

LIBRARIES INFRASTRUCTURE IMPROVEMENTS PLAN

The City of Phoenix charges a Libraries Development Impact Fee (DIF) to help provide new branch libraries. The Libraries DIF is based on the estimated cost of providing library services that are eligible under Arizona impact fee rules within the designated impact fee areas.

LIBRARIES IMPACT FEE BACKGROUND

In 2012, the Arizona legislature adopted new limits on the types of library improvements that are eligible to be funded with impact fees. Under Arizona law, Library DIF are limited to “library facilities of up to ten thousand square feet that provide a direct benefit to development”. Since branch libraries are the smallest category in Phoenix’s library system, and since the current standard for branch libraries exceeds 10,000 square feet in size, the rule has been interpreted to allow inclusion of a cost equivalent to a 10,000 square foot branch library facility. The values used to calculate the “eligible” share of library costs are presented later in this IIP. Library facilities that are explicitly ineligible per Arizona law include: equipment, vehicles or appurtenances.

LIBRARIES DEVELOPMENT IMPACT FEE METHODOLOGY

The proposed Libraries DIF is calculated using an Incremental-Cost Method, which is a forward-looking approach that assumes the branch library system will be expanded to achieve a specific Level of Service (LOS). This update recommends a LOS based on the citywide library service area, rather than calculating a unique LOS for each impact fee area. Using a consistent citywide LOS for all impact fee areas reduces the potential for long-term inequities in library services across the impact fee areas. The incremental-cost method is suitable for the libraries category because the provision of facilities depends largely on the functional population being served in any given area. Location-specific factors like topography, man-made networks (roads, canals, barriers, etc.) and property ownership (especially preserves) have less of an effect on libraries than some other infrastructure categories like arterial streets, water, and wastewater networks.

This update recommends a slight variation to the typical *incremental-cost* approach to help maximize existing resources. Specifically, this update recommends including an adjustment to the calculated demand for library land by carrying-forward land previously acquired for future libraries.

The steps to calculate the Libraries impact fee can be summarized as follows:

- **Project expected new development** in each impact fee area (see Land Use Assumptions Report).
- **Analyze the current level of service** being provided for qualifying capital facilities.
- **Determine the ten-year demand** for additional branch libraries for each impact fee area based on the current level of service.
- **Estimate the cost** to acquire land and construct new branch libraries needed to meet the ten-year demand.
- **Calculate the gross Library impact fee per EDU** by dividing the estimated “plan” cost by the equivalent demand units projected over the ten-year period for each impact fee area.

- **Investigate possible Alternative Revenue Offsets**, and if alternative funding sources are identified, offsets must be quantified to ensure new development is not charged twice for the same improvements. See Alternative Revenue Offsets report for details on offsets.
- **Calculate the Libraries Net Impact Fee per EDU** in impact fee areas by subtracting any offset amounts from the gross impact fee per EDU.
- **Calculate the Libraries Net Impact Fee schedule for each type of land use** by multiplying the Net Libraries impact fee per EDU in each impact fee area by the EDU factor from the Functional Population Equivalent Demand Units Report.

LIBRARIES IMPACT FEE AREAS

Construction costs for new branch library facilities are generally consistent irrespective of where the library is located within the City. However, since the cost to acquire land for future libraries can vary significantly across the City, it is necessary to have multiple Libraries impact fees areas to help account for this potential variability in cost. The Libraries impact fee is charged in four distinct areas: two in the City’s northern growth area and two in the southern growth area. The Libraries Impact Fee Areas are named in the following manner and can be viewed in Appendix A as Map 3.1.

- Northwest (Northwest & Deer Valley)
- Northeast (Northeast & Paradise Ridge)
- Southwest (Estrella N., Estrella S., Laveen W., Laveen E.)
- Ahwatukee

LEVEL OF SERVICE (LOS)

INVENTORY OF EXISTING LIBRARIES:

The following table lists City’s existing libraries that are used to calculate the existing Library Level of Service. The inventory of land for future libraries is incorporated in the fee calculation methodology as an adjustment as explained in the section describing ten-year library demand.

Table 1: Inventory of Existing Libraries

Library	Address	Service Area	Facility (sq ft)	Land (acres)
Ironwood Library	4333 E Chandler Blvd	Ahwatukee	16,300	2.10
West Ahwatukee Branch Library (Future)	19th Ave & Chandler Blvd	Ahwatukee	0	3.00
Desert Broom Library	29710 N Cave Creek Rd	Northeast	15,000	3.00
Desert View Civic Center Branch Library	56th St & Deer Valley Dr	Northeast	13,000	3.00
Agave Library	23550 N 36th Ave	Northwest	25,000	3.84
Branch Library (Future)	Sonoran Blvd. w/o Paloma Pkwy	Northwest	0	3.00
Cesar Chavez Library	3635 W Baseline Rd	Southwest	25,000	3.63
Estrella Branch Library (Future)	NEC of 67th Ave & Lower Buckeye	Southwest	0	3.00
Estrella Civil Center Branch Library	NEC of 99th Ave & Lower Buckeye	Southwest	13,000	3.00
Acacia Library	750 E Townley Ave	Non-IFA	6,600	1.42
Century Library	1750 E Highland Ave	Non-IFA	6,500	1.52
Cholla Library	10050 N Metro Parkway	Non-IFA	30,000	0.69
Desert Sage Library	7602 W Encanto Blvd	Non-IFA	13,400	2.30
Harmon Library	411 W Yavapai St	Non-IFA	12,400	1.40
Juniper Library	1825 W Union Hills Drive	Non-IFA	14,435	1.43
Mesquite Library	4525 E Paradise Village Parkway	Non-IFA	19,875	1.90
Ocotillo Library	102 W Southern Ave	Non-IFA	6,600	1.35
Palo Verde Library	4402 N 51st Ave	Non-IFA	16,000	1.40
Saguaro Library	2808 N 46th St	Non-IFA	10,500	2.00

South Mountain Community Library	7050 S 24th St	Non-IFA	51,600	3.00
Yucca Library	5648 N 15th Ave	Non-IFA	10,000	1.00
Burton Barr Library*	1221 N. Central Ave.	Non-IFA	10,000	5.87
Totals			315,210	52.9

* Burton Barr library is included and is capped at 10,000 square feet. This addition was made because it is important to include Burton Barr in the total citywide library inventory, but including it at its full size skews the average library size being roughly 260,000 sf.

FUNCTIONAL POPULATION

The City of Phoenix Functional Population Report details the methodology to determine the factor of service impact by varying land uses along with the number of Equivalent Demand Units (EDU) representing the amount of growth in each land use category. For easy reference, the following tables provide the numbers used later in this chapter.

TABLE CALCULATION:

- Unit Counts are listed in the City of Phoenix Function Population Report and come from the Applied Economics study. They represent the amount of growth in housing units or 1,000 square feet of non-residential construction in an impact fee area.
- The EDU Factor is calculated under the City of Phoenix Functional Population Report and represents the percentage of growth EDUs each land use demands on Fire Department services.
- The number of EDUs for each impact fee area is calculated by multiplying the Unit Count by the EDU Factor.

Table 2: 2025 EDUs

IF Area	SF	MF	Retail	Office	Industrial	Public	Other	Total
EDU Factor	1	0.68	0.03	0.06	0.02	0.02	0.04	
Citywide	401,783	184,327	2,891	6,871	3,717	1,953	2,488	604,030
Northeast w/ PR	20,356	6,381	112	166	30	38	142	27,225
Northwest w/ DV	15,149	4,140	62	16	79	34	18	19,498
Southwest	47,219	2,338	204	7	1,318	98	22	51,206
Ahwatukee	24,405	6,741	90	100	24	46	45	31,451

Table 3: 10-year EDUs (2025-2034)

IF Area	SF	MF	Retail	Office	Industrial	Public	Other	Total
EDU Factor	1	0.68	0.03	0.06	0.02	0.02	0.04	
Citywide	32,816	30,105	214	686	508	46	173	64,548
Northeast w/ PR	14,350	3,971	31	192	6	14	28	18,592
Northwest w/ DV	2,710	3,988	27	108	92	5	9	6,939
Southwest	9,338	3,847	47	22	215	6	40	13,515
Ahwatukee	337	0	0	0	0	0	0	337

LIBRARY LEVEL OF SERVICE (LOS) CALCULATION:

It is necessary to calculate the Library LOS to determine the ten-year demand. A LOS of 470 square feet per 1,000 EDU is calculated using 2024 citywide total library square footage from Table 1 and citywide library equivalent demand units from Table 2. The LOS is calculated by dividing total Branch Library Capacity by thousands of 2025 EDUs.

Table 4: Library Level of Service

Library Capacity (Sq Ft)	2025 EDU	Existing LOS (Sq Ft / 1K EDU)
315,210	604,030	522

LIBRARY TEN-YEAR DEMAND, 2025-2034

DEMAND FOR NEW BRANCH LIBRARIES:

The 2025-2034 demand for branch libraries is calculated by multiplying the 2025-2034 projected EDU from Table 3 with the Libraries LOS from Table 4. The following table provides the values used to calculate the ten-year demand for new branch libraries for each Libraries impact fee area.

Table 5: Ten-Year Libraries Demand, 2025-2034

Impact Fee Area	2025-34 EDU	LOS (Sq Ft / 1K EDU)	2025-34 Demand (Sq Ft)
Northwest & Deer Valley	6,939	522	3,622
Northeast & Paradise Ridge	18,592	522	9,705
Southwest	13,515	522	7,055
Ahwatukee	337	522	176

UNIT COST ANALYSIS

The Libraries DIF is comprised of the cost to construct new branch libraries. The Libraries DIF does not include costs for library equipment, vehicles, or appurtenances, since these items are specifically prohibited by A.R.S. 9-463.05, Section T. 7(d). No land is needed to be acquired for this update.

LIBRARY CONSTRUCTION COSTS:

For this analysis, costs estimates for development of a branch library were developed from the 2023 General Obligation Bond cost estimates. Inflation is accounted for in the GO Bond, so no inflation was included in the costs below. The following table provides the cost elements and estimated cost per square foot for new libraries.

Table 6: Library Construction Cost per Square Foot

Cost Element	Unit Cost
Design/Engineering/Permits + Construction	\$2,147,515 \$6,644,089
Total Cost ÷ Square Feet	\$8,791,604 13,000
Cost per Square foot	\$676

TEN-YEAR (2025-2034) PLAN COST

The Libraries DIF ten-year “plan” cost for the period from 2025 – 2034 is calculated by multiplying the additional library square footage needed to meet projected demands in each impact fee area (see Table 3), by the estimated construction cost per square foot provided in Table 4. The Library Department has adequate land available to meet new demand over the ten-year period in the four Libraries impact fee areas. As such, there is no land cost for libraries included in this IIP for any impact fee area. The land sites previously obtained by the City for future libraries are included in the library inventory provided in Table 1.

The following table provides the values used to calculate the total ten-year “plan” cost for each Libraries impact fee area.

Table 7: Total Library Plan Cost by Impact Fee Area

Impact Fee Area	Planned Expansion (Sq Ft)	Unit Cost (\$ / sq ft)	Library Expansion Cost
Northwest & Deer Valley	3,622	\$676	\$2,448,472
Northeast & Paradise Ridge	9,705	\$676	\$6,560,580
Southwest	7,055	\$676	\$4,769,180
Ahwatukee	176	\$676	\$118,976

ADJUSTMENT FOR 10,000 SQUARE FOOT RULE:

A.R.S. 9-643.05 limits library impact fees to “facilities up to ten thousand square feet that provided a direct benefit to development”. Since the standard new Phoenix branch library is 13,000 sq ft, an adjustment factor is incorporated in the fee calculation to make sure new development’s contribution toward future branch library facilities does not exceed this requirement. This rule and the associated adjustment means that City funding from non-impact fee sources will be needed to maintain existing service levels for new development. The following table provides the values used to calculate and adjustment factor that prorates the Libraries DIF plan cost to the equivalent of 10,000 sq ft library facilities.

Table 8: Library Adjustment Factor for 10,000 Sq Ft Rule

Avg. Branch Library (Sq Ft)	Impact Fee Eligible (Sq Ft)	Impact Fee Eligible Adj. Factor
13,000	10,000	0.77

ELIGIBLE LIBRARY PLAN COST, 2025-2034

The total library plan cost is reduced to obtain the eligible library plan cost by multiplying the Library Expansion Cost for each impact fee area from Table 6 by the adjustment factor from Table 7.

Table 9: Eligible Library Plan Cost, 2020-2029 by Impact Fee Area

Impact Fee Areas	Library Plan Cost	Impact Fee Eligible Adj. Factor	Eligible Library Plan Cost
Northwest & Deer Valley	\$2,448,472	0.77	\$1,885,323
Northeast & Paradise Ridge	\$6,560,580	0.77	\$5,051,647
Southwest	\$4,769,180	0.77	\$3,672,269
Ahwatukee	\$118,976	0.77	\$91,612

POTENTIAL GROSS IMPACT FEE:

The potential Capital Cost per EDU for each fee area is calculated by dividing eligible ten-year plan costs from Table 8 by the ten-year projected Library EDU from Table 3. The following table provides the values used to calculate Gross Library DIF per EDU for each fee area. The calculation for the Fund Balance Adjustments can be found in the City of Phoenix 2025 Development Impact Fee Update Fund Balance Report.

Table 10: Potential Gross Library Impact Fee per EDU

Impact Fee Areas	Eligible Library Plan Cost	2025-34 EDU	Potential Capital Cost (per EDU)	Fund Balance Adjustment (per EDU)	Potential Gross Fee (per EDU)
Northwest & Deer Valley	\$1,885,323	6,939	\$272	\$154	\$118
Northeast & Paradise Ridge	\$5,051,647	18,592	\$272	\$76	\$196
Southwest	\$3,672,269	13,515	\$272	\$256	\$16
Ahwatukee	\$91,612	337	\$272	\$1,202	\$0

POTENTIAL NET IMPACT FEE

The potential net fee per EDU is calculated by subtracting any offset amounts from the potential gross fee from Table 10. The calculation for the offsets can be found in the City of Phoenix 2025 Development Impact Fee Update Alternative Revenue Offsets Report.

Table 11: Potential Net Impact Fee

Impact Fee Area	Potential Gross Library Impact Fee (per EDU)	Alternative Revenue (per EDU)	Potential Net Fee (per EDU)
Northwest & Deer Valley	\$272	\$19	\$99
Northeast & Paradise Ridge	\$272	\$32	\$164
Southwest	\$272	\$29	\$0
Ahwatukee	\$272	\$19	\$0

SUMMARY OF PLANNED IMPROVEMENTS, 2025-2034

A.R.S. 9-463.05 requires that impact fees collected must be spent on either 1) new projects that serve new development, or 2) to repay debt (interest and principal) incurred to fund the construction of projects that serve new development. It should be noted that A.R.S. 9-463.05 (and impact fee common law) also prohibit impact fee revenues from being spent on operations, maintenance, repair, rehabilitation, environmental or other non-capital expenditures.

For the purpose of this analysis, the following assumptions have been made:

- That all of the projected number of projected EDUs will be developed in the ten-year planning period 2025-2034, and that all EDUs will pay net fees that are consistent with single family dwellings.
- That all of the future library facilities will be built within the ten-year planning period 2025-2034.

A summary of the planned improvements and costs for the ten-year planning period 2025-2034 for the impact fee service areas are shown in the following tables. The tables provide a summary of planned facilities that are eligible to be funded by the Library impact fee collections, as calculated within this Chapter.

Table 12: Northwest and Deer Valley Impact Fee Area (Library), Planned Improvements and Costs, 2025-2034

Planned Improvement	Quantity (Sq Ft)	Total Cost
Sonoran Blvd. west of Paloma Parkway	13,000	\$8,788,000
<i>10-Year Share</i>	3,622	27.9%
<i>Future New Development Share</i>	6,378	49.1%
<i>Non-Impact Fee Share</i>	3,000	23.1%
Subtotal		\$8,788,000
Planned Net Impact Fee Revenue		\$683,908
Anticipated Need for Alternative Funding		\$8,104,092

Table 13: Northeast and Paradise Ridge Impact Fee Area (Library), Planned Improvements and Costs, 2025-2034

Planned Improvement	Quantity (Sq Ft)	Total Cost
56th St & Deer Valley Dr	13,000	\$8,788,000
<i>10-Year Share</i>	9,705	74.7%
<i>Future New Development Share</i>	295	2.3%
<i>Non-Impact Fee Share</i>	3,000	23.1%
Subtotal		\$8,788,000
Planned Net Impact Fee Revenue		\$3,041,465
Anticipated Need for Alternative Funding		\$5,746,535

Table 14: Southwest Impact Fee Area (Library), Planned Improvements and Costs, 2025-2034

Planned Improvement	Quantity (Sq Ft)	Total Cost
NEC of 67th Ave & Lower Buckeye Rd	13,000	\$8,788,000
<i>Future New Development Share</i>	10,000	76.9%
<i>Non-Impact Fee Share</i>	3,000	23.1%
NEC of 99th Ave & Lower Buckeye Rd	13,000	\$8,788,000
<i>10-Year Share</i>	7,055	54.3%
<i>Future New Development Share</i>	2,945	22.7%
<i>Non-Impact Fee Share</i>	3,000	23.1%
Subtotal		\$17,576,000
Planned Net Impact Fee Revenue		\$0
Anticipated Need for Alternative Funding		\$17,576,000

Table 15: Ahwatukee Impact Fee Area (Library), Planned Improvements and Costs, 2025-2034

Planned Improvement	Quantity (Sq Ft)	Total Cost
19th Ave & Chandler Blvd	13,000	\$8,788,000
<i>10-Year Share</i>	176	1.4%
<i>Future New Development Share</i>	9,824	75.6%
<i>Non-Impact Fee Share</i>	3,000	23.1%
Subtotal		\$8,788,000
Planned Net Impact Fee Revenue		\$0
Anticipated Need for Alternative Funding		\$8,788,000

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