current	Recommended
Transportation	Daily Trips	Daily Vehicle-Mile of Travel (VMT) and EDUs
Water	Dwelling Unit Equivalents (DUEs)	Gallons per Day (gpd) and EDUs
Wastewater	Dwelling Unit Equivalents (DUEs)	Gallons per Day (gpd) and EDUs
Fire	Service Population (1)	Functional Population and EDUs
Police	Service Population (2)	Functional Population and EDUs
Parks	Service Population (2)	Equivalent Dwelling Units (EDUs)
Library	Service Population (3)	Equivalent Dwelling Units (EDUs)

Notes: (1) resident population plus 0.73 times number of workers; (2) resident population plus 0.24 times number of workers; (3) resident population plus 0.19 times number of workers.

Methodologies

SB 1525 is sometimes misunderstood to dictate a particular methodology for calculating impact fees. Because cities must forecast anticipated growth over a fixed time period and identify improvements over the same time period, some are lead to think that a "plan-based" methodology is required, where the cost per service unit is calculated by dividing planned costs by anticipated new service units. In fact, however, SB 1525 does not dictate this methodology, and most impact fees in the

state have not been calculated in this way. The reason is that, to support a plan-based methodology, the list of planned improvements must be developed using a rigorous analysis, such as the modeling used to develop a transportation master plan, in order to establish the required nexus between the anticipated growth and the specific list of improvements required to serve that growth.

The principal alternative to the plan-based methodology is "standards-based." The key difference is that the plan-based approach is based on a complex level of service (LOS) standard, such as "every road shall function at LOS D or better," or "the average fire response time shall not exceed three minutes," that requires projecting growth by small areas and using sophisticated modeling or analysis to determine the specific improvements needed to maintain the desired LOS. In contrast, a standards-based approach uses a generalized LOS standard, such as the ratio of park acres to population, that does not require an extensive master planning effort in order to determine the improvements and costs that are attributable to a specific quantity of growth.

There are advantages and disadvantages to the two methodologies. The major advantage of a standards-based methodology is that it is more flexible, since the fees are not dependent on the specific projects included in the list of improvements, only on the average cost to construct a unit of capacity. Changing the list of planned projects typically does not require recalculation of standards-based impact fees, since a single project is likely to have an insignificant impact on the average cost of capacity added by all of the improvements. This allows the capital plan to change in response to unforeseen development without triggering the need for an impact fee update.

That flexibility can also be seen as a major disadvantage of the standards-based approach, although we disagree. Many people, particularly developers and builders, tend to like the certainty of knowing which projects will be funded with their impact fees. This advantage of plan-based fees can be over-rated, however. SB 1525 requires that there be a list of planned improvements, and that the impact fees be spent only on listed projects, regardless of the methodology on which the fees are based. In addition, the impact fee capital plan must be updated at least every five years, and many communities find it necessary to modify their plan even between updates. The real difference between the methodologies is that any change to the capital plan for a plan-based fee would require a new master plan and impact fee update. There may not be as much certainty with a plan-based fee as appears to be commonly believed, but there definitely is more rigidity.

The Town's 2007 impact fee study used the plan-based approach for roads and the standards-based approach for the other facilities. We generally prefer the standards-based approach because of its greater flexibility and the fact that its soundness is not dependent on the availability and quality of a master plan. However, we have relied on the Town's 2008 water and wastewater master plans to determine appropriate unit costs for some components of those fees.

Level of Service (LOS) Standards

SB 1525 does not define the term "level of service," nor does it require the formal adoption of LOS standards. It does require, however, that impact fees be based on the same LOS provided to existing development in the service area. This reflects a basic principle of impact fees, which is that new development should not be charged for a higher LOS than existing development. This does not mean that impact fees cannot be based on a higher standard than is currently actually provided to existing development in a service area. If the fees are based on a higher-than-existing LOS, however, there must be a plan to use non-impact fee funds to remedy the existing deficiency.

The level of service standards used in the Town's 2007 study are compared with the recommended LOS measures in Table 5. The recommended LOS standards are described in the individual facility sections of this report.

Table 5. Current and Recommended Level of Service Standards

Type of Fee	Current	Recommended
Transportation	Level of Service "C"	1.00 Ratio of Vehicle-Miles of Capacity (VMC) to VMT
Water	Existing Cost per DUE	1.00 Ratio of Capacity to Demand (gpd)
Wastewater	Existing Cost per DUE	1.00 Ratio of Capacity to Demand (gpd)
Fire	Existing Cost per Service Population	Existing Cost per Functional Population
Police	Future Cost per Service Population	Existing Cost per Functional Population
Parks	Existing Cost per Service Population	Existing Cost per EDU
Library	Existing Cost per Service Population	Future Cost per EDU

Notes: VMT stands for vehicle-miles of travel, DUE stands for dwelling unit equivalent (same as EDU), gpd stands for gallons per day, and EDU stands for equivalent dwelling unit

Land Use Assumptions

An impact fee update must now include the development of land use assumptions (growth projections) for each service area. SB 1525 defines land use assumptions as "projections of changes in land uses, densities, intensities and population for a specified service area over a period of at least ten years and pursuant to the general plan of the municipality." Since the infrastructure improvements plan (IIP) that must be prepared for each service area must identify improvement needs for a period not to exceed 10 years, a 10-year time-frame would seem to be the most appropriate for both the land use assumptions and the IIP.

Infrastructure Improvements Plan

The infrastructure improvements plan (IIP) that is required to be prepared for each service area is often confused with a list of planned capital improvements. While the IIP must include such a list, it must also contain much more analysis. The IIP is basically the impact fee study. To avoid confusion, we suggest referring to the list of improvements that must be included in the IIP as the "capital plan." This report represents a single, consolidated document that includes land use assumptions, infrastructure improvement plans and impact fee analyses for all of the Town's impact fee facilities.

As noted above, the IIP must identify planned projects over a period of not more than 10 years, and it is suggested that the Town's IIPs and capital plans cover a 10-year period. Of course, the impact

fee analysis could cover a longer period, such as to build-out, which may be required if the fees are based on build-out master plans.

The cost of the projects listed in the capital plan will not determine the impact fee amounts. As noted in the methodology section above, there are two basic methodologies. Under a plan-based approach, the fee will be determined by the projects listed in the applicable master plan, some but not all of which will be listed in the impact fee capital plan. Under the standards-based approach, the fees will be based on the existing level of service and the average cost per unit of capacity (e.g., for roads, the average cost to build an additional vehicle-mile of capacity). So the impact fee capital plan basically functions as a list of improvements that are eligible to be funded with impact fees.

Eligible improvements are those that add capacity to accommodate future growth. Replacing an existing fire truck or an existing fire station, or remodeling or repairing an existing building, are examples of improvements that do not add capacity. Some projects may be partially eligible. For example, replacing an existing two-bay fire station with a larger three-bay fire station would be partially eligible for impact fee funding.

Refunds

A common and understandable misinterpretation of SB 1525 is that a municipality may be required to refund fees collected if any improvement listed in the IIP is not completed within the timeframe of the IIP. Section 9-463.05.B.7 provides that collection of impact fees is allowed only to pay for a project that is identified in the IIP, "and the municipality plans to complete construction and have the service available within the time period established in the infrastructure improvements plan, but in no event longer than the time period provided in subsection H, paragraph 3 of this section [i.e., 15 years for water and wastewater, and 10 years for other facilities]." The key terms in this section are "plans to complete" and "have the service available." No community has a crystal ball that allows them to know with certainty how much development is going to occur over a 10-15 year period in the future. While the Town may plan to complete an improvement in this time period in order to serve anticipated growth, if the anticipated growth does not materialize and the need for the improvement is not required to serve the growth that does occur, it is highly unlikely that a court would find that the Town is compelled to refund the fees that it did collect.

The refund provisions in the referenced refund subsection (H) reinforce this interpretation. The first two subparagraphs refer to the collection of fees when "service is not provided" (H.1) or when "service is not available" and the municipality has failed to complete construction within the time period identified in the IIP (H.2), a clear echo of the "have the service available" phrase in subsection B.7. In general, impact fees are not collected when services are not available. Services are generally available immediately upon development, even if a planned facility could provide service from a closer location. An exception would be if Florence reinstates library impact fees to build its first library, but fails to complete construction within the required time period.

Section 9-463.05.B.7 directly references only the final paragraph of subsection H (H.3), which does not refer to services being available. The third paragraph simply requires that the impact fees be spent within a certain time period (15 years for water and wastewater, and 10 years for other facilities) from the date they were collected. It is reasonable to conclude that this is the only refund provision that will likely be applicable, as long as the Town does not collect impact fees without

providing services (as could happen in the case of library fees). However, there is always the possibility that refunds could be required if a construction project comes in significantly lower than its estimated cost.

Offsets

A fundamental principle of impact fees is that new development should not be required to pay twice for the cost of new facilities – once through impact fees and again through other taxes or fees that are used to fund the same facilities. To avoid such potential double-payment, impact fees must be reduced, and such a reduction is referred to as an "offset." Typically, offsets are incorporated into the impact fee calculation, although they can also be addressed through an independent fee study for an individual development project. While this has long been a part of impact fee practice in Arizona, SB 1525 amended the state enabling act to add the following provision (Section 9-463.05.B.12):

> *The municipality shall forecast the contribution to be made in the future in cash or by taxes, fees, assessments or other sources of revenue derived from the property owner towards the capital costs of the necessary public service covered by the development fee and shall include these contributions in determining the extent of the burden imposed by the development. Beginning August 1, 2014, for purposes of calculating the required offset to development fees pursuant to this subsection, if a municipality imposes a construction contracting or similar excise tax rate in excess of the percentage amount of the transaction privilege tax rate imposed on the majority of other transaction privilege tax classifications, the entire excess portion of the construction contracting or similar excise tax shall be treated as a contribution to the capital costs of necessary public services provided to development for which development fees are assessed, unless the excess portion was already taken into account for such purpose pursuant to this subsection.*

In general, offsets are only required for funding that is dedicated for capacity-expanding improvements of the type addressed by the impact fee. A municipality is not required to use general fund or utility rate revenue to pay for growth-related improvements. If, for example, a municipality decides that the existing level of service on which impact fees are based is lower than what is desired, and opts to use general revenue to raise the level of service for both existing and new development, no offset would be required.

The clearest situation that requires an offset is when there is outstanding debt on the facilities that are providing existing development with the level of service that new development will be expected to pay for through impact fees. In this case, new development will be paying for the facilities that will serve them, while also paying for a portion of the cost of facilities serving existing development through property or other taxes. Consequently, the impact fees should be reduced to avoid this potential double-payment.

Another clear case requiring offsets is when the impact fees for a particular service area have been adopted based on a level of service that is higher than what is currently provided to existing development in the service area. In such a case, the cost of remedying the existing deficiency will almost always be funded by future revenue sources to which new development in the service area will contribute. To the extent that this is the case, an offset is required.

As noted above, an offset will generally be warranted when new development will be contributing toward a funding source that is dedicated to fund the same growth-related improvements addressed by the impact fee. Offsets are also often provided for anticipated grant funding that may be available to help fund growth-related improvements, although the uncertainty of such funding and the fact that it is not paid for by property owners make this type of offset discretionary.

The new language inserted in the state enabling act by SB 1525, cited above, now requires municipalities to provide offsets for the excess portion of any construction contracting excise tax. The Town charges a construction excise tax of 4%, compared to a 2% excise tax rate on other types of business activities. The Town does not dedicate construction excise tax revenues for growth-related capital improvements, nor does it allocate them for specific types of capital improvements. Consequently, there is no rational basis for assigning offsets to specific types of facilities. Nevertheless, state law now requires that such an offset be provided. It would appear to be at the discretion of the Town to determine which fees should be offset to account for the excess construction tax. It is recommended that the Town provide the offset for the excess construction excise tax payments against the road impact fee. Unlike water and wastewater fees, which are not assessed in areas of town that are not served by Town utilities, the road impact fee is assessed against all new development in the town. In addition, the park, fire and police impact fees are not sufficiently large to absorb the offset. Consequently, the calculation and application of the construction excise tax offset is addressed in the road impact fee section of this report.

Finally, SB 1525 not only requires that other revenues generated by new development be considered in determining the extent of the burden imposed, it also specifically requires that certain types of revenue be forecast. This is made more specific in Sec. E.7, which specifies that the IIP should include:

> *A forecast of revenues generated by new service units other than development fees, which shall include estimated state-shared revenue, highway users revenue, federal revenue, ad valorem property taxes, construction contracting or similar excise taxes and the capital recovery portion of utility fees attributable to development based on the approved land use assumptions, and a plan to include these contributions in determining the extent of the burden imposed by the development as required in subsection B, paragraph 12 of this section.*

Revenues projected to be generated by new development over the next ten years are provided in Appendix D. However, it would not be reasonable to infer that all revenue generated by new development must be used to offset capital costs for which impact fees are charged, since much of this revenue is required to pay for increased operations and maintenance needs, as well as capital needs not addressed by impact fees. The methodology for including these contributions in determining the extent of the burden imposed by new development is guided by the principles outlined above. The following offsets are provided in this study:

- Community Facilities District taxes generated by new development in the Merrill Ranch CFDs and used to retire debt on major road improvements funded by the CFDs.

- Community Facilities District taxes generated by new development in the Merrill Ranch CFDs and used to retire debt on CFD bonds used to partially fund the new fire station.

- Assessments paid by property in the North Florence Improvement District and used to retire debt related to the Town's purchase of the water and wastewater system serving the Florence Gardens area.

- Excess construction sales taxes paid by new development (this required offset is applied against the road impact fees).

- Ad valorem and other general fund revenue generated by new development that will be used to remedy the existing deficiency for libraries.

- Federal, State and tribal grant revenue for fire and police capital improvements that, while not directly generated by new development and not assured in the future, might be anticipated based on historical trends and could be, in part, attributable to new development.

- Wastewater utility rate revenue generated by new development and used to retire debt on the existing wastewater system.

Developer Credits

In keeping with the principle that impact fees should not require developers to pay twice for the same facilities, national impact fee case law also requires that developers be given credits for improvements required as a condition of development approval that are of the same type for which impact fees are charged. This principle is now codified in Arizona's enabling act (as modified per SB 1525) in Section 9-463.05.B.7(c), which provides that development fees may be collected if:

> "*The municipality requires or agrees to allow the owner of a development to construct or finance the necessary public service or facility expansion and any of the following apply:*
>
> *(i) The costs incurred or money advanced are credited against or reimbursed from the development fees otherwise due from a development.*
>
> *(ii) The municipality reimburses the owner for those costs from the development fees paid from all developments that will use those necessary public services or facility expansions.*
>
> *(iii) For those costs incurred the municipality allows the owner to assign the credits or reimbursement rights from the development fees otherwise due from a development to other developments for the same category of necessary public services in the same service area."*

The provision cited above does not clearly state whether credits are required for any improvements of the same type as addressed by the applicable impact fee, or whether credits are only required for planned improvements identified in the IIP. However, Section 9-463.05.B.11 makes clear that credit should be given in some instances for improvements that are not listed in the IIP:

> *If a municipality requires as a condition of development approval the construction or improvement of, contributions to or dedication of any facilities that were not included in a previously adopted infrastructure improvements plan, the municipality shall cause the infrastructure improvements plan to be amended to include the facilities and shall provide a credit toward the payment of a development fee for the construction,*

> *improvement, contribution or dedication of the facilities to the extent that the facilities will substitute for or otherwise reduce the need for other similar facilities in the infrastructure improvements plan for which development fees were assessed.*

State law now provides (pursuant to Section 9-463.05.B.7(c), cited above) three options for providing developer credits: (1) fee reductions within the subdivision for which the improvement was made; (2) reimbursements to the developer who made the improvement; or (3) allowing the developer to transfer fee-reduction credits or reimbursement rights to other developments in the same service area. Presumably, a municipality may utilize one or more of these options. Historically, the Town has utilized only the first option, which is to reduce the fees for development within the affected subdivision.

An important consideration is that Arizona law prohibits the use of impact fees to reimburse developers unless the improvement was publicly bid according to A.R.S. Title 34 or other alternative procurement methods. This makes the exclusive use of reimbursements as the method for providing developer credits somewhat problematic. The consultant's recommendation is to utilize only the first two options for any new credit agreements. Utilizing the third option and allowing transfers of credits or reimbursements would impose significant administrative burdens on the Town to track credit eligibility. It is recommended that the Town continue its current practice of providing for fee reductions within the affected development for credits up to the amount of the impact fees that would otherwise be due. The excess value of any developer credits beyond that could be dealt with as reimbursements to the developer from the appropriate impact fee account, limited by the extent to which unencumbered balances in such accounts are available.

SERVICE AREAS

The starting point for the identification of service areas is the current Town limits. The Town has annexed aggressively in recent years, including annexing some areas since the 2010 census. However, it is anticipated that little additional annexation of already-developed areas will occur in the next ten years.

Roads

The types of improvements covered by the Town's current road impact fees are not well defined. It is recommended that the revised road impact fees be restricted to the cost of Town-owned arterials and major collectors, and exclude the cost of State roads, minor collectors and local streets. One advantage of this approach is that an arterial/major collector impact fee is consistent with a Town-wide service area, since the purpose of these facilities is to move traffic throughout the community. Another advantage is that the Town will not need to provide credits against the fees for minor collector improvements, which will generally be made by developers. The extent of the Town's existing and planned major road network is illustrated in the functional classification map from the 2008 *Coolidge-Florence Regional Transportation Plan* (Figure 1). Existing Town-maintained roadways are shown in Figure 2.

Figure 1. Functional Classification Map

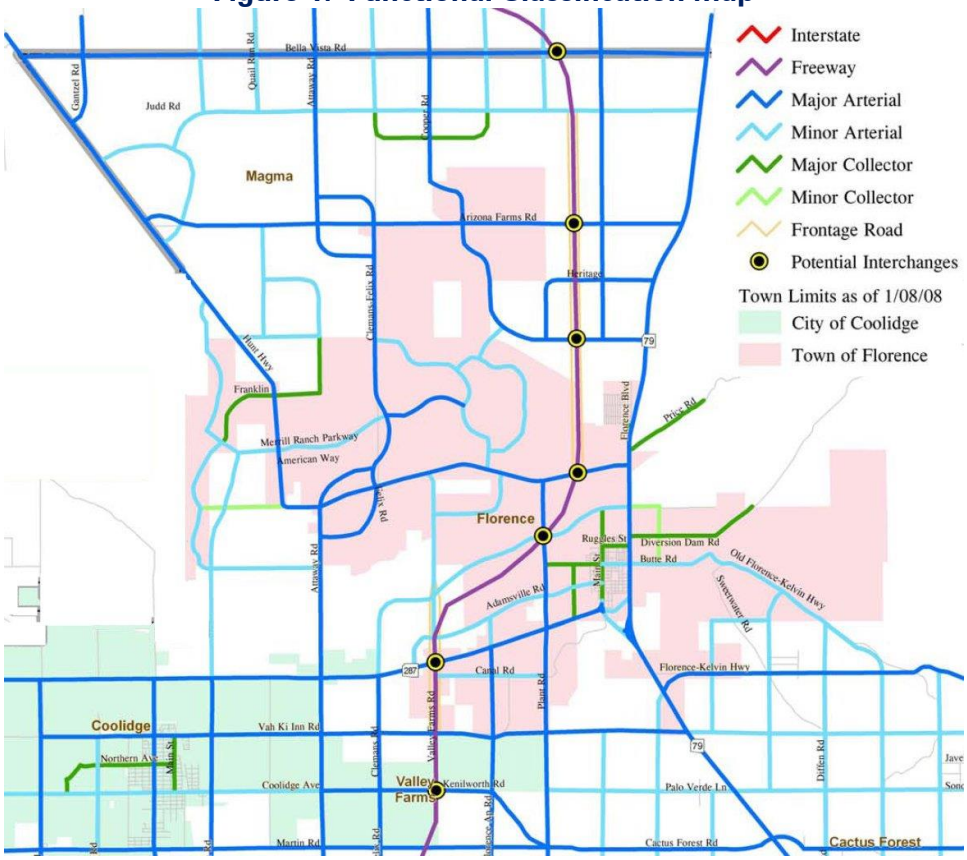
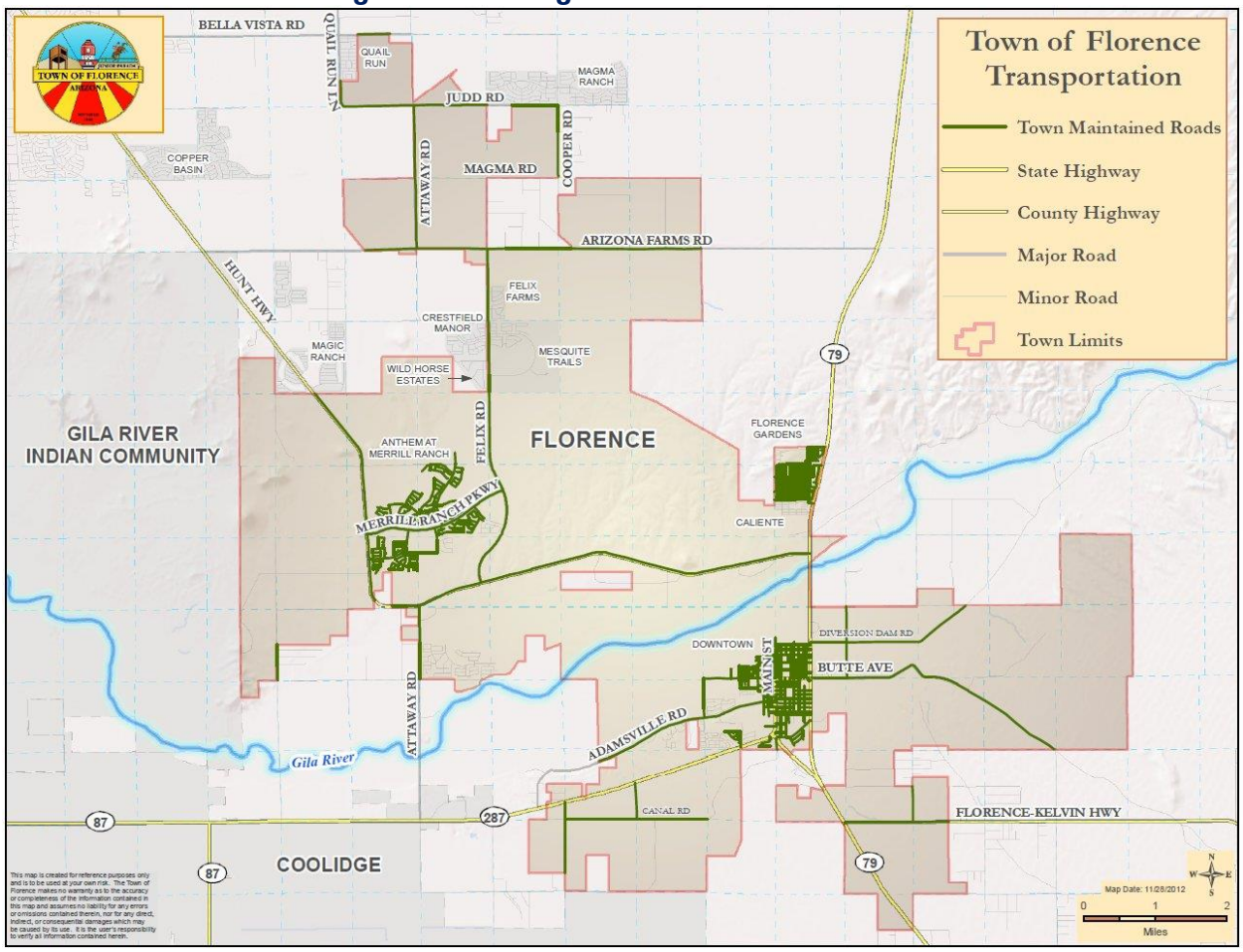


Figure 2. Existing Town-Maintained Roads

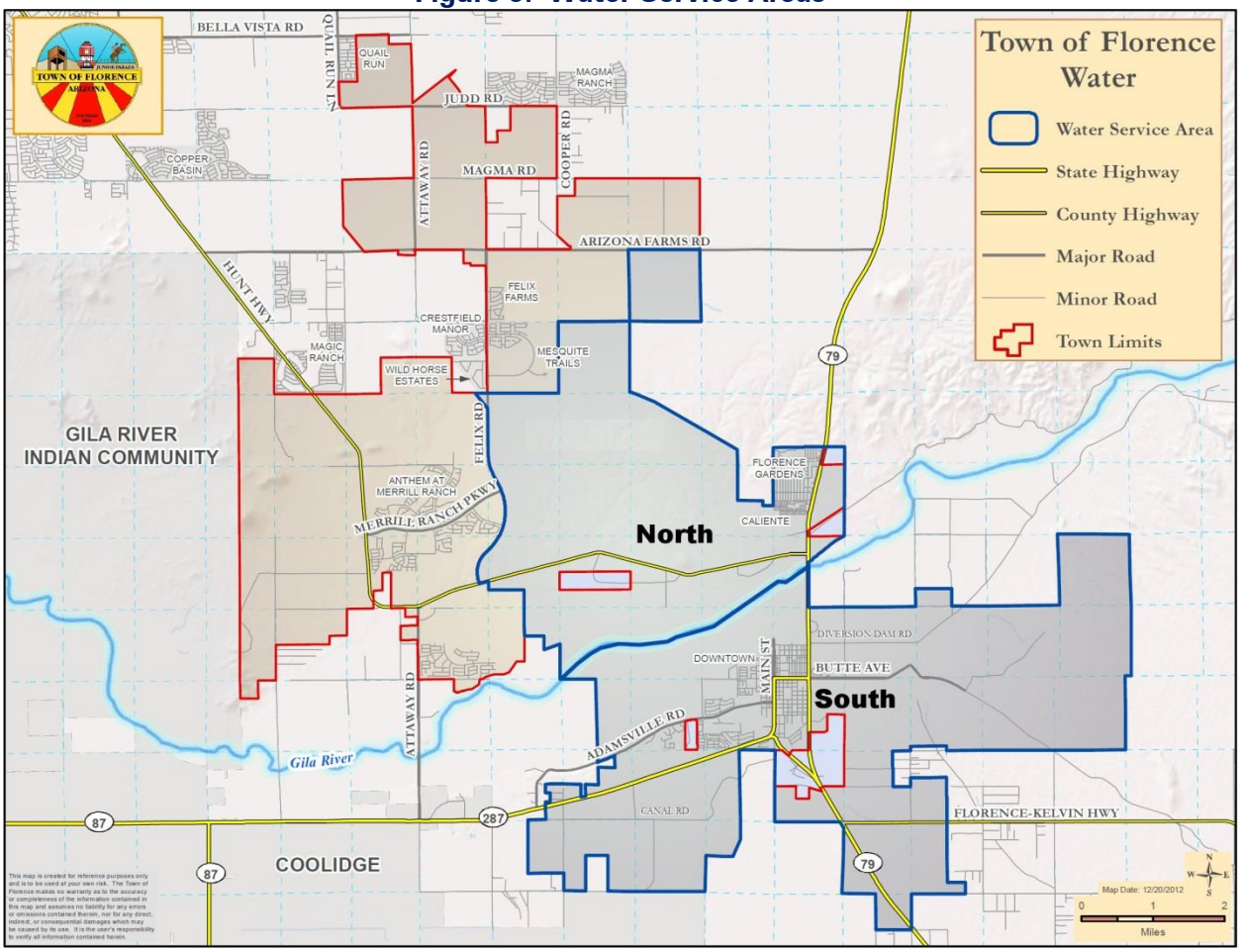


Water

The Town's water system currently serves the downtown and surrounding "Old Florence" area, as well as the Florence Gardens area located north of the Gila River.

The *Water Master Plan* divides the planning area into a number of pressure zones. Water "campuses," which will include a well, booster pump and storage tank, will be located between pressure zones, and will be interconnected for redundancy. These characteristics result in an integrated, pressurized water system. However, there will be limited if any interconnections across the Gila River. There will essentially be two water systems, one north and one south of the Gila River. It is recommended that there should be two water service areas: North and South of the Gila River, as illustrated in Figure 3.

Figure 3. Water Service Areas

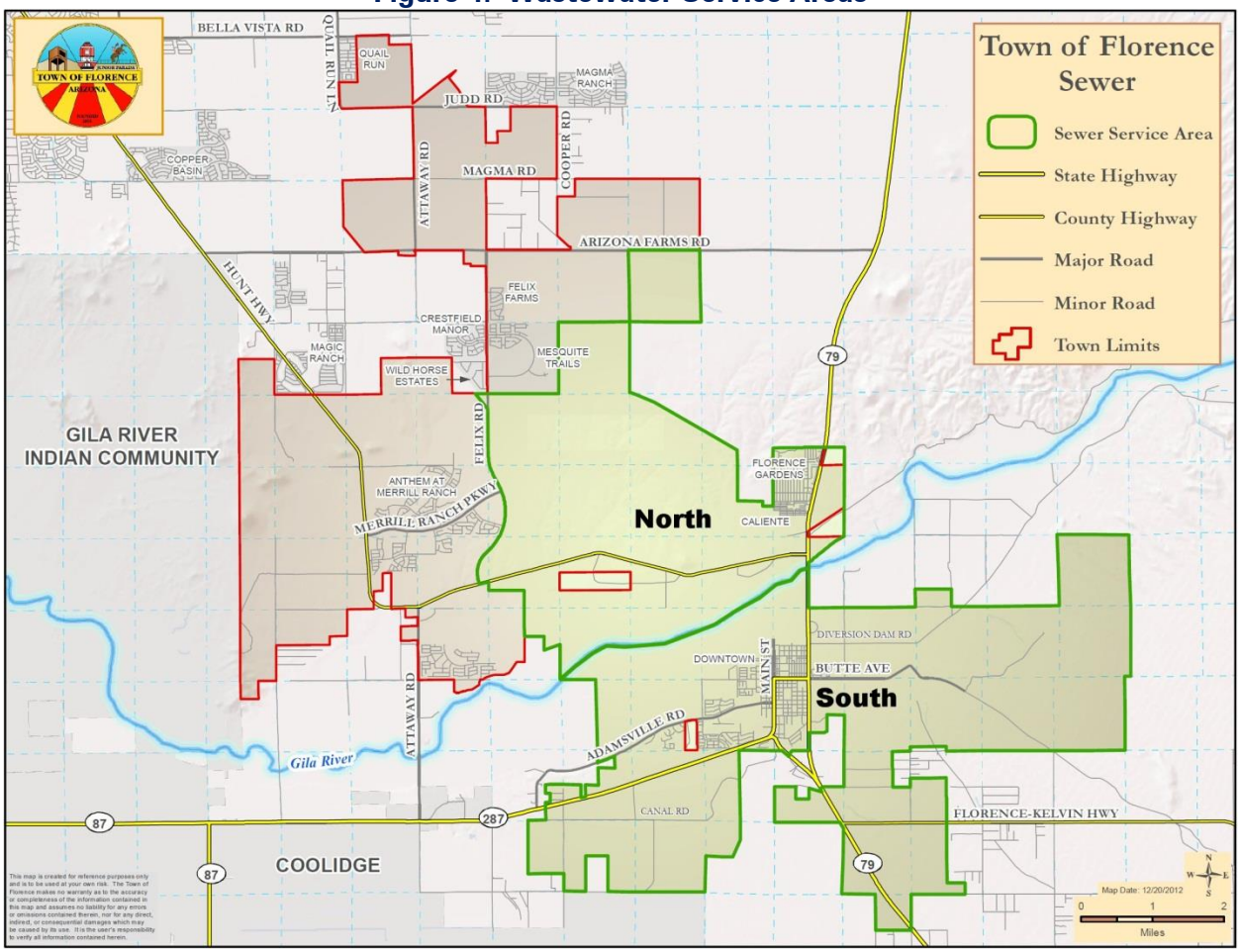


Wastewater

The Town's wastewater system currently serves the downtown and surrounding "Old Florence" area, as well as the Florence Gardens area located north of the Gila River. The downtown area is served by the 2.5 million gallons per day (mgd) Florence Wastewater Treatment Plan, while the Florence Gardens area is served by the 0.42 mgd North Florence Wastewater Treatment Plant.

The *Wastewater Master Plan* divides the planning area into basins. Wastewater flows from south of the Gila River will be conveyed to the existing Florence Wastewater Treatment Plant, which will be expanded on the same site to accommodate the additional flows. Flows from north of the River will be conveyed to the proposed Merrill Ranch Wastewater Reclamation Facility. There will essentially be two wastewater systems, one north and one south of the Gila River. It is recommended that there should be two wastewater service areas: North and South of the Gila River, as illustrated in Figure 4.

Figure 4. Wastewater Service Areas

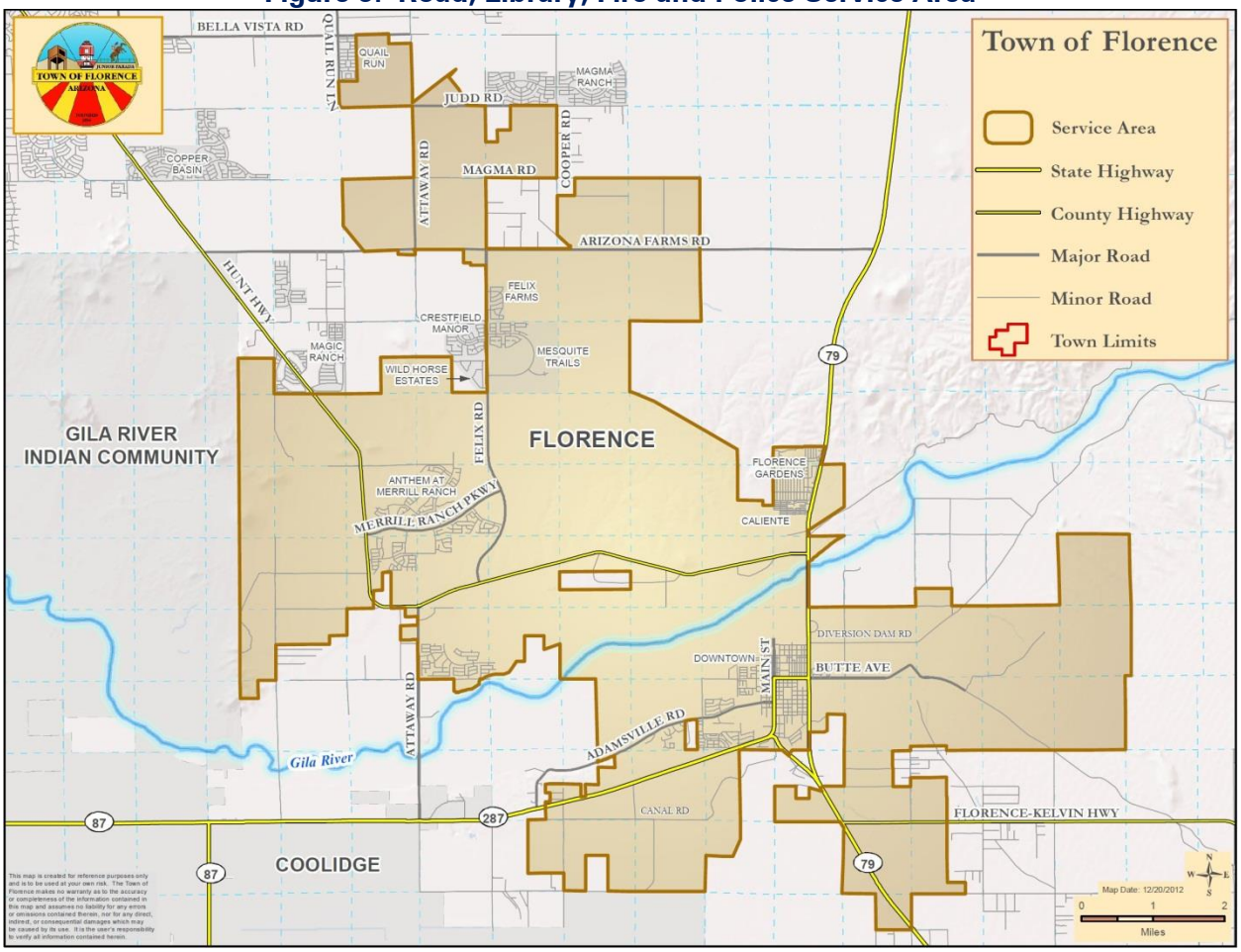


Fire/Police and Libraries

The recommended service areas for fire protection, police protection and libraries are all Town-wide. Police protection is provided throughout the Town from roving patrol cars based in a central police station. Only a single library facility is currently planned to serve the entire Town, which is typical for communities the size of Florence. While fire protection is provided by equipment located in multiple stations (currently two), equipment from multiple stations may be dispatched to a single incident, or if the equipment from one station is on another call, equipment may be dispatched from another station. Fire protection thus forms an integrated system, and a Town-wide service area is appropriate.

The recommended Town-wide service area for roads, fire, police and library impact fees is shown in Figure 5.

Figure 5. Road, Library, Fire and Police Service Area



Parks

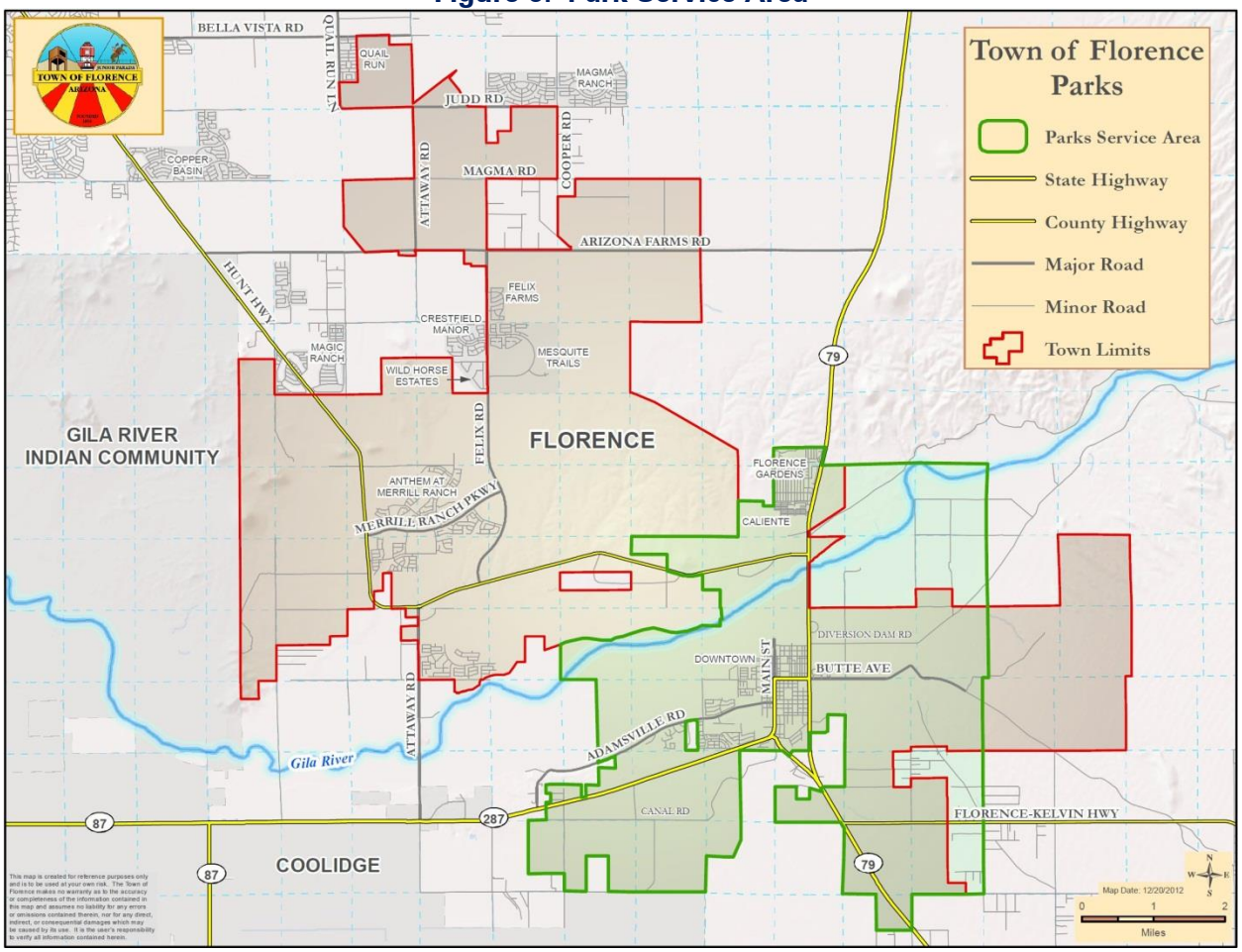
SB 1525, the bill that rewrote the State development impact fee enabling act for municipalities, limits park impact fees to "neighborhood parks," an undefined term that excludes parks larger than 30 acres in size, unless a larger park can be shown to provide a "direct benefit" to development. Excluded from the definition of a neighborhood park are a number of improvements, including aquatic centers, theme parks and community or recreational centers larger than 3,000 square feet.

The Town's 2008 *Parks, Trails and Open Space Master Plan* defines neighborhood parks as 10-acre sites serving development within a one-half mile radius, and community parks as sites with a minimum size of 50 acres serving development within a 3-mile radius. It is recommended that park impact fee service areas for sites with up to 30 acres should be limited to approximately a 2.5 mile radius, or areas that are roughly 25 square miles (5 miles x 5 miles).

Since each service area designated essentially commits the Town to spend the funds collected in that service area within 10 years, it is recommended that park service areas should be defined only in areas where there are existing parks (e.g., Old Florence), or where there is significant near-term development potential (e.g., Anthem at Merrill Ranch). Since it is likely that the Anthem/Merrill

Ranch developments will provide their own private parks, and since it would be difficult to expand the proposed service area to include the Anthem/Merrill Ranch area, a single service area is recommended for the central area of the town, as illustrated in Figure 6.

Figure 6. Park Service Area



LAND USE ASSUMPTIONS

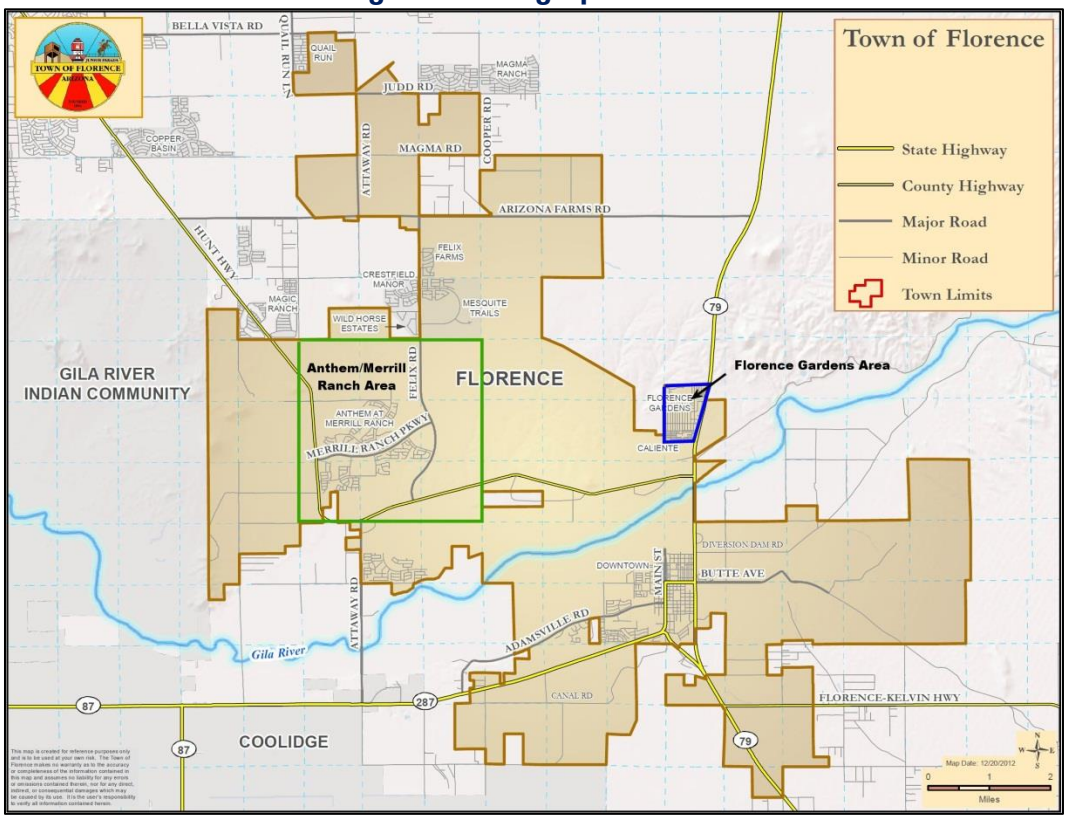
This section presents land use assumptions covering a ten-year period (2013-2023) to serve as the basis for the updated IIP and impact fee calculations for the Town's water, wastewater, road, parks, library, fire and police impact fees. While SB 1525 requires that land use assumptions be developed "pursuant to the general plan," the *Town of Florence 2020 General Plan* provides only build-out projections. Consequently, the development of land use assumptions relies primarily on other sources.

It should be noted that the land use assumptions will not have a significant effect on the amount of the calculated impact fees. This is because the fees will reflect the unit cost of accommodating future growth, and the unit cost will be largely unaffected by either the rate of growth or the total cost of planned improvements to serve the anticipated growth over the planning period. A higher growth projection will necessitate more planned improvement costs than a lower growth projection, but will not necessarily require a higher fee per unit of development.

Geographic Areas

In addition to service areas, growth projections have been developed for various subareas of the Town, as illustrated in Figure 7.

Figure 7. Geographic Areas



Existing Development

The starting point for developing land use assumptions is to determine the amount of existing development. There are two primary sources for population, housing and land use data for small geographic areas that can be aggregated to service areas. These are the 2010 U.S. Census block data (housing units, household population and group quarters population) and Central Arizona Governments (CAG) estimates and projections by Traffic Analysis Zone (TAZ). The TAZ data, which were updated in 2010, include housing units, household population, group quarters population and employment (retail, office, industrial, public and other), and have projections by five-year increments from 2005-2040. In Florence, residents of group quarters are inmates at criminal detention or Homeland Security facilities (referred to here as "prisoners").

U.S. Census and CAG estimates for 2010 by subarea of the town are compared in Table 6. Note that the 2010 Census housing and population estimates are slightly higher than what is reported by the Census for the Town. That is because the area included in the Town's corporate limits has changed since the 2010 Census. The consultant has aggregated block data to determine the 2010 units and population in the area now included in the Town limits.

The CAG data appear to undercount housing units and population north of the Gila River, particularly in Merrill Ranch, while over-counting south of the River. These balance out somewhat, but the CAG data still undercount by about 300 housing units compared to the Census. Despite the housing undercount, the household population estimate overshoots the Census estimate by about 900 persons, suggesting that CAG is using somewhat inflated person per unit ratios.

In terms of prisoner counts, the Census completely overlooks the Homeland Security facility just south of Florence Gardens and undercounts prisoners south of the River, resulting in an overall count that is about 1,800 short of the Town's 2010 survey. The CAG estimates include the Homeland Security facility, but overestimates by about two-fold the number of prisoners (the facility has a capacity of only 697). Overall, the CAG undercounts prisoners even more than the Census.

Table 6. Housing, Household Population and Prisoner Estimates, 2010

	Housing Units		HH Population		Prisoners		
Geographic Area	Census	CAG	Census	CAG	Census	CAG	Survey
Florence Gardens Area	1,783	1,719	1,382	1,707	0	1,281	621
Anthem/Merrill Ranch Area	1,542	682	2,753	1,278	0	0	0
Park Service Area - North*	38	3	37	5	0	0	0
Other	120	530	235	1,083	0	0	0
Subtotal, North of River	3,483	2,934	4,407	4,073	0	1,281	621
N Water/WW Service Area	1,827	1,739	1,393	1,771	0	1281	621
Park Service Area - South	1,779	2,025	3,497	4,730	17,700	14,713	18,915
Other	2	0	0	0	0	0	0
Subtotal, South of River	1,781	2,025	3,497	4,730	17,700	14,713	18,915
Total, Town of Florence	5,264	4,959	7,904	8,803	17,700	15,994	19,536

Source: 2010 U.S. Census block data; CAG 2010 projections by TAZ; 2010 prisoner survey from Town of Florence Planning Department (Census and TAZ prisoner counts are group quarters residents).

Residential Projections

Residential growth projections must start with an estimate of the existing housing stock. The current estimate of dwelling units by housing type is provided in Table 7.

Table 7. Existing Dwelling Units, 2012

Housing Type	2000 Units	2010 Units	2012 Units
Single-Family Detached/MH	2,688	4,736	5,046
Multi-Family	528	528	528
Total	3,216	5,264	5,574

Source: 2000 & 2010 from Census (no multi-family permits issued since 2000 per Town Planning Department); 2012 adds units permitted in 2010 and 2011 from Table 8.

Projections of future growth are always difficult, but are especially difficult for small jurisdictions like Florence, where a single large residential subdivision can make a big difference. Recent building permit activity provides one of the few guides to future growth. Residential building permits issued by the Town since 2005 are summarized in Table 8. During the housing boom years of 2006-2008, the Town was issuing over 400 permits annually. That has since fallen to a little over 100 permits last year.

The Town issued 285 single-family permits and 25 manufactured home permits in 2010 and 2011. Town staff notes that virtually all the single-family permits were in Merrill Ranch and virtually all of the manufactured home permits were in Florence Gardens.

Table 8. Building Permits, 2005-2011

Year	Single-Family	Mfg. Home	Total
2005	100	28	128
2006	407	62	469
2007	411	36	447
2008	467	15	482
2009	201	12	213
2010	173	13	186
2011	112	12	124

Source: Town of Florence Planning Department, March 28, 2012.

The CAG housing unit projections for 2010-2020 are summarized in Table 9. They indicate that most of the growth over the next ten years will be north of the River, which is consistent with the Town's recent experience. However, they project annual growth from 2010-2015 of over 600 units per year, which is 50% higher than what the Town experienced during the housing boom of 2006-2008, and even more rapid growth in the following five years. As noted earlier, the Town issued 124 permits last year, which is less than one-fourth of the projected annual average for the 2010-2015 period. The CAG projections would thus appear to be highly optimistic.

Table 9. CAG Housing Unit Projections, 2010-2020

Geographic Area	2010	2015	2020	Annual Growth 2010-15	Annual Growth 2015-20
Florence Gardens Area	1,719	1,736	1,767	3	6
Anthem/Merrill Ranch Area	682	2,383	5,421	340	608
Park Service Area - North*	3	3	3	0	0
Other	530	1,688	3,760	232	414
Subtotal, North of River	2,934	5,810	10,951	575	1,028
N Water/WW Service Area	1,739	2,750	4,557	202	361
Park Service Area - South	2,025	2,367	2,091	68	-55
Other	0	0	856	0	171
Subtotal, South of River	2,025	2,367	2,947	68	116
Total, Town of Florence	4,959	8,177	13,898	644	1,144

* excluding the Florence Gardens area

Source: CAG demographic datasets by TAZ, 2010.

It would be more reasonable to anticipate that the Town would experience the housing unit increase projected by CAG over the 2010-2015 period during the 2010-2023 period. This would mean that the Town would add an average of about 250 units annually over the 13-year period. This would appear to be more in line with the current housing market and recent trends. The housing unit projections are shown in Table 10. The projections indicate an increase of 3,242 units from 2010-2023, which is slightly higher than the CAG's projected 2010-2015 increase of 3,218.

Table 10. Projected Housing Units, 2013-2023

Geographic Area	2010	2012	2013	2023
Florence Gardens Area	1,783	1,799	1,819	2,019
Anthem/Merrill Ranch Area	1,542	1,725	1,825	4,075
Park Service Area - North*	38	38	45	115
Other	120	120	128	208
Subtotal, North of River	3,483	3,682	3,817	6,417
North Water/WW Service Area	1,827	1,843	1,874	2,894
Park Service Area - South	1,779	1,779	1,807	2,087
Other	2	2	2	2
Subtotal, South of River	1,781	1,781	1,809	2,089
Total, Town	5,264	5,463	5,626	8,506

* excluding the Florence Gardens area

Source: 2010 units from U.S. Census block data; 2012 adds building permits from 2010 and 2011; 2013-2023 projections assume 20 units per year in Florence Gardens area, 100 per year from 2011-2013 and 225 per year from 2013-2023 in Anthem/Merrill Ranch area, 7 per year in the Park Service Area-North, 8 per year in other areas north of the river, 28 per year in the Park Service Area-South, and none in other area south of the river; North wastewater service area for 2012 is 2010 plus growth in Florence Gardens area, 2013 is sum of Florence Gardens area and Park Service Area-North, plus 10 units; North wastewater service area for 2023 assumes one-third of growth in Anthem/Merrill Ranch area will be in the Town's service area..

Household population projections can be derived from the housing unit projections, using the person per unit ratios by area from the 2010 U.S. Census. These are shown in Table 11.

Table 11. Projected Household Population, 2013-2023

Geographic Area	Persons/ Unit	Household Population 2010	2012	2013	2023
Florence Gardens Area	0.78	1,382	1,394	1,410	1,565
Anthem/Merrill Ranch Area	1.79	2,753	3,080	3,258	7,275
Park Service Area - North*	0.97	37	37	44	112
Other	1.96	235	235	251	407
Subtotal, North of River	1.27	4,407	4,746	4,963	9,359
North Water/WW Service Area	0.76	1,393	1,401	1,424	2,199
Park Service Area	1.96	3,497	3,493	3,548	4,098
Other	1.96	0	4	4	4
Subtotal, South of River	1.96	3,497	3,497	3,552	4,102
Total, Town	1.50	7,904	8,243	8,515	13,461

* excluding the Florence Gardens area

Source: 2010 data from U.S. Census block data; projections based on housing projections from Table 10 and persons per unit ratios by area from 2010 Census (2010 household population shown above divided by total 2010 units from Table 6).

Nonresidential Projections

Florence is home to ten correctional facilities, which along with County and other governmental facilities provide the foundation for the Town's economy. The projected growth in the prisoner population from 2010-2023 is based on the CAG's projected 2010-2015 increase in group quarters residents. The results are summarized in Table 12. The projected prisoner population for 2023 exceeds the capacity of existing correctional facilities south of the River (18,983 according to the Town's 2011 survey), indicating some anticipated expansion over the planning period.

Table 12. Projected Prisoner Population, 2013-2023

Geographic Area	2010	2011	2013	2023
Florence Gardens Area	621	395	402	442
Anthem/Merrill Ranch Area	0	0	0	0
Park Service Area - North*	0	0	0	0
Other	0	0	0	0
Subtotal, North of River	621	395	402	442
North Water/WW Service Area	621	395	402	442
Park Service Area - South	18,915	18,831	18,915	19,374
Other	0	0	0	0
Subtotal, South of River	18,915	18,831	18,915	19,374
Total, Town	19,536	19,226	19,317	19,816

* excluding the Florence Gardens area

Source: 2010 and 2011 prisoner counts from Town surveys; 2023 projections based on CAG projected increase from 2010-2015; 2013 projections are straight-line interpolations of 2011-2023 projections.

Employment projections to 2023 are also based on CAG's projected increases from 2010-2015. These are shown in Table 13.

Table 13. Projected Employment, 2013-2023

	Florence Gardens Area	Anthem/ Merrill Ranch	Park Area North*	Other North	Subtotal North of River	North W/WW Area	Park Area South	Other South	Subtotal South of River	Town Wide Total
Retail										
2010	0	81	0	0	81	0	646	23	669	750
2013	0	127	0	34	161	3	754	23	777	938
2023	0	684	0	440	1,124	37	2,050	23	2,073	3,197
Office										
2010	1	0	0	0	1	1	393	0	393	394
2013	1	0	0	7	8	1	494	0	494	502
2023	1	0	0	87	88	1	1,701	0	1,701	1,789
Industrial										
2010	0	33	0	3	36	33	468	0	468	504
2013	0	42	0	5	47	35	468	0	468	515
2023	0	149	0	23	172	53	468	0	468	640
Prison										
2010	124	0	0	0	124	124	3,783	0	3,783	3,907
2013	124	0	0	0	124	124	3,806	0	3,806	3,930
2023	124	0	0	0	124	124	4,079	0	4,079	4,203
Other Public										
2010	0	0	0	0	0	0	2,906	0	2,906	2,906
2013	0	0	0	0	0	0	2,923	0	2,923	2,923
2023	0	0	0	0	0	0	3,133	0	3,133	3,133
Total										
2010	125	114	0	3	242	158	8,196	23	8,219	8,461
2013	125	169	0	46	340	163	8,445	23	8,468	8,808
2023	125	833	0	550	1,508	215	11,431	23	11,454	12,962

* excluding the Florence Gardens area

Source: 2010 estimates from Central Arizona Governments TAZ dataset (see Appendix Table 106); 2023 is CAG 2015 projection; 2013 is based on 1/13th of projected 2010-2023 growth; with the exception that 2010 prison workers estimated based on Town prisoner count and 0.20 workers per prisoner, which is the average ratio in federal prisons per Matthew Harwood, "Prison Overcrowding," *Security Management*, July 21, 2009, and other public being the remainder of public workers (both prison and other public assumed to grow at the same pace as total public workers).

Employment estimates and projections can be used to estimate nonresidential building square footage. This can be done using ratios of employees per 1,000 square feet of building floor area, shown in Table 14.

Table 14. Employees/1,000 Sq. Ft. Ratios

Retail	1.23
Office	3.11
Industrial	0.91
Prison	1.40
Other Public	2.32

Source: Retail and office from Central Arizona Governments, *Pinal County Build-Out*, October 2003; industrial from Institute of Transportation Engineers (ITE), *Trip Generation*, 8th edition, 2009 based on warehouse; public is average from ITE for public/institutional uses.

Applying these ratios to the employment estimates and projections yields the following estimates of existing and future nonresidential building floor area (see Table 15).

Table 15. Projected Nonresidential Building Square Footage (1,000s), 2013-2023

	Florence Gardens Area	Anthem/ Merrill Ranch	Park Area North*	Other North	Subtotal North of River	North W/WW Area	Park Area South	Other South	Subtotal South of River	Town Wide Total
Retail										
2010	0	66	0	0	66	0	525	19	544	610
2013	0	103	0	28	131	2	613	19	632	763
2023	0	556	0	358	914	30	1,667	19	1,686	2,600
Office										
2010	0	0	0	0	0	0	126	0	126	126
2013	0	0	0	2	2	0	159	0	159	161
2023	0	0	0	28	28	0	547	0	547	575
Industrial										
2010	0	36	0	3	39	36	514	0	514	553
2013	0	46	0	5	51	38	514	0	514	565
2023	0	164	0	25	189	58	514	0	514	703
Prison										
2010	89	0	0	0	89	89	2,702	0	2,702	2,791
2013	89	0	0	0	89	89	2,719	0	2,719	2,808
2023	89	0	0	0	89	89	2,914	0	2,914	3,003
Other Public										
2010	0	0	0	0	0	0	1,253	0	1,253	1,253
2013	0	0	0	0	0	0	1,260	0	1,260	1,260
2023	0	0	0	0	0	0	1,350	0	1,350	1,350
Total										
2010	89	102	0	3	194	125	5,120	19	5,139	5,333
2013	89	149	0	35	273	129	5,265	19	5,284	5,557
2023	89	720	0	411	1,220	177	6,992	19	7,011	8,231

* excluding the Florence Gardens area

Source: Square footage for all but prisons is product of employment from Table 13 divided by employees/1,000 sq. ft. ratios from Table 14; prison square footage based on prison employee per inmate ratio cited in preceeding table and 120 sq. ft. per prisoner, which is ratio for ASP-Florence West (GEO) unit per Arizona Department of Corrections, *Biennial Comparison of Private versus Public Provision of Services*, December 21, 2011.

ROADS

This section calculates updated road impact fees for the Town of Florence.

Service Unit

A service unit creates the link between supply (roadway capacity) and demand (traffic generated by new development). An appropriate service unit basis for road impact fees is vehicle-miles of travel (VMT). Vehicle-miles is a combination of the number of vehicles traveling during a given time period and the distance (in miles) that these vehicles travel.

The two time periods most often used in traffic analysis are the 24-hour day (average daily trips or ADT) and the single hour of the day with the highest traffic volume (peak hour trips or PHT). Due to the fact that available traffic counts are in terms of ADT and to be consistent with the Town's current fees, which are based on ADT, daily VMT will be used as the service unit for the road impact fees.

For some purposes, it will be useful to compare service units for the different types of impact fees. Consequently, an alternative service unit will be calculated in terms of Equivalent Dwelling Units, or EDUs. An EDU is a unit of demand expressed in terms of the demand represented by a typical single-family detached dwelling unit.

Methodology

The standards-based methodology for road impact fees is called the "consumption-based" approach. In the standard consumption-based approach, the total cost of a representative set of improvements is divided by the capacity added by those improvements in order to determine an average cost per vehicle-mile of capacity (VMC). This cost per VMC is then multiplied by the vehicle-miles of travel (VMT) generated by a unit of development of a particular land use type to determine the gross impact fee. The level of service (LOS) standard in the consumption-based approach is a system-wide ratio of VMC to VMT of 1.00. A variant is the modified consumption-based approach, which uses a system-wide VMC/VMT ratio higher than 1.00.

The alternative is the plan-based approach. The LOS standard for the plan-based approach is a desired LOS, such as LOS C or LOS D, which is applied to each individual road segment or intersection. The key to a defensible plan-based methodology is a well-designed transportation master plan that establishes a strong nexus between anticipated growth over a 10-20 year period and the improvements that will be required to accommodate growth over that planning horizon. The cost per VMT (or per trip) is determined by dividing the cost of the planned improvements by the growth in VMT (or trips). The cost per VMT (or trip) is then multiplied by the VMT (or trips) generated by a unit of development of a particular land use type to determine the gross impact fee.

The consumption-based approach, at least in its standard form, tends to be conservative and generally results in lower impact fees than the plan-based approach. This is because most roadway systems need more than one unit of capacity (VMC) for each unit of travel demand (VMT) in order to function at an acceptable level of service (the modified consumption-based approach addresses

this issue and is less conservative). Plan-based fees using a transportation plan that identifies all of the improvements needed to provide acceptable levels of service on all roadways will almost always result in higher fees.

The 2007 road impact fee study used the plan-based approach. It divided the Town's share of the total cost of a list of planned improvements by the projected number of new trips that were expected to be generated by new development over a ten-year period (2006-2015) to derive the cost per trip. The problem with this approach is that no analysis was provided to demonstrate the connection between the amount of growth anticipated over the ten-year period and the need for the planned improvements. No LOS standard was stated, nor was there any attempt to identify existing facilities that already fell below the desired LOS (these would be considered existing deficiencies).

In 2008, the Town completed a transportation master plan[1] that could serve as the foundation for a plan-based impact fee calculation. The master plan used LOS D as the desired LOS standard, modeled daily traffic volumes for 2005 and 2025 based on existing and projected development by traffic analysis zones, and identified needed improvements and costs required to accommodate projected development. No existing capacity deficiencies were identified. The master plan identified approximately $426 million in needed Town arterial road improvements.

Even though the Town generally uses LOS C as its standard, under the plan-based approach the fees would be based on the cost to maintain LOS D, since this was the standard used by the master planning process to identify improvement needs. However, the Town would not be tied to the standard used in the master plan if it uses a consumption-based approach.

The alternative to a plan-based methodology would be to use the consumption-based approach. The Town's arterial/major collector road system currently has a VMC/VMT ratio of about 2:1 (see Table 18 in the next section). Since this is twice as high as the 1:1 ratio used in the standard consumption-based approach, there are no existing deficiencies. Under the modified consumption-based approach, the Town could choose to use a VMC/VMT ratio higher than 1:1 as its LOS, as long as it does not exceed 2:1.

Although the Town's most recent transportation master plan is five years old, it could potentially provide the basis for a plan-based road impact fee. However, the consumption-based approach is recommended because of its greater flexibility and the fact that its soundness is not dependent on the availability and quality of a transportation master plan.

Major Roadway System

A road impact fee program should include a clear definition of the major roadway system that will be funded with the impact fees. As noted in the Service Area section of this report, the types of improvements covered by the Town's current road impact fees are not well defined. It is recommended that the revised road impact fees be restricted to the cost of Town-owned arterials and major collectors, and exclude the cost of State roads, minor collectors and local streets. One advantage of this approach is that an arterial/major collector impact fee is consistent with a Town-wide service area, since the purpose of these facilities is to move traffic throughout the community.

[1] Lima & Associates, Kimley-Horn and Associates and Economic and Real Estate Consulting, *Coolidge-Florence Regional Transportation Plan*, Final Report, February 2008

Another advantage is that the Town will not need to provide credits against the fees for minor collector road improvements, which will generally be made by developers. The Town's functional classification map showing the location of existing and planned major roadways is included in the Service Area section of this report (see Figure 1).

This update includes a detailed inventory of the major roadway system, which consists of all the existing arterial and major collector roads. The inventory compares demand and capacity on existing facilities. The capacity of an individual roadway depends on a number of factors, including number of lanes, lane width, topography, percent of truck traffic, etc. In impact fee analysis, generalized capacity estimates are typically used based strictly on number of lanes. The Florida Department of Transportation has done extensive work developing generalized capacity estimates to be used for planning purposes based on Highway Capacity Manual procedures, and their work will be used to develop planning-level capacity estimates for use in this analysis. These estimates are shown in Table 16.

Table 16. Average Daily Capacities

Lanes	Capacity
2-Lane	7,520
3-Lane	9,870
4-Lane	22,700
6-Lane	35,700

Source: 2009 FDOT Quality/Level of Service Handbook, Table 2: Generalized Annual Average Daily Volumes for Areas Transitioning into Urbanized Areas or Areas over 5,000 not in Urbanized Areas, Class II (2-4.5 signalized intersections per mile) at LOS C.

The inventory of the existing major roadway system is presented in Table 17. The principal objective of the inventory is to calibrate national travel demand factors to local conditions by comparing the actual vehicle-miles of travel (VMT) on the major road system to expected VMT based on existing development. This is addressed in the Service Units section below.

Table 17. Existing Major Roadway System

Road	From-To	Class	Miles	Lns	Cap.	VMC	ADT	VMT	Lane-Miles Total	Lane-Miles w/cts
Adamsville Rd	Main St-WTL	Min Art	2.64	2	7,520	19,853	1,072	2,830	5.28	5.28
American Way	Hunt Hwy-Const Way	Maj Col	0.95	2	7,520	7,144			1.90	0.00
Anthem Way	American Way-MRP	Maj Col	0.31	2	7,520	2,331			0.62	0.00
Arizona Farms Rd	ETL-RR tracks	Maj Art	4.72	2	7,520	35,494	2,964	13,990	9.44	9.44
Attaway Rd	AZ Farms-Judd Rd	Maj Art	2.00	2	7,520	15,040			4.00	0.00
Attaway Rd	Palmer Rd-Hunt Hwy	Maj Art	1.07	2	7,520	8,046	7,270	7,779	2.14	2.14
Bella Vista	Quail Run-Attaway (pt.)	Maj Art	0.45	2	7,520	3,384			0.90	0.00
Butte Ave	Plant Rd-Main St	Maj Col	1.00	2	7,520	7,520	2,287	2,287	2.00	2.00
Butte Ave	Main St- Old F-K Hwy	Min Art	1.98	2	7,520	14,890	3,898		3.96	3.96
Canal Rd	Valley Fms-Plant Rd	Min Art	1.95	2	7,520	14,664			3.90	0.00
Centennial Park Av	Butte Ave-16th St	Maj Col	0.13	2	7,520	978			0.26	0.00
Constitution Way	American Way-MRP	Maj Col	0.34	2	7,520	2,557			0.68	0.00
Cooper Rd	Magma Rd-Judd Rd	Maj Art	1.00	2	7,520	7,520	317	317	2.00	2.00
Diversion Dam Rd	Bowling Rd-TL	Maj Col	1.84	2	7,520	13,837			3.68	0.00
Diversion Dam Rd	Pinal Pkwy-Bowling Rd	Min Art	0.50	2	7,520	3,760	3,096	1,548	1.00	1.00
Dogwood Rd	Flor-Kelvin-Sunaire Dr	Min Art	0.50	2	7,520	3,760			1.00	0.00
Felix Rd	Hunt Hwy-RR tracks	Maj Art	2.62	2	9,870	25,859			5.24	0.00
Felix Rd	RR tracks-Crestfield Mr	Maj Art	0.70	2	7,520	5,264			1.40	0.00
Felix Rd	Crestfield-Heritage Rd	Maj Art	0.50	3	9,870	4,935			1.50	0.00
Felix Rd	Heritage-Az Farms Rd	Maj Art	1.00	2	7,520	7,520			2.00	0.00
Florence Hts Dr	Main St-SR 79	Min Art	0.56	2	7,520	4,211	3,678	2,060	1.12	1.12
Flor.-Kelvin Hwy	SR 79-TL	Maj Art	1.44	2	7,520	10,829	1,529	2,202	2.88	2.88
Hiscox Lane	Canal Rd-Hwy 287	Maj Art	0.51	2	7,520	3,835			1.02	0.00
Hunt Hwy	SR 79-TL	Maj Art	5.90	2	7,520	44,368	5,473	32,291	11.80	11.80
Hunt Hwy	TL-S end 6 lane	Maj Art	0.20	2	35,700	7,140	8,154	1,631	0.40	0.40
Hunt Hwy	S end 6ln-N end 6ln	Maj Art	1.52	6	7,520	11,430	8,469	12,873	9.12	9.12
Hunt Hwy	N end 6ln-TL	Maj Art	1.42	2	7,520	10,678	8,469	12,026	2.84	2.84
Judd Rd	CAP Canal-Cooper (pt.)	Min Art	1.12	3	9,870	11,054			3.36	0.00
Judd Rd	Quail Run-CAP Canal	Min Art	1.54	2	7,520	11,581	3,742	5,763	3.08	3.08
Main St	SR 287-Butte Ave	Maj Col	0.64	2	7,520	4,813	4,079	2,611	1.28	1.28
Main St	Butte Ave-N end	Maj Col	0.53	2	7,520	3,986	4,079	2,162	1.06	1.06
Merrill Ranch Pky	Hunt Hwy-Felix Rd	Min Art	2.06	4	22,700	46,762	3,510	7,231	8.24	8.24
Old Flor-Kelvin	Butte Av-Diffen Rd	Min Art	2.34	2	7,520	17,597	3,898	9,121	4.68	4.68
Plant Rd	Adamsville-Butte Ave	Maj Art	0.56	2	7,520	4,211			1.12	0.00
Quail Run	Judd Rd-NTL	Min Art	0.36	2	7,520	2,707			0.72	0.00
Ruggles St	Main St-SR 79	Maj Col	0.48	2	7,520	3,610	2,339	1,123	0.96	0.96
Sun City Blvd	MRP-Franklin Rd	Maj Col	0.93	3	7,520	6,994			2.79	0.00
Valley Farms Rd	N of Vah Ki Inn-Hwy 287	Maj Art	0.99	2	7,520	7,445	1,415	1,401	1.98	1.98
Total			49.30			417,607		121,246	111.35	75.26

Source: Town of Florence, November 10, 2011; "Class" is functional classification; "Miles" is length of segment; "Lns" is existing number of through travel lanes; "Cap." is capacity in vehicles per day from Table 16; "VMC" is vehicle-miles of capacity, which is product of miles and capacity; "ADT" is average daily traffic counts taken 2009-2011; "VMT" is vehicle-miles of travel, which is product of miles and ADT; "Lane-Miles" is miles times number of lanes; "Total" is total number of lane-miles; "w/cts" is number of lane-miles with traffic counts.

A secondary objective of the road inventory is to ensure that the level of service (LOS) implicit in the standard consumption-based road impact fee methodology does not exceed the actual LOS on the major roadway system. The implicit LOS in the standard consumption-based methodology is a system-wide ratio of 1.00 between vehicle-miles of capacity (VMC) and vehicle-miles of travel (VMT) on the major roadway system. As can be seen in Table 18, the current VMC/VMT ratio exceeds 1.00.

Table 18. Existing Road Capacity/Demand Ratio

Daily VMT on Segments with Counts	121,246
÷ Lane-Miles of Segments with Counts	75.26
Average Volume per Lane on Segments with Counts	1,611
x Total Lane-Miles	111.35
Estimated Total Daily Vehicle-Miles of Travel (VMT)	179,385
Existing Vehicle-Miles of Capacity (VMC)	417,607
÷ Existing Vehicle-Miles of Travel (VMT)	179,385
Existing VMC/VMT Ratio	2.33

Source: VMT on segments with counts, lane-miles and VMC from Table 17.

Service Units

Road service units are defined in terms of vehicle travel. The travel demand generated by specific land use types in Florence is a product of three factors: 1) trip generation, 2) percent primary trips and 3) average trip length.

Trip Generation

Trip generation rates are based on information published in the most recent edition of the Institute of Transportation Engineers' (ITE) *Trip Generation* manual. Trip generation rates represent trip ends, or driveway crossings at the site of a land use. Thus, a single-one way trip from home to work counts as one trip end for the residence and one trip end for the work place, for a total of two trip ends. To avoid over counting, all trip rates have been divided by two. This places the burden of travel equally between the origin and destination of the trip and eliminates double charging for any particular trip.

Primary Trip Factor

Trip rates must also be adjusted by a "primary trip factor" to exclude pass by and diverted-linked trips. This adjustment is intended to reduce the possibility of over-counting by only including primary trips generated by the development. Pass by trips are those trips that are already on a particular route for a different purpose and simply stop at a development on that route. For example, a stop at a convenience store on the way home from the office is a pass by trip for the convenience store. A pass by trip does not create an additional burden on the street system and therefore should not be counted in the assessment of impact fees. However, since the fees for the consolidated "commercial" category (retail and office) are based on the travel demand factors for general office, no primary trip adjustment is warranted.

Average Trip Length

In the context of a road impact fee based on a consumption-based methodology, it is necessary to determine the average length of a trip on the major roadway system within Florence. The point of departure in developing local trip lengths is to utilize national data. The U.S. Department of Transportation's 2009 National Household Travel Survey identifies average trips lengths for specific trip purposes. However, these trip lengths are unlikely to be representative of travel on the major roadway system in Florence. An adjustment factor for local trip lengths can be derived by dividing the vehicle-miles of travel (VMT) that is actually observed on the major roadway system by the VMT that would be expected using national average trip lengths and trip generation rates.

The first step is to estimate the total VMT that would be expected to be generated by existing development in Florence based on national travel demand characteristics. This can be accomplished by multiplying existing development in each land use category by the appropriate national trip generation rates, primary trip factors and trip lengths. The expected VMT is considerably higher than the actual estimated VMT on the Town's major roadway system that was calculated earlier. This is not surprising, since the major roadway system does not include State roads, minor collectors, local streets or any portion of a trip that occurs outside the Town limits. Consequently, it is necessary to develop an adjustment factor to account for this variation. The local adjustment factor is the ratio of actual to projected VMT on the major roadway system. As shown in Table 19, the national average trip length for each trip type should be multiplied by a local adjustment factor of 0.417.

Table 19. Local Trip Length Adjustment Factor

Land Use Type	ITE Code	Unit	2010 Units	Trip Rate	Primary Trips	Daily Trips	Length (miles)	Daily VMT
Single-Family Detached	210	Dwelling	4,736	4.79	100%	22,685	9.16	207,795
Multi-Family	220	Dwelling	528	3.33	100%	1,758	8.30	14,591
Commercial	710	1,000 sq ft	736	5.51	100%	4,055	11.98	48,579
Public/Institutional	620	1,000 sq ft	4,044	3.79	100%	15,327	9.61	147,292
Industrial/Warehouse	150	1,000 sq ft	553	1.78	100%	984	11.98	11,788
Total Expected VMT								430,045
Total Actual VMT								179,385
Ratio of Actual to Total VMT								0.417

Source: Existing 2010 units from Table 10 and Table 15; trip rates are one-half daily trip ends during a weekday from Institute of Transportation Engineers (ITE), *Trip Generation*, 8th ed., 2008 (commercial based on general office, public/institutional based on nursing home and industrial/warehouse based on warehouse); daily trips is product of units, trip rate and primary trip percentage; average trip lengths from U.S. Department of Transportation, National Household Travel Survey, 2009; daily VMT is product of daily trips and average trip length; actual VMT from Table 18.

National average trip lengths derived from the U.S. Department of Transportation's 2009 National Household Travel Survey are available for a variety of trip types and purposes, including single-family detached, multi-family, home-to-work and medical/dental. These have been adjusted by the local adjustment factor, as shown in Table 20 below.

Table 20. Average Trip Lengths

Trip Type/Purpose	National Trip Length	Local Adjustment Factor	Local Trip Length
Single-Family	9.16	0.417	3.82
Multi-Family	8.30	0.417	3.46
To or From Work	11.98	0.417	5.00
Medical/Dental	9.61	0.417	4.01

Source: National average trip lengths from U.S. Department of Transportation, National Household Travel Survey, 2009 (office/institutional based on doctor/dentist); local adjustment factor from Table 19.

Service Unit Summary

The result of combining trip generation rates, primary trip factors and localized average trip lengths is a travel demand schedule that establishes the daily VMT during the average weekday on the major roadway system generated by various land use types per unit of development for Florence. The recommended road demand schedule is presented in Table 21. Service units are expressed in both VMT per unit and EDUs per unit (an EDU is a single-family equivalent).

Table 21. Road Demand Schedule

Land Use Type	ITE Code	Unit	Trip Rate	Primary Trips	Length (miles)	VMT/ Unit	EDUs/ Unit
Single-Family Detached	210	Dwelling	4.79	100%	3.82	18.30	1.000
Multi-Family	220	Dwelling	3.33	100%	3.46	11.52	0.630
Commercial	710	1,000 sq ft	5.51	100%	5.00	27.55	1.505
Public/Institutional	620	1,000 sq ft	3.79	100%	4.01	15.20	0.831
Industrial/Warehouse	150	1,000 sq ft	1.78	100%	5.00	8.90	0.486

Source: Trip rates and primary trip percentages from Table 19; average trip lengths from Table 20; daily VMT per unit is product of trips, percent primary trips and trip length; EDUs/unit is ratio of VMT to single-family detached VMT per unit.

Road service units are expressed in terms of both vehicle-miles of travel (VMT) and equivalent dwelling units (EDUs). Projections for both service unit measurements for the 2013-2023 planning period are shown in Table 22.

Table 22. Road Service Units, 2013-2023

		Units		EDUs/	EDUs		VMT/	VMT	
Land Use Type	Unit	2013	2023	Unit	2013	2023	Unit	2013	2023
Single-Family Detached	Dwelling	3,273	3,903	1.000	3,273	3,903	18.30	59,896	71,425
Multi-Family	Dwelling	528	528	0.630	528	528	11.52	6,083	6,083
Commercial	1,000 sq ft	821	2,619	1.505	821	2,619	27.55	22,619	72,153
Public/Institutional	1,000 sq ft	4,068	4,353	0.831	4,068	4,353	15.20	61,834	66,166
Industrial/Warehouse	1,000 sq ft	519	539	0.486	519	539	8.90	4,619	4,797
Total Service Units Outside Merrill Ranch CFDs					9,209	11,942		155,051	220,624
Single-Family Detached	Dwelling	1,825	4,075	1.000	1,825	4,075	18.30	33,398	74,573
Multi-Family	Dwelling	0	0	0.630	0	0	11.52	0	0
Commercial	1,000 sq ft	103	556	1.505	103	556	27.55	2,838	15,318
Public/Institutional	1,000 sq ft	0	0	0.831	0	0	15.20	0	0
Industrial/Warehouse	1,000 sq ft	46	164	0.486	46	164	8.90	409	1,460
Total Service Units Within Merrill Ranch CFDs					1,974	4,795		36,645	91,351
Total Town-Wide Service Units					11,183	16,737		191,696	311,975

Source: Units from Table 10 and Table 15; EDUs per unit and VMT per unit from Table 21; EDUs is product of units and EDUs per unit; VMT is product of units and VMT per unit.

Cost per Service Unit

The cost per service unit is derived from the cost estimates in the Town's transportation master plan. As shown in Table 23, the average cost per vehicle-mile of capacity (VMC) from the master plan is $289. To take into account reduced right-of-way costs and possibly reduced construction from 2008, the cost estimates have been reduced by 10 percent to $260 per VMC.

Table 23. Road Cost per Vehicle-Mile of Capacity

Road	From-To	Class	Miles	Lanes Ex	Lanes Fut	Cost	New VMC	Cost per VMC
Adamsville Rd	Town Lim-Main St	Min Art	2.64	2	4	$13,272,344	40,075	$331
Arizona Farms Rd	Felix Rd-Town Limit	Maj Art	3.22	2	6	$24,104,186	90,740	$266
Attaway Rd	Palmer-Hunt Hwy	Maj Art	1.07	2	6	$7,766,562	30,153	$258
Attaway Rd	Hunt Hwy-Felix Rd	Maj Art	1.28	0	6	$8,233,972	45,696	$180
Attaway Rd	Hunt Hwy-Hiller Rd	Maj Col	1.81	0	3	$10,239,599	17,865	$573
Butte Ave	Plant Rd-Main St	Maj Col	1.00	2	3	$5,346,776	2,350	$2,275
Butte Ave	Main St-SR 79	Min Art	0.49	2	4	$2,463,428	7,438	$331
Butte Rd	SR 79-Old F-K Hwy	Min Art	1.49	2	4	$8,630,831	22,618	$382
Carrell Lane	Vah Ki Inn-SR 79	Min Art	0.75	0	4	$3,770,552	17,025	$221
Clemans-RanchView	Town Limit-SR 79	Min Art	3.38	0	4	$18,132,623	76,726	$236
Desert Color Pkwy	Hunt Hwy-Felix Rd	Min Art	3.76	0	4	$20,043,036	85,352	$235
Diversion Dam Rd	SR 79-end	Maj Col	2.35	2	3	$8,616,924	5,523	$1,560
Florence Hts Dr	Main St-SR 79	Min Art	0.56	2	4	$2,815,346	8,501	$331
Flor-Kelvin Hwy	SR 79-Quail Run	Maj Art	2.00	2	6	$16,100,116	56,360	$286
Franklin	MR Pkwy-Hunt Hwy	Maj Col	1.49	0	3	$7,743,497	14,706	$527
Main St	SR 287-Butte Rd	Maj Col	0.64	2	4	$2,346,737	9,715	$242
Merrill Ranch Pkwy	Walter Butte-Hunt	Min Art	1.05	0	4	$5,278,773	23,835	$221
Merrill Ranch Pkwy	Hunt Hwy-Felix Rd	Min Art	2.08	0	4	$8,580,556	47,216	$182
Merrill Ranch Pkwy	Felix-Desert Color	Maj Art	1.48	0	6	$15,016,998	52,836	$284
Old Flor-Kelvin Hwy	Butte Ave-Diffen Rd	Min Art	2.34	2	4	$17,320,123	35,521	$488
Poston Butte Pkwy	Desert Color Loop	Min Art	3.10	0	4	$17,864,950	70,370	$254
Poston Butte-Coope	Poston Butte-Hiller	Min Art	0.72	0	4	$6,397,730	16,344	$391
Quail Run Rd	Mayfield-Old F-K Hwy	Min Art	0.60	0	4	$4,156,442	13,620	$305
Ranchview Rd	Valley Farms-Hunt	Min Art	1.76	0	4	$8,848,230	39,952	$221
Ruggles St	Main St-SR 79	Maj Col	0.48	2	4	$1,760,053	7,286	$242
Vah Ki Inn Rd	Fulson Rd-SR 79	Maj Art	0.52	0	6	$3,094,030	18,564	$167
W Canal Rd	Valley Farms-Plant	Min Art	1.95	2	4	$9,803,436	29,601	$331
Walker Butte Pkwy	Christensen-Merrill R	Min Art	2.56	0	4	$15,150,152	58,112	$261
Total						$272,898,002	944,100	$289
x Factor for Reduced ROW/Construction Costs								90%
Estimated Current Average Cost per Vehicle-Mile of Capacity (90%)								$260

Source: Lima & Associates, *Coolidge-Florence Regional Transportation Plan*, April 2008, Table 29; new VMC based on segment lengths, number of lanes and capacities from Table 16.

The cost per service unit is the product of the cost per VMC and the level of service (LOS). The existing LOS is 2.33 VMC per VMT (see Table 18), and this represent the full cost to maintain existing levels of service on the Town's major roadways. The standard consumption-based approach, however, is extremely conservative, and is based on a 1.00 ratio of capacity to demand. Under the standard consumption-based approach, the cost per VMT is the same as the cost per VMC, plus the cost of future impact fee studies per VMT, as shown in Table 24.

Table 24. Road Cost per Service Unit

Cost per Vehicle-Mile of Capacity	$260
x Assumed Capacity/Demand Ratio	1.00
Cost per Vehicle-Mile of Travel	$260
Study Cost per VMT	$1
Total Cost per VMT	$261

Source: Cost per VMC from Table 23; capacity/demand ratio is implicit in the standard consumption-based methodology; study cost per VMT is study cost per EDU from Table 113 divided by VMT per single-family unit from Table 21.

Net Cost per Service Unit

As noted in the Legal Framework section of this report, impact fees should be reduced (or "offset") in order to account for other types of revenues that will be generated by new development and used to fund capacity-expanding improvements of the same type as those to be funded by the impact fees. Cases in which such an offset is warranted include funding of existing deficiencies, outstanding debt payments on existing facilities, and dedicated revenue sources to fund growth-related improvements. The road impact fees calculated in this report are based on a system-wide level of service that is lower than the existing level of service, so there are no existing deficiencies. The Town has no outstanding debt on past road improvements, nor any revenue sources that are dedicated for future capacity-expanding road improvements. Consequently, no offsets against the road impact fee are required based on these criteria.

However, the Arizona impact fee enabling act also requires that new development be given an offset against the impact fees for the value of any "excess" construction contracting excise tax payments beyond that required of most other types of business activities. The Town charges a construction excise tax of 4%, compared to a 2% excise tax rate on other types of business activities. Since the Town does not dedicate construction excise tax revenues for growth-related capital improvements, nor does it allocate them for specific types of capital improvements, there is no rational basis for assigning this offset to specific types of facilities. Nevertheless, State law now requires that such an offset be provided. It would appear to be at the discretion of the Town to determine which fees should be offset to account for the excess construction tax. It is recommended that the Town provide the offset for the excess construction excise tax payments against the road impact fee. Unlike water and wastewater fees, which are not assessed in areas of town that are not served by Town utilities, the road impact fee is assessed against all new development in the town. In addition, the park, fire and police impact fees are not sufficiently large to absorb the offset. Consequently, an offset for the excess construction excise tax is provided against the road impact fees.

To determine the appropriate amount of the offset, data was compiled on total construction excise tax payments for single-family detached units constructed over the five-year period from July 1, 2006 through June 30, 2011 (fiscal years 2007 through 2011). This was divided by the number of single-family permits issued over the same period to determine the average construction excise tax payment per unit. Since the excise tax on construction contracting is twice the rate on other business activities, half of the construction tax is the "excess" payment. This amounts to an average offset of $2,682 per single-family unit, as shown in Table 25. The offset per single-family unit is divided by the VMT per single-family unit to determine the offset of $147 per VMT.

Table 25. Construction Tax Offset per Service Unit

Residential Construction Tax Receipts, FY 06/07-10/11	$7,712,632
÷ New Single-Family Permits Issued, FY 06/07-10/11	1,438
Average Construction Tax per Unit	$5,363
x Percent "Excess" Construction Excise Tax	50%
Construction Excise Tax Offset per Single-Family Unit	$2,682
÷ VMT per Single-Family Unit	18.30
Construction Excise Tax Offset per VMT	$147

Source: Residential construction tax receipts from Town of Florence Finance Department, November 9, 2012; building permits from Town of Florence Planning Department, March 28, 2012; VMT per single-family unit from Table 21.

In addition, an offset should be calculated for the Merrill Ranch Community Facility Districts #1 and #2. Properties in the CFDs are paying property taxes to retire bonds used to construct major roadway improvements in the area. A simple way to calculate an offset is to divide the outstanding bond debt by future service units that will be retiring the debt. Merrill Ranch CFDs #1 and #2 are retiring bonds issued in 2006 and 2010 that were used to fund improvements to major Town roads, including Merrill Ranch Parkway, Hunt Highway, American Way, Constitution Way, Felix Road and Sun City Boulevard. Dividing the amount of outstanding road debt by estimated 2023 service units results in a debt offset of $79 per VMT, as shown in Table 26.

Table 26. Merrill Ranch CFD Debt Offset per Service Unit

Bond Issue	Issue Date	Maturity	Orig. Amt.	Retired	Balance
CFD #1, 2008A Bond Issue	6/28/2006	7/1/2030	$4,390,000	$345,000	$4,045,000
CFD #2, 2010 Bond Issue	11/19/2010	7/15/2035	$3,560,000	$425,000	$3,135,000
Total Debt Principal			$7,950,000	$770,000	$7,180,000
÷ 2023 Merrill Ranch CFD VMT					91,351
Debt Offset per VMT					$79

Source: Debt information from Town of Florence Finance Department, July 30, 2012; 2023 VMT from Table 22.

The offsets per VMT are subtracted from the cost per VMT to determine the net costs per VMT in the Merrill Ranch DFDs and the rest of the town, as shown in Table 27.

Table 27. Road Net Cost per Service Unit

	Merrill Ranch CFD 1 & 2	Rest of Town
Cost per VMT	$261	$261
– Construction Sales Tax Offset per VMT	-$147	-$147
– Community Facility District Offset per VMT	-$79	$0
Net Cost per VMT	$35	$114

Source: Cost per VMT from Table 24; construction sales tax offset per VMT from Table 25; Merrill Ranch CFD offset per VMT from Table 26.

Potential Impact Fees

The maximum road impact fees that may be adopted by the Town based on this study is the product of the number of vehicle-miles of travel (VMT) generated by a unit of development and the net cost per VMT calculated above. The resulting fee schedules for the Merrill Ranch CFDs and the rest of the town are presented in Table 28.

Table 28. Potential Road Impact Fees

Land Use Type	Unit	VMT/ Unit	Net Cost/VMT		Net Cost/Unit	
			Non-CFD	CFD	Non-CFD	CFD
Single-Family Detached	Dwelling	18.30	$114	$35	$2,086	$641
Multi-Family	Dwelling	11.52	$114	$35	$1,313	$403
Commercial	1,000 sq ft	27.55	$114	$35	$3,141	$964
Public/Institutional	1,000 sq ft	15.20	$114	$35	$1,733	$532
Industrial/Warehouse	1,000 sq ft	8.90	$114	$35	$1,015	$312

Source: VMT per unit from Table 21; net cost per VMT from Table 27,

The updated road impact fees are compared to the Town's current fees in Table 29.

Table 29. Comparative Road Impact Fees

Land Use Type	Unit	Current Fee	Updated Fee		Percent Change	
			Non-CFD	CFD	Non-CFD	CFD
Single-Family Detached	Dwelling	$583	$2,086	$641	258%	10%
Multi-Family	Dwelling	$410	$1,313	$403	220%	-2%
Commercial	1,000 sq ft	$2,618	$3,141	$964	20%	-63%
Public/Institutional	1,000 sq ft	$2,618	$1,733	$532	-34%	-80%
Industrial/Warehouse	1,000 sq ft	$425	$1,015	$312	139%	-27%

Source: Current fees from Town of Florence, *Annual Report of Development Impact Fees, Reported as of June 30, 2012*; updated fees from Table 28.

Capital Plan

Potential road impact fee revenue over the next ten years, based on anticipated new development within and outside the Merrill Ranch CFDs, is estimated to be about $9.4 million, as shown in Table 30.

Table 30. Potential Road Impact Fee Revenue, 2013-2023

	Merrill Ranch CFDs	Rest of Town	Total
New VMT, 2013-2023	54,706	65,573	120,279
x Net Cost per VMT	$35	$114	n/a
Potential Revenue, 2013-2023	$1,914,710	$7,475,322	$9,390,032

Source: New VMT from Table 22; net cost per unit from Table 28.

Over the next ten years, the Town has plans to complete approximately $33.6 million in growth-related improvement to the major road system, as summarized in Table 31. Anticipated road impact fee revenues will cover approximately 28% of the total cost of planned improvements. The timing of individual improvements will be dependent on the pace and location of development that actually occurs, and not all of the planned improvements will necessarily be completed in the next ten years. Some of the improvements may be constructed by the CFD or developers in return for offsets or

credits against the road impact fees. The list of projects may also change to reflect changes from anticipated development patterns.

Table 31. Road Capital Plan, 2013-2023

Roadway	From-To	Description	Est. Cost
Main Street Ext	Across River	Planning/feasibility study	$650,000
Florence Hts Rd	Main-SR 79	Improve 2-lane chip seal to minor artial	$2,170,000
Felix Rd	Attaway-AZ Farms	Improve 2-3 lane road, except 1/2-rd impmts	$2,385,000
SR 79B/SR 287	Roundabout	Roundabout	$2,150,000
Diversion Dam Rd	SR 79-Bowling Rd	2-ln chip seal to minor arterial w/signalization	$1,559,000
Desert Color Pkwy	Hunt-Felix Rd	Minor arterial, ph 1	$1,298,000
Hunt Hwy/SR 79	Intersection	Turn lanes & signalization	$1,334,000
AZ Farms Rd	Felix-ETL	Complete 1/2-rd adj to Co area to min art (n half)	$2,806,000
Attaway	Palmer-Hunt	Complete 1/2-rd adj to Co area to major arterial	$3,577,000
Adamsville Rd	Central-Cent Park	Drain imp, ped access & imp to min art	$796,000
Walker-Butte	Franklin to Tn Lmts	New minor art for init ph assoc w/project	$4,400,000
Adamsville Rd	Main-Central	Imp drain, ped acces & imp to minor arterial	$2,000,000
Centennial Park Av	SR 287-Butte	New major collector	$1,827,000
W Canal Rd	Vally Farms-1 mi E	New road	$2,200,000
Flor-Kelvin Hwy	SR 79-Quail Run	Major arterial	$1,724,000
Hunt Hwy	TL to Comm Fac. Area	Access control for CFA and emer signalization	$355,000
Signalization	As Warranted	Arterial/arterial or arterial/major collector ints.	$2,325,000
Road Impact Fee Studies (2)			$25,458
Total			$33,581,458

Source: Town of Florence, May 24, 2012; road impact fee study cost from Table 112.

PARKS

The Town provides a number of public park facilities for the benefit of residents. This section calculates updated park impact fees.

Service Units

The demand for Town park facilities is generated by people, including both residents and employees. Non-resident employees may make use of Town parks during breaks, before or after work, or when participating in company-sponsored events. The number of people associated with a multi-family unit or 1,000 square feet of nonresidential building are divided by the number of people associated with a single-family dwelling to determine park equivalent dwelling unit (EDU) multipliers for each land use type.

The best available data on average household size by housing type is still the 2000 Census. The 2000 Census recorded information on occupied housing units and residents for 16.7% of the dwelling units in the Town. The Census Bureau has since restricted such data to 1% annual samples, and the most recent compilation of such data is a 5% sample from the last five years (2006 through 2010). Since Florence has only an estimated 528 multi-family units, a 5% sample would include only about 26 such units, which would have a very large margin of error. Consequently, average household sizes are based on 2000 Census data, as summarized in Table 32.

Table 32. Average Household Size

Housing Type	Household Population	Households	Average HH Size
Single-Family Detached	4,401	1,777	2.48
Multi-Family	849	422	2.01

Source: 2000 U.S. Census, SF-3 (1-in-6 sample data).

A single-family home is by definition one park service unit (equivalent dwelling unit or EDU). The numbers of service units associated with a multi-family unit or 1,000 square feet of nonresidential building floor area are determined by dividing the number of persons by the average household size of a single-family unit (2.48 people). The resulting service unit multipliers are presented in Table 33.

Table 33. Park Service Unit Multipliers

Land Use	Unit	Pop./Emp. per Unit	Occupancy Factor	Occupants/ Unit	EDUs/ Unit
Single-Family Detached	Dwelling	2.48	1.00	2.48	1.00
Multi-Family	Dwelling	2.01	1.00	2.01	0.81
Commercial	1,000 sf	1.23	0.24	0.30	0.12
Industrial/Warehouse	1,000 sf	0.91	0.24	0.22	0.09
Public/Institutional	1,000 sf	1.40	0.24	0.34	0.14

Source: Population per dwelling unit is average household size from Table 32; employment per 1,000 square feet from Table 14 (commercial based on retail, public/institutional based on prison); occupancy factor for nonresidential uses based on ratio of typical 40-hour work week to 168 total hours per week.

The number of service units in an area can be determined by multiplying the number of development units (housing units and 1,000 square feet of nonresidential) by the service unit multipliers for each land use type and summing for the area. Existing and projected service units (EDUs) in the park service area and town-wide are calculated in Table 34.

Table 34. Park Service Units, 2013-2023

Land Use	Dev't Unit	Dev't Units 2013	Dev't Units 2023	EDUs/ Unit	EDUs 2013	EDUs 2023
Park Service Area						
Single-Family Detached	Dwelling	1,324	1,674	1.00	1,324	1,674
Multi-Family	Dwelling	528	528	0.81	428	428
Commercial	1,000 sf	772	2,214	0.12	93	266
Industrial/Warehouse	1,000 sf	514	514	0.09	46	46
Public/Institutional	1,000 sf	3,979	4,264	0.14	557	597
Total, Park Service Area					2,448	3,011
Town-Wide						
Single-Family Detached	Dwelling	5,098	7,978	1.00	5,098	7,978
Multi-Family	Dwelling	528	528	0.81	428	428
Commercial	1,000 sf	924	3,175	0.12	111	381
Industrial/Warehouse	1,000 sf	565	703	0.09	51	63
Public/Institutional	1,000 sf	4,068	4,353	0.14	570	609
Total, Town-Wide					6,258	9,459

Source: Development units from Table 10 and Table 15; EDUs per unit from Table 33/ EDUs is product of development units and EDUs per unt.

Cost per Service Unit

SB 1525 limits park impact fees to "neighborhood parks," an undefined term that excludes parks larger than 30 acres in size, unless a larger park can be shown to provide a "direct benefit" to development. SB 1525 also excludes a number of park improvements from being funded with park impact fees, including "that portion of any facility that is used for amusement parks, aquariums, aquatic centers, auditoriums, arenas, arts and cultural facilities, bandstand and orchestra facilities, bathhouses, boathouses, clubhouses, community centers greater than three thousand square feet in floor area, environmental education centers, equestrian facilities, golf course facilities, greenhouses, lakes, museums, theme parks, water reclamation or riparian areas, wetlands, zoo facilities or similar recreational facilities, but may include swimming pools." Since the Aero Modeler Park and rodeo grounds could be construed to fall within a prohibited category, those facilities will be excluded in determining the existing level of service.

In general, impact fees should be based on the current level of service being provided to existing development. All of the Town's existing parks are located in the proposed park service area. The inventory of existing eligible park facilities in the park service area is provided in Table 35.

Table 35. Existing Park Facilities

Improvement	Heritage	Little League	Main Street	Jacques Square	Arriola Square	Poston Butte*	Total
Land (acres)	25.17	1.75	1.25	0.25	0.25	30.00	58.67
Parking Spaces	200	0	15	10	12	0	237
Restrooms	1	1	0	1	0	0	3
Basketball Courts w/lighting	2	0	0	0	0	0	2
Picnic Ramadas	5	0	3	0	0	0	8
Picnic Tables	0	0	8	0	0	0	8
Volleyball Courts	1	0	0	0	0	0	1
Softball Fields w/lighting	3	0	0	0	0	0	3
Baseball Fields w/lighting	1	0	0	0	0	0	1
Soccer Fields	1	0	0	0	0	0	1
Play Structures w/shade	2	0	0	0	0	0	2
Park Benches	0	3	0	2	4	0	9
Bleachers (25')	0	2	0	0	0	0	2
Dugouts	0	2	0	0	0	0	2
Scoreboards	0	1	0	0	0	0	1

* eligible 30 acres of 160-acre site

Source: Town of Florence Parks Department, December 8, 2011; Duncan Associates.

The replacement cost of existing facilities in the park service area can be determined based on current unit costs. Park land costs are estimated to be $30,000 per acre. This is lower than the $40,000 per acre cost used in the 2007 impact fee study, and it is likely to be conservative. The Town purchased the 30.45-acre Giles property across the street from the Town Hall in 2007 for $1,370,700, or $45,015 per acre. Road right-of-way dedicated to the Town by Pulte Homes and Anthem in 2007-2009 was valued by the developer at an average of $47,935 per acre. Unit costs for park amenities were drawn from actual recent purchases from the Town's fixed asset listings, adjusted for inflation, from Town Parks Department staff and from the consultant's experience. The total replacement value of existing park land and facilities serving the park service area is estimated to be about $3.36 million, as shown in Table 36.

Table 36. Existing Park Facility Replacement Costs

Improvement	Units	Unit Cost	Total Cost
Park Land (acres)	58.67	$30,000	$1,760,100
Parking Spaces	237	$2,500	$592,500
Restrooms	3	$22,000	$66,000
Basketball Courts w/lighting	2	$65,000	$130,000
Picnic Ramadas	8	$5,000	$40,000
Picnic Tables	8	$4,000	$32,000
Volleyball Courts	1	$60,000	$60,000
Softball Fields (fencing/lighting)	3	$96,000	$288,000
Baseball Fields (fencing/lighting)	1	$96,000	$96,000
Soccer Fields	1	$96,000	$96,000
Play Structures w/shade	2	$76,754	$153,508
Park Benches	9	$1,627	$14,640
Bleachers (25')	2	$4,000	$8,000
Dugouts	2	$9,000	$18,000
Scoreboards	1	$4,000	$4,000
Total			$3,358,748

Source: Units from Table 35; unit costs from Town of Florence Parks Department, Town of Florence fixed asset listings and Duncan Associates.

The existing level of service in the park service area can be expressed in terms of current cost per service unit, as shown in Table 37.

Table 37. Existing Park Level of Service, Park Service Area

Total Existing Park Value, Park Service Area	$3,358,748
÷ Existing Park EDUs, Park Service Area	2,448
Existing Cost per EDU, Park Service Area	$1,372

Source: Total park value from Table 36; existing EDUs in the park service area from Table 34.

Net Cost per Service Unit

As noted in the Legal Framework section of this report, impact fees should be reduced (or "offset") in order to account for other types of revenues that will be generated by new development and used to fund capacity-expanding improvements of the same type as those to be funded by the impact fees. Cases in which such an offset is warranted include funding of existing deficiencies, outstanding debt payments on existing facilities, and dedicated revenue sources to fund growth-related improvements. The Town has no outstanding debt on past park improvements, nor any revenue sources that are dedicated for future capacity-expanding park improvements. The Town has not received any grant funding for parks in the last five years, and has no reasonable expectation of future grant funding. Since the fees are based on the existing level of service for the park service area, there are no deficiencies. Consequently, no offsets against the park impact fee are required based on these criteria, and the net cost per service unit is the same as the cost per service unit calculated above, plus the cost per service unit for future impact fee studies.

Table 38. Park Net Cost per Service Unit

Existing Park Cost per EDU	$1,372
Park Impact Fee Study Cost per EDU	$45
Park Net Cost per EDU	$1,417

Source: Cost per EDU from Table 37; study cost from Table 113.

Potential Impact Fees

The maximum park impact fees that may be adopted by the Town based on this study is the product of the number of service units generated by a unit of development and the net cost per service unit calculated above. The resulting fee schedule is presented in Table 39.

Table 39. Potential Park Impact Fees, Park Service Area

Land Use Type	Unit	EDUs/ Unit	Net Cost/ EDU	Net Cost/ Unit
Single-Family Detached	Dwelling	1.00	$1,417	$1,417
Multi-Family	Dwelling	0.81	$1,417	$1,148
Commercial	1,000 sq ft	0.12	$1,417	$170
Public/Institutional	1,000 sq ft	0.14	$1,417	$198
Industrial/Warehouse	1,000 sq ft	0.09	$1,417	$128

Source: EDUs per unit from Table 33; net cost per EDU from Table 38.

The updated park fees are compared to current fees in Table 40. It should be noted that park fees outside the park service area would be eliminated when the updated fees are adopted.

Table 40. Comparative Park Impact Fees

Land Use Type	Unit	Current Fee	Updated Fee*	Percent Change
Single-Family Detached	Dwelling	$857	$1,417	65%
Multi-Family	Dwelling	$617	$1,148	86%
Commercial	1,000 sq ft	$162	$170	5%
Public/Institutional	1,000 sq ft	$162	$198	22%
Industrial/Warehouse	1,000 sq ft	$92	$128	39%

* applies to park service area only

Source: Current fee from Town of Florence, *Annual Report of Development Impact Fees, Reported as of June 30, 2012*; updated fees from Table 39.

Capital Plan

Potential park impact fee revenue over the next ten years, based on anticipated new development in the park service area, is estimated to be about $0.80 million, as shown in Table 41.

Table 41. Potential Park Impact Fee Revenue, 2013-2023

New EDUs, Park Service Area, 2013-2023	563
x Net Cost per EDU	$1,417
Projected Impact Fee Revenue	$797,771

Source: New EDUs from Table 34; net cost per EDU from Table 38.

Over the next ten years, the Town plans to construct a new community center and provide new playground equipment in Main Street Park, as shown in Table 42. However, the timing of individual improvements will be dependent on the pace and location of development that actually occurs, and not all of the planned improvements will necessarily be completed in the next ten years. Anticipated impact fees will cover approximately 64% of eligible planned costs.

Table 42. Park Capital Plan, 2013-2023

	Total Cost	Eligible Cost
New 40,000 sq. ft. Community Center*	$14,607,055	$1,095,529
Main Street Park Playground Equipment	$125,000	$125,000
Park Impact Fee Studies (2)	$25,458	$25,458
Total	$14,757,513	$1,245,987

* Eligible share is 3,000 square feet of 40,000 sq. ft. building

Source: Town of Florence, May 22, 2012; study cost from Table 112.

LIBRARY

The Town suspended its library impact fee on January 1, 2012, because it was no longer authorized as originally calculated under revisions to State law that went into effect on that date. This section calculates a potential library impact fee for the Town.

Service Units

In the Town's 2007 impact fee study, the service unit for libraries was defined in terms of service population, in which a resident was counted as a full person and a worker was counted as 0.19 persons. The weighting factor for workers was derived from a library usage study conducted by the City of Phoenix in 1998.

An alternative to the use of population as the service unit for library impact fees is equivalent dwelling units, or EDUs. An EDU represents the demand for library facilities from a typical single-family dwelling unit, based on average household size. Using EDUs as the service unit has the advantage of eliminating the effects of occupancy rates, which can change significantly over time. Multi-family dwelling units typically represent a fraction of an EDU, since they typically have fewer occupants per unit. Rather than relying on a 14-year-old study conducted in Phoenix, nonresidential development could be converted into EDUs based on the 0.24 factor for workers used in the 2007 study for parks (based on the ratio of a typical 40-hour work week to 168 total hours per week). This approach is retained for the updated park fees, and is used for the updated library fees as well.

The demand for library facilities is generated by people, including both residents and employees. Non-resident employees may make use of library facilities during breaks, for work-related purposes or before or after work. The number of people associated with a multi-family unit or 1,000 square feet of nonresidential building are divided by the number of people associated with a single-family dwelling to determine park equivalent dwelling unit (EDU) multipliers for each land use type. The service unit multipliers by land use for libraries are the same as for parks (see previous section).

Cost per Service Unit

SB 1525 prohibits the use of impact fees after January 1, 2012 for libraries over 10,000 square feet that do not provide a direct benefit, or for "equipment, vehicles or appurtenances." Presumably appurtenances would include books, furniture and fixtures. The League of Cities and Towns is interpreting the size threshold to allow cities to pay for the first 10,000 square feet of a library with impact fees.

The Town does not currently own a library facility, but provides library services out of the high school. The 2007 study calculated the fee using a standards-based methodology, based on the existing level of service. The study divided the cost of existing vehicles, equipment and books owned by the Town by the existing service units to determine the cost per service unit. Since none of these capital items are currently eligible for library impact fees, it was not possible to recalculate an impact fee for adoption by January 1, 2012 based on the previous study. However, a new library impact fee can now be calculated that would be consistent with SB 1525.

The Town plans to construct a library building of approximately 35,000 square feet. The Town has purchased a parcel of land near the Town Hall that it plans to use for several facilities, including a library. While the Town-owned library books and equipment are no longer impact fee eligible, the portion of the cost of the land that is attributable to 10,000 square feet of the planned library building is eligible and could be used as the basis to determine the existing LOS. However, since the property was purchased with loan proceeds, there is very little equity in the property. If the full value of the land attributable to the library is used as the basis of the LOS, an offset for the outstanding debt would need to be calculated, offsetting most of the fee amount. Consequently, basing the fees on the existing level of service, whether only on the equity amount or on the full value less an offset for the outstanding debt, will likely result in very low library impact fees. The alternative is to base the library fees on a future level of service, with a plan to fund the deficiency and with an offset provided for the portion of the deficiency that would be paid by future development.

The Town estimates is that the planned library will cost per square foot for architectural/engineering fees and construction (excluding furniture, fixtures and equipment, which are not eligible for impact fees), based on the average cost for libraries built in Arizona over the last four years, as shown in Table 43.

Table 43. Library Cost per Square Foot

Year	City	Construction Cost	Gross Sq. Feet	Cost per Sq. Foot
2008	Scottsdale	$7,771,987	20,000	$389
2008	Tucson (Marana)	$5,251,000	20,000	$263
2008	Tucson	$1,300,000	5,000	$260
2008	Wellton	$2,200,000	8,675	$254
Average Cost per Sq. Ft., 2008				$291
	Peoria	$8,470,000	22,500	$376
2009	Phoenix	$8,189,340	25,000	$328
2009	Phoenix	$5,409,950	12,400	$436
2009	Queen Creek	$13,695,733	47,000	$291
2009	Yuma	$5,200,000	22,398	$232
2009	Yuma	$18,042,381	79,491	$227
Average Cost per Sq. Ft., 2009				$315
2010	Prescott Valley	$17,650,000	55,000	$321
2010	Scottsdale	$7,265,000	21,000	$346
Average Cost per Sq. Ft., 2010				$333
2011	Phoenix	$16,821,504	53,500	$314
2011	Waddell	$8,686,984	29,000	$300
Average Cost per Sq. Ft., 2011				$307
Average Cost per Sq. Ft., 2008-2011				$310

Source: Town library staff, based on data from the *Library Journal*.

If the Town is to reinstate the collection of library impact fees, it will need to construct an eligible facility (up to 10,000 square feet) within ten years. Based on projected growth in the land use assumptions, this would result in a level of service of $328 per EDU by 2023 (see Table 44 below). Assuming that the Town uses its current library impact fee account balance for this purpose, the

Town would need to commit about $1.26 million in non-impact fee funds to fund the construction of the library.

Table 44. Library Level of Service and Deficiency Cost

Impact Fee Eligible Square Feet	10,000
x Construction Cost per Square Foot	$310
Impact Fee Eligible Cost	$3,100,000
÷ 2023 Town-Wide EDUs	9,459
2023 LOS (Cost per EDU)	$328
x Town-Wide 2013 EDUs	6,258
Potential Deficiency Cost	$2,052,624
– Existing Library Impact Fee Fund Balance	-$792,122
Unfunded Deficiency Cost	$1,260,502

Source: Construction cost per square foot from Table 43; 2013 and 2023 town-wide EDUs from Table 34; existing park impact fee fund balance as of June 30, 2010 from Florence Finance Director, July 26, 2012.

Net Cost per Service Unit

As noted in the Legal Framework section of this report, impact fees should be reduced (or "offset") in order to account for other types of revenues that will be generated by new development and used to fund capacity-expanding improvements of the same type as those to be funded by the impact fees. Cases in which such an offset is warranted include funding of existing deficiencies, outstanding debt payments on existing facilities, and dedicated revenue sources to fund growth-related improvements. The Town has no outstanding debt on past library improvements, although it does have debt on the Giles property, a portion of which may be used for a future library. However, since it is not known how much of the land may be used for a library, no land costs have been included in the fee calculations. The Town does not have any revenue sources that are dedicated for future capacity-expanding library improvements. Consequently, no offsets against the library impact fees are required based on these two criteria.

Since the Town does not currently have a Town-owned library building to serve existing residents, there is an existing deficiency. Since the unfunded portion of the deficiency will be funded from non-impact fee revenue generated by all development in the Town, a revenue offset should be provided. The simplest way to calculate such an offset is to divide the unfunded deficiency amount by the number of future town-wide service units. More complicated techniques could be used to calculate a somewhat lower offset, based on growth projections and assumptions about how the deficiency would be funded over time, but the simpler, more conservative approach is used here.

Table 45. Library Deficiency Offset per Service Unit

Unfunded Deficiency Amount	$1,260,502
÷ 2023 Town-Wide EDUs	9,459
Deficiency Offset per EDU	$133

Source: Unfunded deficiency amount from Table 44; 2023 EDUs from Table 34.

The cost per EDU is the sum of the future improvement cost per EDU and the cost of library impact fee studies required over the next ten years per EDU. The net cost per EDU is determined

by subtracting the deficiency offset, resulting in a net cost of $203 per service unit, as shown in Table 46.

Table 46. Library Net Cost per Service Unit

Future Cost per EDU	$328
Study Cost per EDU	$8
– Deficiency Offset per EDU	-$133
Net Cost per EDU	$203

Source: Future cost per EDU from Table 44; existing EDUs from Table 34.

Potential Impact Fees

The maximum library impact fees that may be adopted by the Town based on this study is the product of the number of service units generated by a unit of development and the net cost per service unit calculated above. The resulting fee schedule is presented in Table 47.

Table 47. Potential Library Impact Fees

Land Use Type	Unit	EDUs/ Unit	Net Cost/ EDU	Net Cost/ Unit
Single-Family Detached	Dwelling	1.00	$203	$203
Multi-Family	Dwelling	0.81	$203	$164
Commercial	1,000 sq ft	0.12	$203	$24
Public/Institutional	1,000 sq ft	0.14	$203	$28
Industrial/Warehouse	1,000 sq ft	0.09	$203	$18

Source: EDUs per unit from Table 33; net cost per EDU from Table 46.

Table 48 compares the library impact fees that were in place prior to January 1, 2012 with the updated library fees.

Table 48. Comparative Library Fees

Land Use Type	Unit	Previous Fee	Updated Fee	Percent Change
Single-Family Detached	Dwelling	$407	$203	-50%
Multi-Family	Dwelling	$293	$164	-44%
Commercial	1,000 sq ft	$60	$24	-60%
Public/Institutional	1,000 sq ft	$60	$28	-53%
Industrial/Warehouse	1,000 sq ft	$34	$18	-47%

Source: Previous fees from Town of Florence, *Annual Report of Development Impact Fees, Reported as of June 30, 2012*; updated fees from Table 47.

Capital Plan

Potential library impact fee revenue over the next ten years, based on anticipated new development, is estimated to be about $0.65 million, as shown in Table 49.

Table 49. Potential Library Impact Fee Revenue, 2013-2023

New EDUs, 2013-2023	3,201
x Net Cost per EDU	$203
Projected Impact Fee Revenue	$649,803

Source: New EDUs from Table 34; net cost per EDU from Table 46.

Anticipated costs and revenues for a new 10,000 square foot library building over the next ten years are summarized in Table 50 (the sum of costs and revenues do not quite match due to rounding). In order to achieve the future level of service on which the fees are based, it will be necessary for the Town to use the current $0.79 million library impact fee account balance to partially address the existing deficiency. In addition, the Town will need to identify $1.68 million in additional, non-impact fee revenue to fund the rest of the existing deficiency, as well as to supplement impact fees in order to make up for the impact fee revenue lost due to the deficiency offset.

Table 50. Library Costs and Revenues, 2013-2023

New EDUs, 2013-2023	3,201
x Cost per EDU	$328
Growth Cost, 2013-2023	$1,049,928
Existing Deficiency Cost	$2,052,624
Study Cost	$25,458
Total Cost, 2013-2023	$3,128,010
Anticipated Future Impact Fee Revenue	$649,803
Existing Impact Fee Account Balance	$792,122
Non-Impact Fee Funding Needed	$1,683,533
Projected Revenue	$3,125,458

Source: New EDUs Table 34; cost per EDU, existing deficiency cost and impact fee account balance from Table 44; anticipated impact fee revenue from Table 49; non-impact fee funding is difference between total costs and other projected revenue.

Over the next ten years, the Town plans to construct a new library of at least 10,000 square feet. It is estimated that the portion of the future library eligible for impact fee funding (10,000 square feet) will cost approximately $3.1 million to construct. Library impact fees are anticipated to cover approximately 21% of the eligible costs.

Table 51. Library Capital Plan, 2013-2023

New 10,000 Sq. Ft. Library	$3,100,000
Library Impact Fee Studies (2)	$25,458
Total	$3,125,458

Source: Library cost from Table 44; study cost from Table 112.

FIRE

The Town provides fire protection service throughout the town from two existing fire stations – one located in downtown Florence and the other in the Merrill Ranch area. This section calculates updated fire impact fees.

Service Units

The two most common methodologies used in calculating public safety (fire and police) service units and impact fees are the "calls-for-service" approach and the "functional population" approach. The 2007 study used a less common approach, which relied on limited residential-versus-nonresidential call data from one year to weight workers as the equivalent of 0.73 persons. The consultant's experience is that fees based on call data will fluctuate significantly between updates because the distribution of calls is relatively unstable over time, especially for smaller communities.

This update utilizes the "functional population" approach to calculate and assess the fire impact fees. This approach is a generally-accepted methodology for both fire and police impact fee types, and is based on the observation that demand for public safety facilities tends to be proportional to the presence of people. This approach generates service unit multipliers that are similar to those based on call data, but are more stable over time.[2]

The service unit for the fire and police impact fee updates is an Equivalent Dwelling Unit, or EDU. The functional population-based multipliers by land use type for fire and police impact fees are converted into EDUs. The description of the functional population methodology, the calculation of the service unit multipliers and the determination of existing and projected fire and police service units are presented in Appendix B.

Cost per Service Unit

The cost per service unit to provide fire protection to new development is based on the existing level of service provided to existing development. The level of service is quantified as the ratio of the replacement cost of existing fire capital facilities to existing fire service units.

The Town has two existing fire stations, as summarized in Table 52. While the Anthem station is currently in a temporary building, funding is in place and construction will be completed by October 2013, so it is appropriately included in the existing level of service.

Table 52. Existing Fire Facilities

Facility	Acres	Sq. Ft.
Fire Station # 1 (Central)	2.39	10,000
Fire Station # 2 (Anthem)	3.00	12,000
Total	5.39	22,000

Source: Town of Florence, November 9, 2012.

[2] See Clancy Mullen, *Fire and Police Demand Multipliers: Calls-for-Service versus Functional Population*, proceedings of the National Impact Fee Roundtable, Arlington, VA, October 5, 2006 http://growthandinfrastructure.org/proceedings/2006_proceedings/fire%20police%20multipliers.pdf

The permanent Anthem fire station is estimated to cost $2.5 million to build. The building will cost about $206 per square foot, as shown in Table 53.

Table 53. Fire Station Cost per Square Foot

Grading Engineering	$90,000
CLOMAR	$5,000
Grading Engineering	$100,000
Project Management	$140,000
Civil Engineering	$25,000
Geo Tech	$10,000
Survey	$10,000
Station Design	$150,000
Construction	$1,500,000
Inspection	$20,000
Permits	$50,000
Off Site Improvements	$275,000
Contingency	$100,000
Total	$2,475,000
÷ Building Square Feet	12,000
Fire Station Cost per Square Foot	$206

Source: Town of Florence, October 15, 2012.

The replacement cost of existing fire equipment is based on original purchase price, inflated to current dollars, as shown in Table 54.

Table 54. Existing Fire Equipment Cost

Equipment	Year	Original Cost	Inflation Factor	Current Cost	Eligible Cost
Mobile Mini Storage Unit	1999	$6,981	1.374	$9,592	$9,592
Air Bag Lift Syst (136-ton)	2000	$5,318	1.326	$7,052	$7,052
12-Lead Biphasic Monitor	2001	$23,489	1.291	$30,324	$30,324
2001/02 New Fire Sta-FFE	2001	$69,196	1.291	$89,332	$0
AMKUS Extrication Tool	2002	$14,168	1.272	$18,022	$18,022
Exercise Equipment	2003	$20,602	1.246	$25,670	$0
Thermal Imaging Camera	2005	$9,529	1.172	$11,168	$11,168
Light Tower Trailer	2005	$10,497	1.172	$12,302	$12,302
Air/Light Trailer	2006	$64,050	1.126	$72,120	$72,120
Extrication Tool	2007	$19,977	1.100	$21,975	$21,975
Thermal Imaging Camera	2007	$7,469	1.100	$8,216	$8,216
Debibrillator/Heart Monitor	2007	$15,568	1.100	$17,125	$17,125
Voice Data System Station	2007	$33,465	1.100	$36,812	$36,812
Emergency Generators	2008	$276,648	1.042	$288,267	$288,267
Zoll Heart Monitor	2008	$16,826	1.042	$17,533	$17,533
Wireless Upgrade-Anthem	2008	$11,655	1.042	$12,145	$12,145
Mask Tester	2010	$7,894	1.051	$8,297	$8,297
Heart Monitor for Engine 549	2010	$19,135	1.051	$20,111	$20,111
Verticon Breathing Appar	2011	$37,065	1.014	$37,584	$37,584
Posi Tester	n/a	$12,000	1.000	$12,000	$12,000
Turnout Gear	n/a	$52,500	1.000	$52,500	$52,500
Self-Contained Breathing App	n/a	$10,500	1.000	$10,500	$10,500
Access Control System	n/a	$6,108	1.000	$6,108	$6,108
Helicopter Landing Pad	n/a	$40,000	1.000	$40,000	$0
Total		$790,640		$864,755	$709,753

Source: Fixed Asset Listings, Year End October 31, 2011, November 10, 2011 and Fire Department, October 31, 2012; inflation factor is ratio of Consumer Price Index for July 2012 to July of acquisition year.

As with equipment, the replacement cost of existing fire apparatus and vehicles is based on original purchase price, inflated to current dollars, as shown in Table 55.

Table 55. Existing Fire Vehicle Cost

Vehicle	Year	Original Cost	Inflation Factor	Current Cost
1996 Ferrera Fire Truck	1996	$168,818	1.459	$246,305
1998 Pierce Fire Truck	1998	$438,869	1.404	$616,172
2002 Pierce Fire Truck #126	2002	$213,150	1.272	$271,127
2005 Ford S-Duty F45	2005	$42,578	1.172	$49,901
Ford Super Duty F-550	2006	$88,340	1.126	$99,471
2004 Ford F-150 Truck (Used)	2008	$10,650	1.042	$11,097
2007 Chev G3500 AEV Trauma	2008	$115,676	1.064	$123,079
1987 Ford Water Tender (Used)	2011	$13,500	1.014	$13,689
2012 Ford F-150 FWD	2012	$37,511	1.000	$37,511
2012 Pierce Velocity Pumper Fire Engine	2012	$670,000	1.000	$670,000
Total		$1,799,092		$2,138,352

Source: Fixed Asset Listings, Year End October 31, 2011, November 10, 2011 and Fire Department, October 31, 2012; inflation factor is ratio of Consumer Price Index for July 2012 to July of acquisition year.

The Town's existing fire facilities have a total estimated replacement cost of $7.54 million, as summarized in Table 56. Dividing the total cost of existing capital facilities and equipment by the existing number of service units (EDUs) results in a cost of $1,026 per EDU.

Table 56. Existing Fire Cost per Service Unit

	Existing Units	Unit Cost	Total Cost
Fire Station Land (acres)	5.39	$30,000	$161,700
Fire Station Building (square feet)	22,000	$206	$4,532,000
Fire Vehicles			$2,138,352
Fire Equipment			$709,753
Total Existing Fire Facility Value			$7,541,805
Current Fire Impact Fee Account Balance			$1,691,836
Total Current Fire Capital Investment			$9,233,641
÷ Existing Town-Wide EDUs			9,000
Cost per EDU			$1,026

Source: Existing acres and building square feet from Table 52; land value per acre same as park cost per acre from Table 36; building cost per square foot from Table 53; vehicle cost from Table 55; equipment cost from Table 54; existing EDUs from Table 110.

Net Cost per Service Unit

As noted in the Legal Framework section of this report, impact fees should be reduced (or "offset") in order to account for other types of revenues that will be generated by new development and used to fund capacity-expanding improvements of the same type as those to be funded by the impact fees. Cases in which such an offset is warranted include funding of existing deficiencies, outstanding debt payments on existing facilities, and dedicated revenue sources to fund growth-related improvements. There are no existing deficiencies, since the fees are based on the existing town-wide level of service, and the Town does not have any revenue sources that are dedicated for future capacity-expanding fire improvements. While the Town has no town-wide debt on past fire improvements, it has issued bonds via the Merrill Ranch Community Facilities Districts to help fund the construction of the permanent Anthem fire station. Consequently, fire impact fees in the Merrill Ranch CFDs should be reduced to take into account that new development in that area will be paying a portion of its share of fire capital costs through CFD property taxes. The amount of the offset is calculated by dividing the amount of the CFD debt by the projected future service units that will be paying off the debt, as shown in Table 57.

Table 57. Fire CFD Debt Offset

Bond Issue	Amount
CFD #1 Bond Issue	$900,000
CFD #2 Bond Issue	$500,000
Total Debt Principal	$1,400,000
÷ 2023 Merrill Ranch EDUs	4,511
Debt Offset per EDU	$310

Source: CFD debt issues from Town of Florence, November 9, 2012; 2023 EDUs from Table 111.

The Town has received some grant funding for fire facilities over the last five years. Federal, State and tribal grants for the types of facilities and equipment included in calculating the existing level of service are summarized in Table 58. Over the last five years, the Town received an average of

$74,144 in Federal, State and tribal grants. Offsets against impact fees for grant funding are not required. Grant funding is not generated by new development, allows the Town to raise the level of service for existing development, and is not guaranteed for the future. Nevertheless, an offset will be provided for potential grant funding, based on the assumption that future grants will follow the historical trend.

Table 58. Fire Grant Funding Offset

Fiscal Year	Grant	Description	Source	Amount
2007-08	None	n/a	n/a	$0
2008-09	2009 GOHS	Extrication Equipment	State	$11,425
2008-09	2006 SSP Grant	Firetruck and EMS vehicle	Federal	$300,000
2009-10	2009 GOHS	Extrication Equipment	Federal	$19,794
2009-10	FEMA-AFG	Mask Fit Tester	Federal	$8,000
2010-11	None	n/a	n/a	$0
2011-12	Gila River Indian Comm. Gaming Grant	Public Safety Vehicles (1 fire)	Tribal	$31,500
Total Five-Year Funding				$370,719
÷ Years				5
Annual Historical Funding				$74,144
÷ Existing EDUs				9,000
Annual Funding per EDU				$8
x Present Value Factor (20 Years)				14.24
Grant Funding Credit per EDU				$114

Source: Historical grant funding from Town Finance Department, November 9, 2012; existing EDUs from Table 110; present value factor based on discount rate of 3.48%, which is the December 2012 average interest rate on state and local bonds from the U.S. Federal Reserve at http://www.federalreserve.gov/datadownload/Build.aspx?rel=H15.

The cost of future fire impact fee studies must be added to the facility and equipment costs. The offset for future CFD debt service payments is subtracted to determine the net cost per service unit in the Merrill Ranch CFDs. The grant funding offset is subtracted from the cost per service unit for all areas. The net costs per service unit are shown in Table 59.

Table 59. Fire Net Cost per Service Unit

	Merrill Ranch CFD 1 & 2	Rest of Town
Cost per EDU	$1,026	$1,026
Fire Impact Fee Study Cost per EDU	$5	$5
– Community Facility District Offset per EDU	-$310	$0
– Grant Funding Offset per EDU	-$114	-$114
Net Cost per EDU	$607	$917

Source: Cost per EDU from Table 56; study cost from Table 112; CFD offset from Table 57; grant funding offset from Table 58.

Potential Impact Fees

The maximum fire impact fees that may be adopted by the Town based on this study is the product of the number of service units generated by a unit of development and the net cost per service unit calculated above. The resulting fee schedules for the areas within and outside of the Merrill Ranch community facilities districts are presented in Table 60.

Table 60. Potential Fire Impact Fees

Land Use	Unit	EDUs/ Unit	Net Cost/EDU		Net Cost/Unit	
			Non-CFD	CFD	Non-CFD	CFD
Single-Family Detached/MH	Dwelling	1.00	$917	$607	$917	$607
Multi-Family	Dwelling	0.81	$917	$607	$743	$492
Commercial	1,000 sq. ft.	0.72	$917	$607	$660	$437
Public/Institutional	1,000 sq. ft.	0.66	$917	$607	$605	$401
Industrial/Warehouse	1,000 sq. ft.	0.22	$917	$607	$202	$134

Source: EDUs per unit from Table 109; net cost per EDU from Table 59.

Table 61 compares the current fire impact fees with the updated fire impact fees.

Table 61. Comparative Fire Fees

Land Use	Unit	Current Fee	Updated Fee		Percent Change	
			Non-CFD	CFD	Non-CFD	CFD
Single-Family Detached/MH	Dwelling	$1,096	$917	$607	-16%	-45%
Multi-Family	Dwelling	$788	$743	$492	-6%	-38%
Retail/Commercial	1,000 sq. ft.	$629	$660	$437	5%	-31%
Public/Institutional	1,000 sq. ft.	$629	$605	$401	-4%	-36%
Industrial/Warehouse	1,000 sq. ft.	$362	$202	$134	-44%	-63%

Source: Current fees from Town of Florence, *Annual Report of Development Impact Fees, Reported as of June 30, 2012*; updated fees from Table 60.

Capital Plan

Potential fire impact fee revenue over the next ten years, based on anticipated new development, is estimated to be about $3.5 million, as shown in Table 62.

Table 62. Potential Fire Impact Fee Revenue, 2013-2023

Land Use Type	Unit	New Units	Net Cost/ Unit	Potential Revenue
Single-Family Detached	Dwelling	630	$917	$577,710
Multi-Family	Dwelling	0	$743	$0
Commercial	1,000 sq ft	1,798	$660	$1,186,680
Public/Institutional	1,000 sq ft	285	$605	$172,425
Industrial/Warehouse	1,000 sq ft	20	$202	$4,040
Subtotal, Outside Merrill Ranch CFDs				$1,940,855
Single-Family Detached	Dwelling	2,250	$607	$1,365,750
Multi-Family	Dwelling	0	$492	$0
Commercial	1,000 sq ft	453	$437	$197,961
Public/Institutional	1,000 sq ft	0	$401	$0
Industrial/Warehouse	1,000 sq ft	118	$134	$15,812
Subtotal, Merrill Ranch CFDs				$1,579,523
Total Potential Revenue				$3,520,378

Source: New units from Table 10 and Table 15; net cost per unit from Table 60.

Over the next ten years, the Town plans to construct a new fire station and purchase an aerial ladder truck and two fire engines, as shown in Table 63. However, the timing of individual improvements will be dependent on the pace and location of development that actually occurs, and not all of the

planned improvements will necessarily be completed in the next ten years. Some of the improvements may be constructed by the CFD or developers in return for offsets or credits against the fire impact fees. The list of projects may also change to reflect changes from anticipated development patterns. Projected fire impact fees over the next ten years will cover approximately 56% of the planned capital expenditures.

Table 63. Fire Capital Plan, 2013-2023

New 110' Aerial Ladder Truck	$1,420,000
New Fire Engine Tanker/Pumper	$630,000
New Fire Engine Tanker/Pumper	$630,000
Fire Station 546 (Hwy 287/Valley Farms)	$3,570,000
Development Fee Update Studies (2)	$25,458
Total	$6,275,458

Source: Town of Florence, May 22, 2012 and October 31, 2012; study cost from Table 112.

POLICE

The Town provides police protection throughout the town. This section calculates updated police impact fees.

Service Units

The two most common methodologies used in calculating public safety (fire and police) service units and impact fees are the "calls-for-service" approach and the "functional population" approach. The 2007 study used a less common approach, which relied on limited residential versus nonresidential call data from one year to weight workers as the equivalent of 0.73 persons. The consultant's experience is that fees based on call data will fluctuate significantly between updates because the distribution of calls is relatively unstable over time, especially for smaller communities.

This update utilizes the "functional population" approach to calculate and assess the police impact fees. This approach is a generally-accepted methodology for both fire and police impact fee types, and is based on the observation that demand for public safety facilities tends to be proportional to the presence of people. This approach generates service unit multipliers that are similar to those based on call data, but are more stable over time.

The service unit for the fire and police impact fee updates is an Equivalent Dwelling Unit, or EDU. The functional population-based multipliers by land use type for fire and police impact fees are converted into EDUs. The description of the functional population methodology, the calculation of the service unit multipliers and the determination of existing and projected fire and police service units are presented in Appendix B.

Cost per Service Unit

The cost per service unit to provide fire protection to new development is based on the existing level of service provided to existing development. The level of service is quantified as the ratio of the replacement cost of existing police capital facilities to existing police service units.

The Town has a central police station and a recently-completed evidence building in the downtown area. Details are shown in Table 64.

Table 64. Existing Police Facilities

Facility	Address	Sq. Ft.	Acres
Police Station	425 N Pinal St	8,400	0.89
Evidence Building	425 N Pinal St	4,416	n/a
Total		12,816	0.89

Source: Town of Florence, November 15, 2011.

The evidence building, completed in June 2012 except for final finish-out, cost $331 per square foot, as shown in Table 65.

Table 65. Police Station Cost per Square Foot

Total Evidence Building Cost	$1,664,388
– Portion to be Occupied by IT Dept. (15%)	-$202,629
Eligible Cost of Police Portion	$1,461,759
÷ Police Square Feet	4,416
Cost per Square Foot	$331

Source: Town of Florence, March 16, 2012.

The replacement cost of existing police vehicles is based on the most recent purchase price, as shown in Table 66.

Table 66. Existing Police Vehicle Cost

Vehicle Type	Number	Unit Cost	Total Cost
Patrol Sedans	25	$36,500	$912,500
Vans/SUVs	10	$36,937	$369,370
Pick-up Trucks	6	$36,047	$216,282
Motorcycles	1	$26,244	$26,244
Total	42		$1,524,396

Source: Fixed Asset Listings, Year End October 31, 2011, November 10, 2011; unit costs based on most recent purchases.

Besides vehicles, the major equipment relied upon by the Police Department is its communications system. The Town is nearing completion to upgrades to the public safety communication system. The upgrades to the system will enhance the communication exchange between dispatch operations, fire operations, police operations and regional public safety partners. Upgraded equipment includes radios, dispatch consoles, repeaters, upgrades to the existing communication tower in the Florence Gardens area, and the construction of a new communication tower in the vicinity of Hunt Highway and Attaway Road. As of June 30, 2012, $1,179,724 has been spent. An additional amount of $415,000 has been budgeted to complete the project with a total cost estimated at $1,594,724.

The Town's existing police facilities have a total estimated replacement cost of $7.39 million, as summarized in Table 67. Dividing the total cost of existing capital facilities and equipment by the existing number of service units (EDUs) results in a cost of $821 per EDU.

Table 67. Existing Police Cost per Service Unit

	Existing Units	Unit Cost	Total Cost
Police Station Land (acres)	0.89	$30,000	$26,700
Police Station Building (square feet)	8,400	$331	$2,780,400
Evidence Building (square feet)	4,416	$331	$1,461,696
Police Vehicles			$1,524,396
Communications System			$1,594,724
Total Existing Police Facility Value			$7,387,916
÷ Existing Town-Wide EDUs			9,000
Cost per EDU			$821

Source: Existing acres and building square feet from Table 64; land value per acre same as park cost per acre from Table 36; building cost per square foot from Table 65; vehicle cost from Table 66; communications system cost from Town Finance Department, November 9, 2012; existing EDUs from Table 110.

Net Cost per Service Unit

As noted in the Legal Framework section of this report, impact fees should be reduced (or "offset") in order to account for other types of revenues that will be generated by new development and used to fund capacity-expanding improvements of the same type as those to be funded by the impact fees. Cases in which such an offset is warranted include funding of existing deficiencies, outstanding debt payments on existing facilities, and dedicated revenue sources to fund growth-related improvements. The Town has no outstanding debt on past police improvements, nor does the Town have any revenue sources that are dedicated for future capacity-expanding police improvements. Consequently, no offsets against the police impact fee are required based on these criteria.

The Town has received considerable grant funding for police facilities over the last five years. Federal, State and tribal grants for the types of facilities and equipment included in calculating the existing level of service are summarized in Table 68. Over the last five years, the Town received $119,250 annually in Federal, State and tribal grants (additional grants for types of equipment not included in the level of service calculations, such as in-car laptops, radar guns, uniforms and bullet-proof vests, are not shown in the table). Offsets against impact fees for grant funding are not required. Grant funding is not generated by new development, allows the Town to raise the level of service for existing development, and is not guaranteed for the future. Nevertheless, an offset will be provided for potential grant funding, based on the assumption that future grants will follow the historical trend.

Table 68. Police Grant Funding Offset

Fiscal Year	Grant	Description	Source	Amount
2007-08	None	n/a	n/a	$0
2008-09	2008 GADA (Match Grant)	Police Evidence Bldg	State	$36,000
2008-09	FEMA-AFG	Public Safety Communication Project	Federal	$65,400
2008-09	Dept of Homeland Security	Communications System Upgrades	Federal	$280,000
2009-10	2009 Tohono O'odham 12% Gaming Grant	Motorcyle for PD	Tribal	$30,000
2010-11	2010 FEMA-AFG	Public Safety Communication Project	Federal	$65,331
2011-12	Gila River Indian Comm. Gaming Grant	Public Safety Vehicles (3 police)	Tribal	$94,500
2011-12	Town PSSG -Police	Patrol Car	Federal	$25,020
Total				$596,251
÷ Years				5
Annual Grant Funding				$119,250
÷ Existing EDUs				9,000
Annual Grant Funding per EDU				$13.25
x Present Value Factor (25 Years)				16.52
Grant Offset per EDU				$219

Source: Grant funding from Town Finance Department, November 9, 2012; existing EDUs from Table 110; present value factor based on discount rate of 3.48%, which is the December 2012 average interest rate on state and local bonds from the U.S. Federal Reserve at http://www.federalreserve.gov/datadownload/ Build.aspx?rel=H15.

The cost of future police impact fee studies must be added to the facility and equipment costs. The offset for future grant funding is subtracted to determine the net cost per service unit (see Table 69 below).

Table 69. Police Net Cost per Service Unit

Cost per EDU	$821
Police Impact Fee Study Cost per EDU	$5
– Grant Offset per EDU	-$219
Net Cost per EDU	$607

Source: Cost per EDU from Table 67; study cost from Table 113; grant offset from Table 68.

Potential Impact Fees

The maximum police impact fees that may be adopted by the Town based on this study is the product of the number of service units generated by a unit of development and the net cost per service unit calculated above. The resulting fee schedule is presented in Table 70.

Table 70. Potential Police Impact Fees

Land Use	Unit	EDUs/ Unit	Net Cost/ EDU	Net Cost per Unit
Single-Family Detached/MH	Dwelling	1.00	$607	$607
Multi-Family	Dwelling	0.81	$607	$492
Commercial	1,000 sq. ft.	0.72	$607	$437
Public/Institutional	1,000 sq. ft.	0.66	$607	$401
Industrial/Warehouse	1,000 sq. ft.	0.22	$607	$134

Source: EDUs per unit from Table 109; net cost per EDU from Table 69.

Table 71 compares the current police impact fees with the updated police impact fees.

Table 71. Comparative Police Fees

Land Use	Unit	Current Fee	Revised Fee	Percent Change
Single-Family Detached/MH	Dwelling	$913	$607	-34%
Multi-Family	Dwelling	$657	$492	-25%
Retail/Commercial	1,000 sq. ft.	$171	$437	156%
Public/Institutional	1,000 sq. ft.	$171	$401	135%
Industrial/Warehouse	1,000 sq. ft.	$98	$134	37%

Source: Previous fees from Town of Florence, *Annual Report of Development Impact Fees, Reported as of June 30, 2012*; updated fees from Table 70.

Capital Plan

Potential police impact fee revenue over the next ten years, based on anticipated new development, is estimated to be about $2.87 million, as shown in Table 72.

Table 72. Potential Police Impact Fee Revenue, 2013-2023

New EDUs, 2013-2023	4,720
x Net Cost per EDU	$607
Projected Impact Fee Revenue	$2,865,040

Source: New EDUs from Table 110; net cost per EDU from Table 69.

Over the next ten years, the Town plans to acquire land for and construct a new 19,000 square-foot police station with an estimated cost of $8 million, as shown in Table 73. Projected police impact fees over the next ten years will cover approximately 36% of the eligible planned capital expenditures.

Table 73. Police Capital Plan, 2013-2023

New Police Station	$8,000,000
Impact Fee Update Studies (2)	$25,458
Total	$8,025,458

Source: Town of Florence, May 22, 2012; study update cost from Table 112.

WATER

The Town has charged new water customers a water impact fee since 2003. The fees were originally based on a study by Black and Veatch. The water impact fees were updated in 2007 based on a study by MuniFinancial. This study represents the second update of the water impact fees.

Service Units

To calculate water and wastewater impact fees, the demand associated with different types of customers must be expressed in a common unit of measurement, called a "service unit." The service unit for the Town's water and wastewater impact fees is an "equivalent dwelling unit" (EDU). An EDU is a single-family detached dwelling unit or its equivalent in terms of water demand. The number of service units associated with different customers is determined by the capacity of the water meter relative to the capacity of the smallest meter size, which is typically used by a single-family unit. Table 74 below presents recommended EDU multipliers for various meter sizes based on meter capacities from the American Water Works Association.

Table 74. Meter Capacity Ratios

Meter Size	Type	Capacity (gpm)	EDU Multiplier
5/8"x3/4"	Disc	10	1.0
1"	Disc	25	2.5
1 1/2"	Disc	50	5.0
2"	Disc	80	8.0
3"	Compound	160	16.0
3"	Turbine	175	17.5
4"	Compound	250	25.0
4"	Turbine	300	30.0
6"	Compound	500	50.0
6"	Turbine	625	62.5
8"	Turbine	900	90.0
10"	Turbine	1,450	145.0
12"	Turbine	2,150	215.0

Source: Meter capacities in gallons per minute (gpm) represent the recommended maximum rates for continuing operations from the American Water Works Association for disc meters (AWWA C700), compound meters (AWWA C702) and vertical shaft and low-velocity horizontal turbine meters (AWWA C701).

The original EDU multipliers used in the 2007 impact fee study are shown in Table 75 below for comparison. The meter ratios for larger meters should be increased based on current AWWA meter capacity standards.

Table 75. Comparative Meter Capacity Ratios

Meter Size	Type	Meter Ratios		Percent
		Current	Updated	Change
5/8"x3/4"	Disc	1.00	1.00	0%
1"	Disc	1.67	2.50	50%
1 1/2"	Disc	3.33	5.00	50%
2"	Disc	6.67	8.00	20%
3"	Compound	10.67	16.00	50%
3"	Turbine	10.67	17.50	64%
4"	Compound	16.67	25.00	50%
4"	Turbine	16.67	30.00	80%
6"	Compound	33.33	50.00	50%
6"	Turbine	33.33	62.50	88%
8"	Turbine	80.00	90.00	13%
10"	Turbine	126.67	145.00	14%
12"	Turbine	166.67	215.00	29%

Source: Current meter capacity ratios from MuniFinancial, *Town of Florence Development Impact Fee Study*, May 2007, Table 9-5; updated ratios from Table 74.

Town water billing records for 2002 and 2012 provide the number of annual active meters by size and type. Multiplying the number of active meters by the EDUs per meter yields the number of customers, expressed in terms of service units (EDUs), over this recent ten-year period, as shown in Table 76.

Table 76. Water Service Units, 2002-2012

Meter Size	Type	2002 Meters		2012 Meters		EDUs/ Meter	2002 EDUs		2012 EDUs	
		South	North	South	North		South	North	South	North
5/8"x3/4"	Disc	1,178	1,726	1,350	1,981	1.00	1,178	1,726	1,350	1,981
1"	Disc	75	2	81	3	2.50	188	5	203	8
1 1/2"	Disc	0	0	0	2	5.00	0	0	0	10
2"	Disc	37	8	60	13	8.00	296	64	480	104
3"	Compound	0	3	5	1	16.00	0	48	80	16
3"	Turbine	0	0	1	3	17.50	0	0	18	53
4"	Compound	28	1	2	0	25.00	700	25	50	0
4"	Turbine	0	0	2	0	30.00	0	0	60	0
6"	Compound	0	0	0	0	50.00	0	0	0	0
6"	Turbine	0	0	6	1	62.50	0	0	375	63
8"	Turbine	0	0	1	0	90.00	0	0	90	0
10"	Turbine	0	0	1	0	145.00	0	0	145	0
12"	Turbine	0	0	0	0	215.00	0	0	0	0
Total		1,318	1,740	1,509	2,004		2,362	1,868	2,851	2,235

Source: Meters by size for 2001-2002 fiscal year and as of June 30, 2012 City of Florence water billing records, September 28, 2012; EDUs/meter from Table 74; EDUs is product of meter count and EDUs/meter.

The growth in water service units over this recent ten-year period provides a reasonable basis for projecting growth over the next ten years. These projections are shown in Table 77.

Table 77. Water Service Units, 2013-2023

	South	North	Total
2012 EDUs	2,851	2,235	5,086
– 2002 EDUs	2,362	1,868	4,230
New EDUs, 2002-2012	489	367	856
÷ Years	10	10	10
Annual New EDUs	49	37	86
Estimated 2013 EDUs	2,900	2,272	5,172
Estimated New EDUs, 2013-2023	489	367	856
Estimated 2023 EDUs	3,389	2,639	6,028

Source: 2002 and 2012 EDUs from Table 76; 2013 and 2023 EDUs based on annual growth from 2002-2012.

Current water demands from existing customers are evaluated based on recent water demand. For the one-year period from September 2010 through August 2011, the Town's wells produced an average of 1.925 million gallons per day (mgd), as shown in Table 78.

Table 78. Water Production, 9/2010 through 8/2011

Month	Year	Gallons	MGD
September	2010	57,972,151	1.932
October	2010	72,866,801	2.351
November	2010	49,288,222	1.643
December	2010	57,069,544	1.841
January	2011	47,557,953	1.534
February	2011	48,418,200	1.729
March	2011	53,726,313	1.733
April	2011	60,474,687	2.016
May	2011	69,187,943	2.232
June	2011	58,206,764	1.940
July	2011	61,849,778	1.995
August	2011	65,851,229	2.124
Total Produced		702,469,585	1.925

Source: Town of Florence, May 31, 2012.

A water system must be able to meet peak day demand. The Town uses a peak day factor of 2.0 times average day demand. Based on this factor, current peak day demand is estimated to be 756 gallons per day (gpd) per service unit.

Table 79. Water Demand per Service Unit

Average Day Demand (gpd), 2011	1,925,000
÷ 2012 Water EDUs	5,086
Average Day Demand (gpd) per EDU	378
x Peaking Factor	2.0
Peak Day Demand (gpd) per EDU	756

Source: 2011 average day demand from Table 78; 2012 EDUs from Table 76; peaking factor from Town of Florence Public Works Department, November 1, 2012.

Cost per Service Unit

According to SB 1525, impact fees "shall be based on the same level of service provided to existing development." The capacity of a water system is based on firm capacity, which is typically calculated at 75% of full capacity, or for smaller systems with the largest well out of service. The Town's water production facilities provide adequate capacity to accommodate the peak water demands of existing water customers, as shown in Table 80. In addition, the Town's Water Master Plan states that all components of the water system, including wells, storage facilities and transmission lines, are adequate to accommodate existing customers.

Table 80. Existing Water Level of Service

Facility	gpm	mgd
Well No. 1	1,500	2.160
Well No. 3*	2,500	3.600
Well No. 4	1,000	1.440
Well No. 5	1,500	2.160
Total Capacity	6,500	9.360
– Capacity of Largest Well	-2,500	-3.600
Total, Firm Capacity	5,000	5.760
Existing Peak Demand		3.850

* planned to be in service in July 2013

Source: Well capacities from Town of Florence Public Works Department, November 10, 2011; firm capacity is with largest well out of service; peak demand from Table 79.

While the Town's water system is adequate to accommodate existing customers, there is little excess capacity to accommodate growth. The cost to serve new customers will be based on new facilities identified in the Water Master Plan. These new facilities consist primarily of new water campuses, each containing a well, pump and storage tank, and transmission lines. The cost of a water campus is estimated by the Town to be $3 million, as shown in Table 81. Dividing the cost by the capacity results in a water campus cost of $1.11 per gallon per day (gpd).

Table 81. Water Campus Cost

Well Drilling	$750,000
Pump (2,500 gpm)	$1,150,000
Storage (1 MG)	$1,100,000
Total	$3,000,000
÷ Water Campus Firm Capacity (gpd)	2,700,000
Water Cost per gpd	$1.11

Source: Town of Florence Public Works Department, September 20, 2012; firm capacity is 75% of capacity per *Water Master Plan*.

The need for new water transmission lines to serve new customers is derived from the Water Master Plan. Lines 12" in diameter and smaller are excluded, because those smaller lines will typically be installed by developers. As shown in Table 82, future transmission lines will cost $1.47 per gallon per day of additional water customer demand.

Table 82. Water Transmission Line Cost

Pipe Size	Planned Linear Feet	Cost/ Foot	Cost
16" Pipe	387,500	$156	$60,450,000
20" Pipe	91,820	$197	$18,088,540
24" Line	85,200	$227	$19,340,400
30" Pipe	15,880	$281	$4,462,280
Total Cost			$102,341,220
÷ Projected New Peak Day Demand (gpd)			69,737,760
Transmission Line Cost per gpd			$1.47

Source: Planned lines, costs and projected demand from Fluid Solutions, *Town of Florence Water Master Plan*, 2008, except that cost per foot for 16" reduced per Town Public Works Department, October 1, 2012.

Adding water campus and transmission line costs to derive a total cost per gallon per day of demand, and multiplying that sum by the peak day demand per service unit results in a cost of $1,950 per service unit to provide the capital facilities needed to accommodate additional water customers, as shown in Table 83.

Table 83. Water Cost per Service Unit

Water Campus Cost per Gallon/Day	$1.11
Transmission Line Cost per Gallon/Day	$1.47
Total Cost per Gallon/Day	$2.58
x Peak Day Demand per EDU (gpd)	756
Water Cost per EDU	$1,950

Source: Water campus cost from Table 81; transmission line cost from Table 82; peak day demand per EDU from Table 79.

Net Cost per Service Unit

As noted in the Legal Framework section of this report, impact fees should be reduced (or "offset") in order to account for other types of revenues that will be generated by new development and used to fund capacity-expanding improvements of the same type as those to be funded by the impact fees. Cases in which such an offset is warranted include funding of existing deficiencies, outstanding debt payments on existing facilities, and dedicated revenue sources to fund growth-related improvements. The Town's water system does not have any existing deficiencies, there are no revenue sources dedicated for future capacity-expanding water improvements, and no grants have been received in the recent past or are anticipated to be received in the future to help defray growth-related capital costs of expanding the water system. Consequently, no offsets against the water impact fees are required based on those criteria.

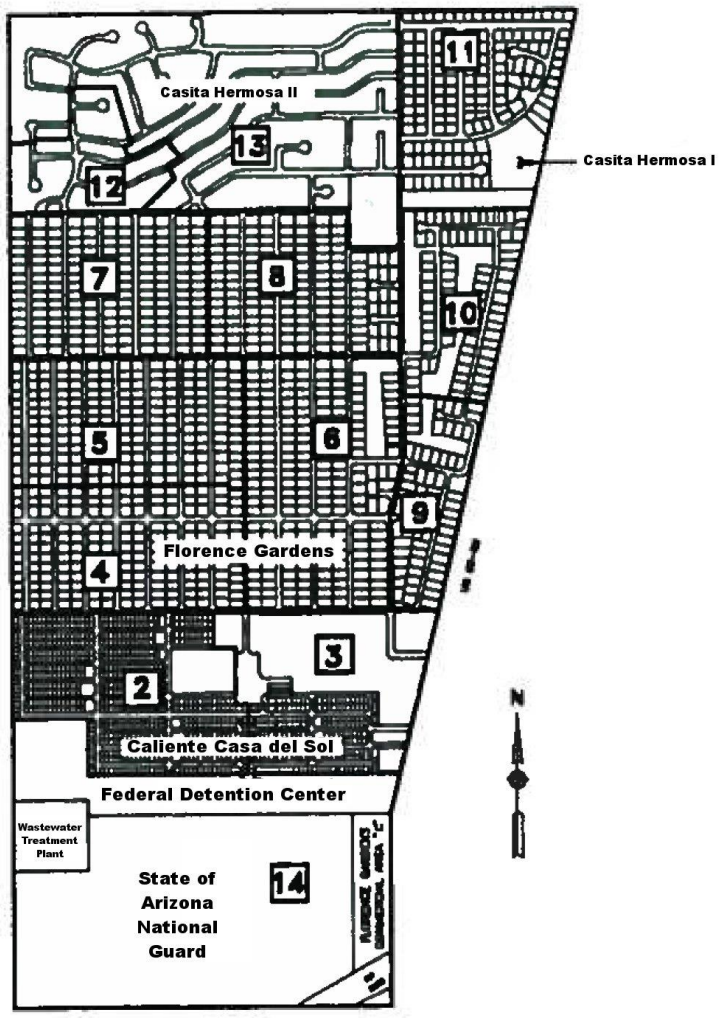
There is some debt on the water system, stemming from the purchase of the Arizona Sierra Water Utility, which is being retired with assessments on property in the North Florence Improvement District (see Figure 8). Since these properties will not be subject to the water impact fees, no additional offset is required. Since no offsets are required, the net cost per service unit is the sum of the facility cost per service unit and the study cost per service unit, as shown in Table 84 below.

Table 84. Water Net Cost per Service Unit

Water Cost per EDU	$1,950
Water Study Cost per EDU	$30
Water Net Cost per EDU	$1,980

Source: Cost per EDU from Table 83; study cost from Table 113.

Figure 8. North Florence Improvement District



Potential Impact Fees

The maximum water impact fees that may be adopted by the Town based on this study is the product of the number of service units generated by a unit of development and the net cost per service unit calculated above. The resulting fee schedule is presented in Table 85.

Table 85. Potential Water Impact Fees

Meter Size	Type	EDUs per Meter	Net Cost/ EDU	Net Cost/ Meter
5/8"x3/4"	Disc	1.0	$1,980	$1,980
1"	Disc	2.5	$1,980	$4,950
1 1/2"	Disc	5.0	$1,980	$9,900
2"	Disc	8.0	$1,980	$15,840
3"	Compound	16.0	$1,980	$31,680
3"	Turbine	17.5	$1,980	$34,650
4"	Compound	25.0	$1,980	$49,500
4"	Turbine	30.0	$1,980	$59,400
6"	Compound	50.0	$1,980	$99,000
6"	Turbine	62.5	$1,980	$123,750
8"	Turbine	90.0	$1,980	$178,200
10"	Turbine	145.0	$1,980	$287,100
12"	Turbine	215.0	$1,980	$425,700

Note: Fees will not be assessed in North Florence Improvement District.
Source: EDUs per meter from Table 74; net cost per EDU from Table 84.

Table 86 compares the current water impact fees with the updated impact fees. The updated fees would apply to all new customers outside the North Florence Improvement District. The updated fees are lower for most meter sizes and types.

Table 86. Comparative Water Fees

Meter Size	Type	Current Fee	Updated Fee	Percent Change
5/8"x3/4"	Disc	$3,330	$1,980	-41%
1"	Disc	$5,550	$4,950	-11%
1 1/2"	Disc	$11,101	$9,900	-11%
2"	Disc	$22,201	$15,840	-29%
3"	Compound	$35,522	$31,680	-11%
3"	Turbine	$35,522	$34,650	-2%
4"	Compound	$55,503	$49,500	-11%
4"	Turbine	$55,503	$59,400	7%
6"	Compound	$111,007	$99,000	-11%
6"	Turbine	$111,007	$123,750	11%
8"	Turbine	$266,415	$178,200	-33%
10"	Turbine	$421,825	$287,100	-32%
12"	Turbine	$555,031	$425,700	-23%

Source: Current fees from Town of Florence, *Annual Report of Development Impact Fees, Reported as of June 30, 2012*; updated fees for all new customers except those in the North Florence Improvement District from Table 85.

Capital Plan

Potential water impact fee revenue over the next ten years, based on anticipated new customers, is estimated to be about $1.69 million, as shown in Table 87. Since the new customer projections are based on historical trends, they implicitly assume that the Merrill Ranch area in the North service area will continue to be served by Johnson Utilities. Even if the Town does begin to provide water service to that area, revenues may not be much higher, since water fees may need to be reduced to provide offsets for water improvements funded by the Community Facilities Districts.

Table 87. Potential Water Impact Fee Revenue, 2013-2023

	South	North	Total
New Water Customers, 2013-2023 (EDUs)	489	367	856
x Net Cost per EDU (Outside N Florence Imp. District)	$1,980	$1,980	$1,980
Potential Water Impact Fee Revenue, 2013-2023	$968,220	$726,660	$1,694,880

Source: New EDUs from Table 77; net cost per EDU outside the North Florence Improvement District from Table 84.

Over the next ten years, the Town anticipates the need for a number of improvements totaling an estimated $13.44 million, as shown in Table 88. However, the timing of individual improvements will be dependent on the pace and location of development that actually occurs, and not all of the planned improvements will necessarily be completed in the next ten years. Some of the improvements may be constructed by developers in return for offsets or credits against the water impact fees. The list of projects may also change to reflect changes from anticipated development patterns. Projected water impact fees over the next ten years will cover approximately 13% of the planned capital expenditures.

Table 88. Water Capital Plan, 2013-2023

Planned Improvement	Description	Total
Prison Complex Water Line (NE)	4,680' of 16" water line	$732,000
Water Transmission Line Ext (Well 5 to 4)	5,653' of 12" water line	$968,000
Valley Farms Area Well #1	New water campus, w/o storage tank	$1,930,000
New Well, SE (Majestic Ranch)	Provide water to annexed areas SE of Town	$1,120,000
Water Storage Tank, SE	Water tank on improved site to supply SE area	$1,050,000
Impact Fee Studies (2)		$14,543
Subtotal, South Service Area		$5,814,543
N Florence Water Storage Transmission Line	Looped line from Well #1 to storage tank at FG	$1,150,000
Water Transmission Line Ext (Caliente-Calif)	8,700' of 12" line extension	$1,665,000
Felix Road Well (Zone A1)	Prove out existing well	$980,000
Merrill Ranch Well #1 and Storage Tank	Shallow well, 0.50 mg tank	$1,900,000
Merrill Ranch Well #2		$1,920,000
Impact Fee Studies (2)		$10,915
Subtotal, North Service Area		$7,625,915
Total		$13,440,458

Source: Town of Florence, March 18, 2012; total study cost from Table 112, allocated between service areas based on projected new EDUs from Table 77.

WASTEWATER

The Town has charged new wastewater customers a wastewater impact fee since 2003. The fees were originally based on a study by Black and Veatch. The wastewater impact fees were updated in 2007 based on a study by MuniFinancial. This study represents the second update of the wastewater impact fees.

Service Units

To calculate wastewater impact fees, the demand associated with different types of customers must be expressed in a common unit of measurement, called a "service unit." The service unit for the Town's water and wastewater impact fees is an "equivalent dwelling unit" (EDU). An EDU is a single-family detached dwelling unit or its equivalent in terms of water or wastewater demand. For water, the number of service units associated with different customers is determined by the capacity of the water meter relative to the capacity of the smallest meter size, which is typically used by a single-family unit. For wastewater, an adjustment is warranted to take into account that more of the water consumed by non-single-family customers is returned to the wastewater system (that is, less is used for lawn watering and irrigation). According to the Town's Public Works Department, approximately 25% of single-family water usage is for irrigation, compared to a de minimus percentage for other customers. Consequently, the wastewater service unit multipliers for non-single-family customers are derived by dividing the water multipliers by 0.75, as shown in Table 89.

Table 89. Wastewater Service Unit Multipliers

Meter Size	Type	Water	Wastewater
5/8"x3/4"	Disc-Resid.	1.0	1.0
5/8"x3/4"	Disc-Other	1.0	1.3
1"	Disc	2.5	3.3
1 1/2"	Disc	5.0	6.7
2"	Disc	8.0	10.7
3"	Compound	16.0	21.3
3"	Turbine	17.5	23.3
4"	Compound	25.0	33.3
4"	Turbine	30.0	40.0
6"	Compound	50.0	66.7
6"	Turbine	62.5	83.3
8"	Turbine	90.0	120.0
10"	Turbine	145.0	193.3
12"	Turbine	215.0	286.7

Source: Water service unit multipliers from Table 74; wastewater service unit multiplier for non-single-family customers are water multipliers divided by 0.75.

The original EDU multipliers used in the 2007 impact fee study are shown in Table 90 below for comparison. The service unit multipliers for non-single-family meters should be increased significantly to better reflect actual wastewater demand.

Table 90. Comparative Wastewater Service Unit Multipliers

Meter Size	Type	Meter Ratios		Percent
		Current	Updated	Change
5/8"x3/4"	Disc-Resid.	1.00	1.00	0%
5/8"x3/4"	Disc-Other	1.00	1.30	30%
1"	Disc	1.67	3.30	98%
1 1/2"	Disc	3.33	6.70	101%
2"	Disc	6.67	10.70	60%
3"	Compound	10.67	21.30	100%
3"	Turbine	10.67	23.30	118%
4"	Compound	16.67	33.30	100%
4"	Turbine	16.67	40.00	140%
6"	Compound	33.33	66.70	100%
6"	Turbine	33.33	83.30	150%
8"	Turbine	80.00	120.00	50%
10"	Turbine	126.67	193.30	53%
12"	Turbine	166.67	286.70	72%

Source: Current meter capacity ratios from MuniFinancial, *Town of Florence Development Impact Fee Study*, May 2007, Table 9-5; updated ratios from Table 89.

Determining the number of service units is more difficult for wastewater than it is for water, since some wastewater customers are not water customers, and the Town's records for wastewater customers do not include information on water meter size. However, data on average water service units per customer can be used to estimate the same for wastewater. As shown in Table 91, non-single-family customers can be expected to use 4.89 times as much water as a single-family customer. However, as noted above, it is estimated that only 75% of single-family water use returns to the wastewater system, since the rest is used for lawn watering. As a result, the number of wastewater service units per customer for non-single-family customers is 30% higher (1.00 ÷ 0.75 = 1.30) than the water service units per customer.

Table 91. Wastewater Service Unit Multipliers by Customer Class

Customer Class	2012 Water Customers	2012 Water EDUs	Water EDUs/ Customer	Wastewater EDUs/ Customer
Single-Family	3,101	3,101	1.00	1.00
Other	406	1,985	4.89	6.36
Total	3,507	5,086	1.45	n/a

Source: 2012 water customers by class from Town billing records as of June 30, 2012; 2012 total water EDUs from Table 76; single-family water EDUs are the same as single-family customers by definition; other water EDUs is the difference between single-family and total water EDUs; water EDUs/customer is ratio of EDUs to customers; wastewater EDUs per non-single-family customer is 1.30 times water EDUs per non-single-family customer, as described in the preceding text.

The current number of wastewater service units is estimated in Table 92. It is estimated that existing wastewater customers generate 4,242 equivalent dwelling units (EDUs) of wastewater demand Town-wide.

Table 92. Wastewater Service Units, 2012

	South	North	Total
2012 Single-Family Customers	943	1,671	2,614
x EDUs per Single-Family Customer	1.00	1.00	1.00
2012 Single-Family EDUs	943	1,671	2,614
2012 Other Customers	214	42	256
x EDUs per Other Customer	6.36	6.36	6.36
2012 Other Customer EDUs	1,361	267	1,628
2012 Total EDUs	2,304	1,938	4,242
÷ 2012 Total Customers	1,157	1,713	2,870
Average EDUs per Customer	1.99	1.13	1.48

Source: 2012 wastewater customers by class from Town billing records as of June 30, 2012; wastewater EDUs per customer from Table 91.

The growth in wastewater service units over the last ten years (2002-2012) provide a reasonable basis for projecting growth over the 2013-2023 period, as shown in Table 93.

Table 93. Wastewater Service Units, 2013-2023

	South	North	Total
2002 Customers	1,116	1,550	2,666
x EDUs per Customer	1.99	1.13	
2002 EDUs	2,221	1,752	3,973
2012 EDUs	2,304	1,938	4,242
– 2002 EDUs	-2,221	-1,752	-3,973
New EDUs, 2002-2012	83	186	269
÷ Years	10	10	10
Annual New EDUs	8	19	27
Estimated 2013 EDUs	2,312	1,957	4,269
Estimated New EDUs, 2013-2023	83	186	269
Estimated 2023 EDUs	2,395	2,143	4,538

Source: 2002 wastewater customers from Town utility billing records as of June 30, 2012; EDUs per customer and 2012 EDUs from Table 92; 2013 and 2023 EDUs based on annual EDU growth from 2002-2012.

Average day water demand for a single-family unit is estimated to be 378 gallons per day (gpd). Single-family customers typically return only 75% of their water use to the wastewater system, with the remainder used for outdoor watering. This indicates that the average wastewater demand is 284 gpd per service unit, as shown in Table 94.

Table 94. Wastewater Demand per Service Unit

Average Daily Water Demand (gpd) per EDU	378
x % of Single-Family Water Returned	75%
Average Daily Wastewater Demand per EDU (gpd)	284

Source: Average daily water demand per EDU from Table 79.

Cost per Service Unit

According to SB 1525, impact fees "shall be based on the same level of service provided to existing development." The Town's wastewater production facilities provide adequate capacity to accommodate the peak wastewater demands of existing wastewater customers, as shown in Table 95. In addition, the Town's Wastewater Master Plan states that all components of the wastewater system are adequate to accommodate existing customers.

Table 95. Existing Wastewater Level of Service

Existing Capacity (mgd)	2.920
– Existing Demand (mgd)	2.095
Existing Excess Capacity (mgd)	0.825

Source: Treatment capacity from Town of Florence Public Works Department, November 10, 2011; existing demand is average daily influent flows from September 2010 through August 2011 from Public Works, November 15, 2011.

While the Town's wastewater system is adequate to accommodate existing customers, there is little excess capacity to accommodate growth. The cost to serve new customers will be based on new facilities identified in the Wastewater Master Plan and the Town's capital plan. These new facilities consist primarily of wastewater treatment plant expansions, interceptors and lift stations, and sewer cleaning equipment.

The cost of adding new wastewater treatment plant capacity varies by service area, as shown in Table 96. In the south, the existing 2.5 mgd treatment plant is planned to be expanded to 4.0 mgd. At an estimated cost of $12.5 million, the cost of the additional capacity is $8.35 per gpd. In the north, the initial temporary package plant will cost an estimated $4.0 million and have a capacity of 200,000 gpd, for a cost of $20.00 per gpd. The plan is for the initial package plant to be replaced by a Phase II membrane plant with a cost of $14.95 per gpd. It is anticipated that the northern plants will be constructed by the Merrill Ranch community facilities district, and that the Town will purchase approximately 0.50 mgd of capacity in the Phase II plant to replace the current 0.42 mgd Florence Gardens treatment plant and add some capacity to accommodate growth. To be conservative, treatment plant costs will be based on the cost to add capacity to the southern plant.

Table 96. Wastewater Treatment Plant Cost per Service Unit

	South	North, Ph I	North, Ph II
Treatment Plant Cost	$12,525,000	$4,000,000	$14,950,000
÷ New Treatment Capacity (gpd)	1,500,000	200,000	1,000,000
Treatment Cost per gpd	$8.35	$20.00	$14.95

Source: Town of Florence Public Works Department, March 28, 2012.

The need for new wastewater interceptors and lift stations to serve new customers to build-out is derived from the Wastewater Master Plan. As shown in Table 97, future interceptor and lift station costs will vary somewhat by service area. To be conservative, the interceptor and lift station cost per service unit will be based on the lower cost of $2.64 per gallon per day of additional wastewater customer demand for the south service area.

Table 97. Wastewater Interceptor/Lift Station Cost per Service Unit

	Planned Quantities		Cost/	Planned Costs		
	South	North	Unit	South	North	Total
10″ PVC (feet)	60,000	11,000	$55	$3,300,000	$605,000	$3,905,000
12″ PVC (feet)	29,400	17,300	$65	$1,911,000	$1,124,500	$3,035,500
15: PVC (feet)	29,500	7,000	$76	$2,242,000	$532,000	$2,774,000
18″ PVC (feet)	17,600	0	$91	$1,601,600	$0	$1,601,600
21″ PVC (feet)	29,800	700	$105	$3,129,000	$73,500	$3,202,500
24″ PVC (feet)	28,900	17,300	$121	$3,496,900	$2,093,300	$5,590,200
30″ PVC (feet)	43,000	2,500	$177	$7,611,000	$442,500	$8,053,500
36″ PVC (feet)	34,900	0	$192	$6,700,800	$0	$6,700,800
48″ Manhole (each)	517	193	$5,600	$2,895,200	$1,080,800	$3,976,000
60″ Manhole (each)	173	45	$7,700	$1,332,100	$346,500	$1,678,600
72″ Manhole (each)	1	0	$9,300	$9,300	$0	$9,300
84″ Manhole (each)	19	2	$10,900	$207,100	$21,800	$228,900
Lift Station B-1 (mgd)	7.92	0.00	$0.50	$3,960,000	$0	$3,960,000
Lift Station C-1 (mgd)	12.96	0.00	$0.50	$6,480,000	$0	$6,480,000
Lift Station D-1 (mgd)	0.00	5.04	$0.50	$0	$2,520,000	$2,520,000
Lift Station D-2 (mgd)	0.00	10.37	$0.50	$0	$5,185,000	$5,185,000
Lift Station D-3 (mgd)	0.00	4.71	$0.50	$0	$2,355,000	$2,355,000
Lift Station D-4 (mgd)	0.00	0.60	$0.50	$0	$300,000	$300,000
Lift Station D-5 (mgd)	0.00	0.40	$0.50	$0	$200,000	$200,000
Total Build-Out Cost				$44,876,000	$16,879,900	$61,755,900
Build-Out Growth in Demand (gpd)				16,996,133	5,938,560	22,934,693
Cost per gpd				$2.64	$2.84	$2.69

Source: Planned lines, manholes and lift station quantities from Fluid Solutions, *Town of Florence Wastewater Master Plan*, 2008; costs per unit from Town of Florence Public Works Department, September 14, 2012.

A final cost component is the equipment required to clean the wastewater lines. The Town's existing equipment will need to be replaced with updated equipment to maintain the larger interceptors required to accommodate anticipated growth. The growth-related share of this cost is determined using an incremental expansion approach based on the existing level of service. This is calculated in Table 98.

Table 98. Wastewater Equipment Cost per Service Unit

Replacement Value of Existing Equipment	$58,000
÷ Existing Wastewater Demand (gpd)	2,095,000
Cleaning Equipment Cost per gpd	$0.03

Source: Replacement value of existing sewer cleaning equipment from Town of Florence Public Works Department, September 19, 2012; existing wastewater demand from Table 95.

Adding wastewater treatment, interceptor/lift station and cleaning equipment costs results in the total cost per gallon per day of demand. Multiplying that sum by the demand per service unit results in a cost of $3,130 per service unit to provide the capital facilities needed to accommodate additional wastewater customers, as shown in Table 99.

Table 99. Wastewater Cost per Service Unit

Treatment Plant Cost per gpd	$8.35
Interceptor/Lift Station Cost per gpd	$2.64
Cleaning Equipment Cost per gpd	$0.03
Total Cost per gpd	$11.02
x Demand per EDU (gpd)	284
Wastewater Cost per EDU	$3,130

Source: Treatment plant cost per gpd from Table 96; interceptor/lift station cost per gpd from Table 97; cleaning equipment cost per gpd from Table 98; demand per EDU from Table 94.

Net Cost per Service Unit

As noted in the Legal Framework section of this report, impact fees should be reduced (or "offset") in order to account for other types of revenues that will be generated by new development and used to fund capacity-expanding improvements of the same type as those to be funded by the impact fees. Cases in which such an offset is warranted include funding of existing deficiencies, outstanding debt payments on existing facilities, and dedicated revenue sources to fund growth-related improvements. The Town's wastewater system does not have any existing deficiencies, there are no revenue sources dedicated for future capacity-expanding wastewater improvements, and no grants have been received in the recent past or are anticipated to be received in the future to help defray growth-related capital costs of expanding the wastewater system. Consequently, no offsets against the wastewater impact fees are required based on those criteria.

There is some system-wide debt on the wastewater system, outstanding from the $7.5 million loan from the Water Infrastructure Authority of Arizona (WIFA) for improvements to the south Florence treatment plant. A second WIFA loan for $1.3 million taken out in 2009 and to be used for the future expansion of the south Florence treatment plan has not been spent, and no offset is required for this debt. A simple way to calculate an offset is to divide the outstanding debt by existing service units. This puts new customers on equal terms with current wastewater customers in terms of the portion of the capital costs needed to serve them that will be borne by general utility system debt. The offset for the system-wide debt is $1,085 per service unit, as shown in Table 100.

Table 100. Wastewater System-Wide Debt Offset

Water Infrastructure Authority of Arizona Loan 1	$4,601,318
÷ Existing Wastewater EDUs	4,242
Debt Offset per EDU	$1,085

Source: Outstanding debt as of July 30, 2012 from Town of Florence Finance Department; existing EDUs from Table 92.

In addition, there is some debt stemming from the purchase of the Arizona Sierra Water Utility, which is being retired with assessments on property in the Florence Gardens area. Since these properties will not be subject to the wastewater impact fees, no additional offset is required. The net cost per service unit is the sum of the facility cost and the impact fee study per service unit, less the system-wide debt offset per service unit (see Table 101 below).

Table 101. Wastewater Net Cost per Service Unit

Facility Cost per EDU	$3,130
Study Cost per EDU	$95
– System-Wide Debt Offset per EDU	-$1,085
Net Cost per EDU	$2,140

Source: Facility cost per EDU from Table 99; study cost from Table 113; offset from Table 100.

Potential Impact Fees

The maximum wastewater impact fees that may be adopted by the Town based on this study is the product of the number of service units generated by a unit of development and the net cost per service unit calculated above. The resulting fee schedule is presented in Table 102.

Table 102. Potential Wastewater Impact Fees

Meter Size	Type	EDUs per Meter	Net Cost/ EDU	Net Cost/ Meter
5/8"x3/4"	Disc-Resid.	1.0	$2,140	$2,140
5/8"x3/4"	Disc-Other	1.3	$2,140	$2,782
1"	Disc	3.3	$2,140	$7,062
1 1/2"	Disc	6.7	$2,140	$14,338
2"	Disc	10.7	$2,140	$22,898
3"	Compound	21.3	$2,140	$45,582
3"	Turbine	23.3	$2,140	$49,862
4"	Compound	33.3	$2,140	$71,262
4"	Turbine	40.0	$2,140	$85,600
6"	Compound	66.7	$2,140	$142,738
6"	Turbine	83.3	$2,140	$178,262
8"	Turbine	120.0	$2,140	$256,800
10"	Turbine	193.3	$2,140	$413,662
12"	Turbine	286.7	$2,140	$613,538

Source: EDUs per meter from Table 89; net cost per EDU from Table 101.

Table 103 compares the current wastewater impact fees with the updated impact fees. The updated fees would apply to all new customers outside the North Florence Improvement District. The updated fees are generally lower for the smallest and largest meter sizes.

Table 103. Comparative Wastewater Fees

Water Meter Size	Type	Current Fee	Updated Fee*	Percent Change
5/8"x3/4"	Disc-Resid.	$4,105	$2,140	-48%
5/8"x3/4"	Disc-Other	$4,105	$2,782	-32%
1"	Disc	$6,841	$7,062	3%
1 1/2"	Disc	$13,684	$14,338	5%
2"	Disc	$27,369	$22,898	-16%
3"	Compound	$43,789	$45,582	4%
3"	Turbine	$43,789	$49,862	14%
4"	Compound	$68,422	$71,262	4%
4"	Turbine	$68,422	$85,600	25%
6"	Compound	$136,843	$142,738	4%
6"	Turbine	$136,843	$178,262	30%
8"	Turbine	$328,422	$256,800	-22%
10"	Turbine	$522,154	$413,662	-21%
12"	Turbine	$684,213	$613,538	-10%

* for customers outside North Florence Improvement District
Source: Current fees from Town of Florence, *Annual Report of Development Impact Fees, Reported as of June 30, 2012*; updated fees from Table 102.

Capital Plan

Potential wastewater impact fee revenue over the next ten years, based on anticipated new development, is estimated to be about $0.58 million, as shown in Table 104.

Table 104. Potential Wastewater Impact Fee Revenue, 2013-2023

	South	North	Total
New Wastewater Customers, 2013-2023 (EDUs)	83	186	269
x Net Cost per EDU (Outside FG Assessment District)	$2,140	$2,140	$2,140
Potential Wastewater Impact Fee Revenue, 2013-2023	$177,620	$398,040	$575,660

Source: New EDUs from Table 93; net cost per EDU from Table 101.

Over the next ten years, the Town plans to make some major capital investments in its wastewater system, as shown in Table 105. However, the timing of individual improvements will be dependent on the pace and location of development that actually occurs, and not all of the planned improvements will necessarily be completed in the next ten years. Some of the improvements may be constructed by the CFD or developers in return for offsets or credits against the wastewater impact fees.

It is likely that only a small portion of these costs will be paid for with impact fees, due to relatively slow projected growth in new wastewater customers. In the North service area, about half of the total costs are not eligible for impact fee funding, since they are related to the replacement of the temporary Phase I Merrill Ranch package plants or the replacement of the existing North Florence treatment plant. In addition, it is anticipated that the Merrill Ranch treatment plant phases will be funded primarily with Community Facilities District (CFD) bonds, although the Town may contribute roughly half of the funds to construct the Phase II facility in order to replace the capacity of the North Florence plant as well as to purchase some additional capacity to serve future growth outside the CFD. The projections of new customers in the North service area are based on historical trends, which implicitly assume that the Anthem/Merrill Ranch development continues to

be served to non-Town providers. In the event that the area becomes served by the Town wastewater system, it is unlikely that new customers within the CFD would pay a wastewater impact fee, due to offsets or credits for their CFD taxes to pay off CFD-funded wastewater infrastructure.

Table 105. Wastewater Capital Plan, 2013-2023

Planned Improvement	Total Cost	Eligible Cost	Potential Impact Fee Revenue
Sewer Cleaning Equipment (1)	$187,500	$187,500	
1 mgd Lift Station at Valley Farms	$920,000	$920,000	
10" Sewer Main Extension, Eliz-Adamsville	$144,000	$144,000	
S Florence WWTP Expansion to 4 mgd	$12,525,000	$12,525,000	
Main Interceptor from CCA-WWTP	$4,679,400	$4,679,400	
Impact Fee Study Cost	$7,855	$7,855	
Subtotal, South Service Area	$18,463,755	$18,463,755	$177,620
Sewer Cleaning Equipment (1)	$187,500	$187,500	
Lift Station at Hunt Hwy/SR 79	$370,000	$370,000	
Merrill Ranch WRF, Ph I	$4,000,000	$4,000,000	
Merrill Ranch WRF, Ph II (2)	$14,950,000	$6,351,000	
18" Bore across SR 79	$100,000	$100,000	
N Florence WWTP Expansion (3)	$2,549,000	$407,840	
N Florence Lift Station (3)	$850,000	$136,000	
Impact Fee Study Cost	$17,603	$17,603	
Subtotal, North Service Area	$23,024,103	$11,569,943	$398,040
Total	$41,487,858	$30,033,698	$575,660

Notes: (1) cost split evenly between service areas; (2) eligible cost reduced by $4 million because it will replace Phase I facility, and remaining cost reduced by 42% because the 1.00 mgd facility will replace the existing 0.42 mgd North Florence treatment plant; (3) these improvements are related to the conversion of the existing North Florence treatment plant to a lift station to convey flows to the Merrill Ranch Ph. II facility, which will replace the current 0.42 mgd North Florence plant with a Town-owned 0.50 mgd share of the Merrill Ranch facility.

Source: Town of Florence, March 28, 2012; total impact fee study cost from Table 112, allocated by service area based on projected new EDUs from Table 93; potential impact fee revenue from Table 104.

APPENDIX A: CAG PROJECTIONS

Table 106. CAG Projections, 2010-2015

Geographic Area	Housing Units	Household Population	Prisoners	Employees					
				Retail	Office	Indust.	Public	Other	Total
Florence Gardens Area, 2010	1,719	1,707	1,281	0	1	0	0	65	66
Anthem/Merrill Ranch Area, 2010	682	1,278	0	81	0	33	0	109	223
Park Service Area - N, 2010	3	5	0	0	0	0	0	0	0
Other, 2010	530	1,083	0	0	0	3	0	100	103
Subtotal, N of River, 2010	2,934	4,073	1,281	81	1	36	0	274	392
Park Service Area - S, 2010	2,025	4,730	14,713	646	393	61	6,689	172	7,961
Other, 2010	0	0	0	23	0	0	0	0	23
Subtotal, S of River, 2010	2,025	4,730	14,713	669	393	61	6,689	172	7,984
Town of Florence, 2010	4,959	8,803	15,994	750	394	97	6,689	446	8,376
North Water/WW Service Area	1,739	1,771	1,281	0	1	33	0	123	157
Florence Gardens Area, 2015	1,736	1,742	1,328	0	1	0	0	65	66
Anthem/Merrill Ranch Area, 2015	2,383	4,793	0	684	0	149	0	578	1,411
Park Service Area - N, 2015	3	6	0	0	0	0	0	0	0
Other, 2015	1,688	3,472	0	440	87	23	0	635	1,185
Subtotal, N of River, 2015	5,810	10,013	1,328	1,124	88	172	0	1,278	2,662
Park Service Area - S, 2015	2,367	5,435	15,256	2,050	1,701	468	7,212	1,020	12,451
Other, 2015	0	0	0	23	0	0	0	2	25
Subtotal, S of River, 2015	2,367	5,435	15,256	2,073	1,701	468	7,212	1,022	12,476
Town of Florence, 2015	8,177	15,448	16,584	3,197	1,789	640	7,212	2,300	15,138
North Water/WW Service Area	2,750	3,830	1,328	37	1	53	0	423	514
Florence Gardens Area, 2010-15	17	35	47	0	0	0	0	0	0
Anthem/Merrill Ranch Area, 2010-15	1,701	3,515	0	603	0	116	0	469	1,188
Park Service Area - N, 2010-15	0	1	0	0	0	0	0	0	0
Other, 2010-15	1,158	2,389	0	440	87	20	0	535	1,082
Subtotal, N of River, 2010-15	2,876	5,940	47	1,043	87	136	0	1,004	2,270
Park Service Area - S, 2010-15	342	705	543	1,404	1,308	407	523	848	4,490
Other, 2010-15	0	0	0	0	0	0	0	2	2
Subtotal, S of River, 2010-15	342	705	543	1,404	1,308	407	523	850	4,492
Town of Florence, 2010-15	3,218	6,645	590	2,447	1,395	543	523	1,854	6,762
North Water/WW Service Area	1,011	2,059	47	37	0	20	0	300	357

Source: Central Arizona Governments, demographic dataset by Traffic Analysis Zone, 2010.

APPENDIX B: FUNCTIONAL POPULATION

The two most common methodologies used in calculating public safety (fire and police) service units and impact fees are the "calls-for-service" approach and the "functional population" approach. For the reasons discussed in the "service unit" section of the fire portion of this report, this update utilizes the "functional population" approach to calculate and assess the fire and police impact fees. This approach is a generally-accepted methodology for these impact fee types and is based on the observation that demand for public safety facilities tends to be proportional to the presence of people at a particular site.

Functional population is analogous to the concept of "full-time equivalent" employees. It represents the number of "full-time equivalent" people present at the site of a land use, and it is used for the purpose of determining the impact of a particular development on the need for facilities. For residential development, functional population is simply average household size times the percent of time people spend at home. For nonresidential development, functional population is based on a formula that factors trip generation rates, average vehicle occupancy and average number of hours spent by visitors at a land use.

Residential Functional Population

For residential land uses, the impact of a dwelling unit on the need for capital facilities is generally proportional to the number of persons residing in the dwelling unit. This can be measured for different housing types in terms of either average household size (average number of persons per occupied dwelling unit) or persons per unit (average number of persons per dwelling unit, including vacant as well as occupied units). In this analysis, average household size is used to develop the functional population multipliers, as it avoids the need to make assumptions about occupancy rates.

Determining residential functional population multipliers is considerably simpler than the nonresidential component. It is estimated that people, on average, spend 16 hours, or 67 percent, of each 24-hour weekday at their place of residence and the other 33 percent away from home. The functional population per unit for these uses is shown in Table 107.

Table 107. Functional Population per Unit for Residential Uses

Housing Type	Unit	Average HH Size	Occupancy	Func. Pop./Unit
Single-Family Detached/MH	Dwelling	2.48	0.67	1.66
Multi-Family	Dwelling	2.01	0.67	1.35

Source: Average household size from Table 32.

Nonresidential Functional Population

The functional population methodology for nonresidential land uses is based on trip generation data utilized in developing the road demand schedule prepared for the updated road impact fee update. Functional population per 1,000 square feet is derived by dividing the total number of hours spent by employees and visitors during a week day by 24 hours. Employees are estimated to spend 8 hours

per day at their place of employment, and visitors are estimated to spend one hour per visit. The formula used to derive the nonresidential functional population estimates is summarized in Figure 9.

Figure 9. Nonresidential Functional Population Formula

FUNCPOP/UNIT = (employee hours/1000 sf + visitor hours/1000 sf) ÷ 24 hours/day

Where:

Employee hours/1000 sf = employees/1000 sf x 8 hours/day

Visitor hours/1000 sf = visitors/1000 sf x 1 hour/visit

Visitors/1000 sf = weekday ADT/1000 sf x avg. vehicle occupancy – employees/1000 sf

Weekday ADT/1000 sf = one-way avg. daily trips (total trip ends ÷ 2)

Using this formula and information on trip generation rates, vehicle occupancy rates from the *National Household Travel Survey* and other sources and assumptions, nonresidential functional population estimates per 1,000 square feet of gross floor area are calculated in Table 108.

Table 108. Functional Population per Unit for Nonresidential Uses

Land Use	Unit	Trip Rate	Persons/ Trip	Employee/ Unit	Visitors/ Unit	Functional Pop./Unit
Commercial	1,000 sq. ft.	5.51	1.24	3.11	3.72	1.19
Industrial/Warehouse	1,000 sq. ft.	1.78	1.24	0.91	1.30	0.36
Public/Institutional	1,000 sq. ft.	3.79	2.59	2.32	7.50	1.09

Source: Trip rates based on one-half of average daily trip rate from ITE, *Trip Generation*, 8th ed., 2008 (commercial based on office, industrial based on warehousing, institutional based on nursing home); persons/trip is average vehicle occupancy from Federal Highway Administration, *Nationwide Household Travel Survey*, 2009; employees/unit from Table 14; visitors/unit is trips times persons/trip minus employees/unit; functional population/unit calculated based on formula from Figure 9.

Fire and Police Service Unit Summary

The functional population multipliers for the recommended residential and nonresidential land use categories are summarized in Table 109 and converted into equivalent dwelling units (EDUs).

Table 109. Fire and Police Service Unit Multipliers

Land Use	Unit	Functional Pop./Unit	EDUs/ Unit
Single-Family Detached/MH	Dwelling	1.66	1.00
Multi-Family	Dwelling	1.35	0.81
Commercial	1,000 sq. ft.	1.19	0.72
Industrial/Warehouse	1,000 sq. ft.	0.36	0.22
Public/Institutional	1,000 sq. ft.	1.09	0.66

Source: Residential dwelling unit functional population per unit from Table 107; nonresidential functional population per unit from Table 108; EDUs/unit is ratio of functional population per unit to functional population per single-family unit.

Town-wide fire and police service units are expressed in terms of equivalent dwelling units (EDUs). Multiplying existing and projected development units in each land use category by the service unit multipliers calculated in the previous table yields the total number of existing and projected fire and police service units, as summarized in Table 110.

Table 110. Fire and Police Service Units, Town-Wide, 2013-2023

Land Use	Dev't Unit	Dev't Units 2013	Dev't Units 2023	EDUs/ Unit	EDUs 2013	EDUs 2023
Single-Family Detached	Dwelling	5,098	7,978	1.00	5,098	7,978
Multi-Family	Dwelling	528	528	0.81	428	428
Commercial	1,000 sf	924	3,175	0.72	665	2,286
Industrial/Warehouse	1,000 sf	565	703	0.22	124	155
Public/Institutional	1,000 sf	4,068	4,353	0.66	2,685	2,873
Total					9,000	13,720

Source: Development units from Table 10 and Table 15; EDUs per unit from Table 109.

For the purpose of calculating offsets, it is necessary to estimate the number of service units in the Merrill Ranch Community Facilities Districts. This is estimated based on the land use assumptions developed for the Anthem/Merrill Ranch area, as shown in Table 111.

Table 111. Fire and Police Service Units, Merrill Ranch CFDs, 2013-2023

Land Use	Dev't Unit	Dev't Units 2013	Dev't Units 2023	EDUs/ Unit	EDUs 2013	EDUs 2023
Single-Family Detached	Dwelling	1,825	4,075	1.00	1,825	4,075
Multi-Family	Dwelling	0	0	0.81	0	0
Commercial	1,000 sf	103	556	0.72	74	400
Industrial/Warehouse	1,000 sf	46	164	0.22	10	36
Public/Institutional	1,000 sf	0	0	0.66	0	0
Total					1,909	4,511

Source: Development units from Table 10 and Table 15; EDUs per unit from Table 109.

APPENDIX C: IMPACT FEE STUDY COST

According to State law, impact fees may be used to pay for the costs of "professional services required for the preparation or revision of a development fee" (Sec. 9-463.05.A, ARS). This impact fee study cost the Town $89,100 for the update of road, water, wastewater, park, library, fire and police impact fees, or $12,729 per facility type. Since SB 1525 requires impact fees to be updated every five years, two additional studies will be required over the next ten years, which indicates a future cost of $25,458 per facility type.

Table 112. Study Cost per Facility, 2013-2023

Cost of 2012 Impact Fee Study	$89,100
÷ Number of Facilities	7
Cost per Facility	$12,729
x Number of Studies Needed, 2013-2023	2
Study Cost per Facility, 2013-2023	$25,458

Source: Cost of 2012 study from Duncan Associates contract.

Dividing the cost of the study for each facility by the new EDUs projected over the next ten years results in the following study costs per EDU.

Table 113. Study Cost per EDU by Facility, 2013-2023

Facility Type	Study Cost	New EDUs	Cost per EDU
Roads	$25,458	2,733	$9
Water	$25,458	856	$30
Wastewater	$25,458	269	$95
Parks	$25,458	563	$45
Library	$25,458	3,201	$8
Fire	$25,458	4,720	$5
Police	$25,458	4,720	$5

Source: Study cost per facility from Table 112; new EDUs from Table 22 (roads), Table 34 (parks); Table 49 (library), Table 60 (fire), Table 70 (police), Table 77 (water) and Table 93 (wastewater).

APPENDIX D: REVENUE PROJECTIONS

SB 1525 requires a projection of future revenues anticipated to be generated by new development. These projections are provided in Table 114.

Table 114. Growth-Related Revenues, 2013-2023

Funding Type	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
State-Shared Revenue	$172,784	$345,568	$518,352	$691,136	$863,920
Federal Grants	$739	$1,478	$2,217	$2,956	$3,695
Highway User Revenue	$81,229	$162,458	$243,687	$324,916	$406,145
Ad Valorem Property Tax	$21,580	$43,160	$64,740	$86,320	$107,900
Construction Excise Tax	$364,684	$364,684	$364,684	$364,684	$364,684
Wastewater Rates - Debt	$3,886	$7,720	$11,504	$15,239	$18,924
Total	$644,902	$925,068	$1,205,184	$1,485,251	$1,765,268

Funding Type	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
State-Shared Revenue	$1,036,704	$1,209,488	$1,382,272	$1,555,056	$1,727,840	$9,503,120
Federal Grants	$4,434	$5,173	$5,912	$6,651	$7,390	$40,645
Highway User Revenue	$487,374	$568,603	$649,832	$731,061	$812,290	$4,467,595
Ad Valorem Property Tax	$129,480	$151,060	$172,640	$194,220	$215,800	$1,186,900
Construction Excise Tax	$364,684	$364,684	$364,684	$364,684	$364,684	$3,646,840
Wastewater Rates - Debt	$22,561	$26,150	$29,693	$33,190	$36,659	$205,526
Total	$2,045,237	$2,325,158	$2,605,033	$2,884,862	$3,164,663	$19,050,626

Source: Based on FY 2013 projected revenue from Town of Florence Official Budget, Fiscal Year 2012-2013; state-shared revenue, federal grants, highway user revenue and property tax revenue projections based on FY 2013 revenue per EDU and EDU projections from Table 22; excess construction excise tax revenue projections based on excess construction excise tax per single-family unit from Table 25 and projected road EDUs from Table 22; wastewater debt service revenue projections based on wastewater debt service per wastewater EDU and projected wastewater EDUs from Table 93.