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The State of the Parks Initiative: Combined Park System Profiles

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THE STATE OF THE PARKS INITIATIVE: COMBINED PARK SYSTEM PROFILES

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The region of Central Arizona has a legacy of open spaces that have supported Arizona's rapid growth to this present day. Still, park systems' growth and operating resources have not kept pace with population and economic recovery since the 2008 recession. This limited financial capacity and additional demand, compromise stewardship success in treasured natural areas and diminish quality visitor experiences for residents and visitors alike. Therefore, Sonoran Institute (SI), in partnership with the Central Arizona Conservation Alliance (CAZCA), investigated the "state of the parks" within the region to identify the areas of greatest need among natural, desert open space parks.

This investigation was designed as a mixed methods approach. The quantitative parks profile data covered throughout this report resulted from a review of parks and recreation strategic plans, municipality general plans, budgets, annual reports, and the NRPA metrics database. This was coupled with qualitative data sourced from one-on-one interviews with local jurisdiction staff, and a stakeholder meeting with parks and recreation leaders from across Central Arizona.

There are five primary findings resulting from this work. (1) Rapid and cyclical growth in population is compromising the park, open space and trails systems in Central Arizona. The ebb and flow cycle without stable funding sources for land acquisition, park development and maintenance leaves a level of service lag in providing appropriate stewardship and visitation opportunities for residents. (2) Natural resource plans lack monitoring and implementation strategies, and do not adequately consider other jurisdictions or the region as a whole, leaving gaps in open space connectivity. (3) The jurisdictional budget books are regularly used to forecast costs of plan implementation for the next 5 years, but the implementation costs of projects with longer planning horizons and deferred maintenance costs are not evaluated. (4) The majority of park systems continue to feel the financial stress since the 2008 recession. On average the O&M budgets have not returned to pre-recession levels. (5) In comparison to the national average, park systems in Central Arizona underfund land acquisition and maintenance. They receive less funding from dedicated sources than the national average.

Finally, four significant areas of need were identified from this initial evaluation:

1. **Peer to Peer Connectivity:** There is a need for sharing methods & processes amongst staff and across communities to create standard datasets and best practices;
2. **Park to Park Connectivity:** There is a need for significant park expansions to protect wildlife connectivity, land use buffers, and open space integrity;
3. **Park to Person Connectivity:** There is a need for equity in access to open spaces and level of service in urban areas, as well as park staff development and training to support meaningful visitor experiences;
4. **Monitoring and Maintenance:** There is a need for comprehensive and effective monitoring, adaptive management, maintenance & restoration programs.

METHOD NOTES

Between January 2019 and September 2020, Sonoran Institute was the lead in the State of the Parks analysis of public park departments in the Central Arizona region. Sonoran Institute researched the seven largest public open space and preserve systems in the region to understand their positions within ten major categories.

The categories covered areas like economic impact to the community, overall strategic planning, natural resources planning, visitation trends, budgets (operations and maintenance, capital improvements, and general trends), land acquisition, funding sources, and staff capacity. Evaluation

questions were developed by drawing on studies by the National Recreation and Parks Association (NRPA) and by utilizing the combined expertise of the CAZCA steering committee (steering committee organizations at the time were City of Peoria, Desert Botanical Garden, Maricopa County Parks and Recreation Department, McDowell Sonoran Conservancy, Sonoran Institute, and the Urban Land Institute), which played an advisory role in this process.

A profile was developed for each park system. To complete the park system profiles, SI reviewed public documents such as the parks and recreation strategic plans, the municipality general plans, budgets, annual reports, as well as the NRPA metrics

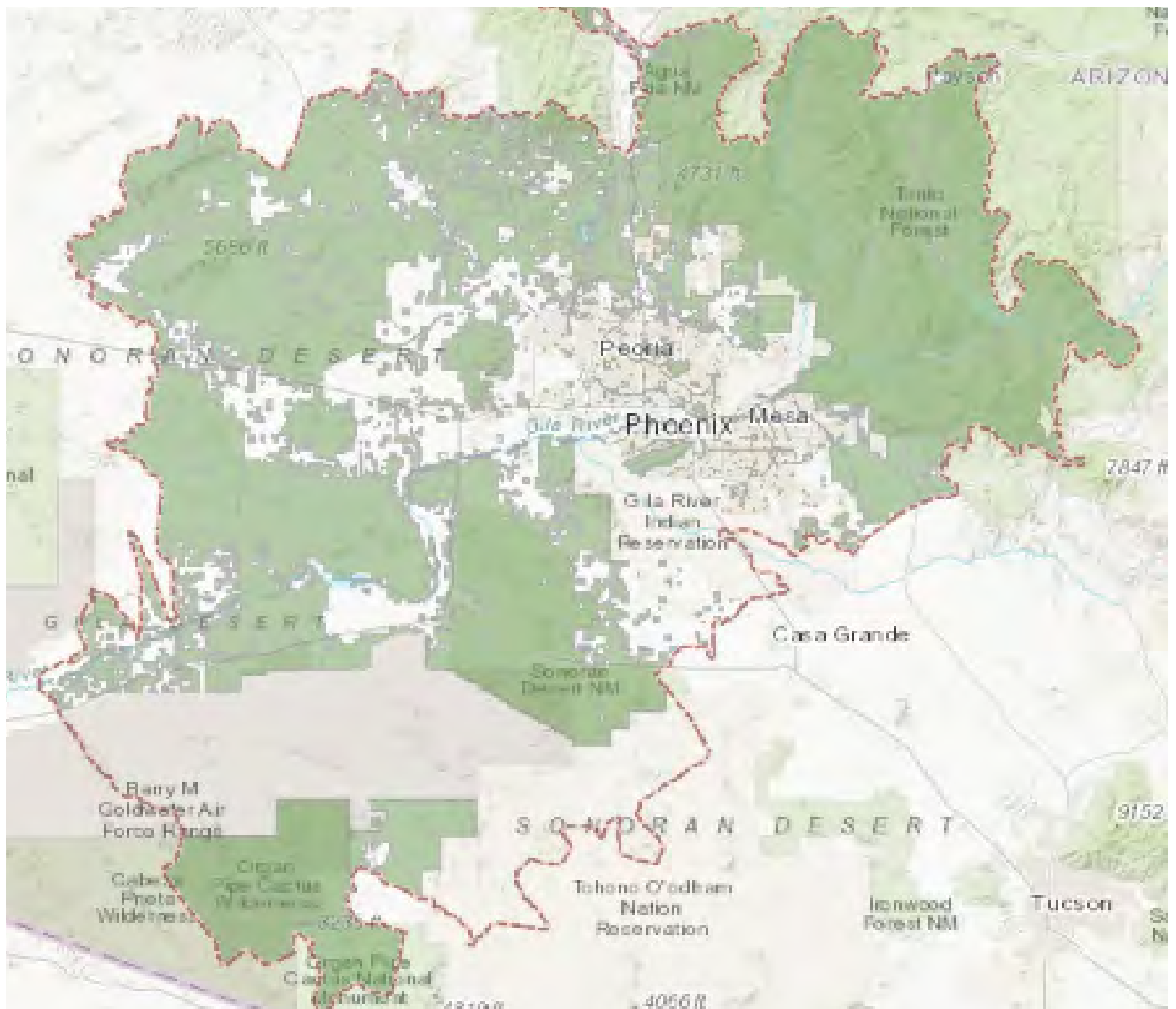


Figure 1. Parks and preserves within CAZCA study area, CAZCA Greenprint

database. Any remaining evaluation questions were asked during interviews with local jurisdiction staff. Each profile was approved by the department directors.

To avoid comparisons across jurisdictions, and potential conflict as per respondent request, the profile data were merged and summarized. Park department staff reviewed final statements and convened in January 2020 to discuss the results in an advisory group. This same advisory group agreed upon the four priorities outlined in this report.

Story Context

Parks departments are responsible for more than just parks. Within parks, there are three types of land management segments: undeveloped natural open spaces, “traditional parks” such as grassy play areas and playgrounds, and publicly maintained spaces such as lawn areas and right of ways. Parks departments also include public facilities and infrastructure within parks. While CAZCA focuses on natural open spaces, the CAZCA steering committee agreed the Park Profiles should include all types of land, campgrounds and recreation facilities.

This decision was made for two main reasons: a) traditional urban parks and facilities are sometimes prioritized above natural open spaces. To adequately support natural open spaces, we need to understand the potential barriers to meeting higher priorities as those would theoretically be addressed before open spaces. b) Park plans, budgets, and other documents referenced do not clearly or consistently distinguish between the types of open space and facilities, making parsing out data that pertained only to natural open spaces infeasible.

This decision means that the following figures may represent natural open spaces, as well as developed parks, campgrounds, recreation centers, and other park amenities. However, except in the economic benefits section, facilities that are indoors and low activity level, like libraries, stadiums, and community centers were excluded from analysis as much as possible.

STUDY AREA DESCRIPTION

Total Square Miles, Jurisdiction	10,702
Total Square Miles, Planning Area	not reported
Total Population	7,060,558
Total Sites; Total Acres	1,240; 185,231
Total Developed Acres	32%
Total Undeveloped Acres	68%
Trail Miles	1,093
Number of Operated Facilities	433
Facilities Square Footage	6,297,275

The seven park departments included here serve a total of 10,702 square miles, and a sum of 7,060,558 residents, with an average of 1,529 square miles and 1,008,651 residents served among the seven.

On average, the park departments manage 87 parks (26,142 acres) and 39 non-park sites (318 acres). This creates a total number of 1,240 managed sites (average 177 sites) or total managed acres 185,231 (average 26,462). Non-park sites might include rights-of-way, open space outside of city buildings, and so on. Almost all departments reported responsibility for maintaining public facilities and non-park grounds in addition to parks.

On average, approximately 32% of this managed land is developed parkland, and 68% is undeveloped parkland. Undeveloped properties include lands set aside as natural open space and left undisturbed apart from trailheads and other access-related infrastructure (NRPA 2019). Conversely, developed properties are graded lands with playgrounds, and other sports and recreation type facilities. Parks departments manage a total of 1,093 miles of trails, or 156 miles on average.

Park departments manage a total of 433 facilities (6,297,275 square feet), or on average, 61 facilities (899,610 square feet). The National Parks and Recreation Association (NRPA) considers operated facilities as headquarters, maintenance areas, museums, and other “programmable” areas. It does not include restrooms, storage, or concessions.

Economic Benefits

SI investigated the following economic benefit questions: (1) Has the park system studied the economic impact park visitors have on the regional economy? (2) If so, what is the total economic direct/indirect contribution of parks and preserves and/or the total direct and indirect employment?

STATE BENCHMARK

The Outdoor Industry Association estimated in 2017 that Arizona’s outdoor recreation economy generates 201,000 direct jobs, \$21.2 billion in consumer spending, \$5.7 billion in wages and salaries, and \$1.4 billion in state and local tax revenue.

CENTRAL ARIZONA FINDINGS

One park system has done a comprehensive study, and the remaining 6/7 have partial or indirect analyses. The partial studies show the impacts of certain aspects of individual park systems, like the economic impact of specific parks, certain special events, or the MLB Cactus League stadiums.

Indirect studies are produced by the jurisdiction’s tourism department and will reflect parks as well as other attractions in the city. Some departments rely on state and national level studies.

From these combined studies, we know the Total economic contribution of parks and preserves in Central Arizona is between \$627,525,104 (only comprehensive and partial studies) and \$3,027,525,104 (included indirect as well).

These studies (comprehensive and partial) report 8,574 jobs supported by the park departments.

BENCHMARK COMPARISON

In a rough comparison of the total known impact of the seven public park departments against the whole of the outdoor industry in Arizona, it is estimated that these seven parks departments alone contribute:

- **Between 2.9% and 11% of the outdoor industry direct economic contributions.**
- **4% of the total jobs in the outdoor industry.**

Strategic Master Planning

Master plans outline the key priorities and goals that a park system wishes to address. The existence of a plan indicates how well that park department is aware of and suited to tackle its biggest challenges.

The implementation plans that estimate cost and routinely monitor progress help SI and CAZCA understand which of the park-identified priorities are being focused on by park departments.

SI investigated the following master plan questions:

- (1) Has the park prepared or updated a strategic or comprehensive plan describing its overall management goals and priorities?
- (2) What is the estimated cost of implementing its plan?
- (3) Has there been progress in implementing the plan?
- (4) Does that department include planning and park development in their operating budget?

METHOD NOTES

One of the plans was unable to be shared with the research team due to departmental technical difficulty, so the town staff person responded to these questions about their plan in an interview.

NATIONAL BENCHMARK

Planning efforts are best updated between every 5 and 10 years, depending on the rate of change in the community. The best plans should include an implementation or monitoring plan (Goldschalk 2015).

According to the NRPA, 67% of parks in the U.S. include planning and development in their operating budget (NRPA 2019).

and strategic developments in their annual budgets. This is beneath the NRPA national benchmark of 67%.

CENTRAL ARIZONA FINDINGS

TABLE 2. Overview of parks studied	
Has a comprehensive master plan?	5/7
Includes cost estimates?	1/7
Total costs	Unknown
Incls implementation/ monitoring plan?	3/7
Planning expenses incl in annual budget?	4/7
Total costs estimated	Unknown

All the park systems studied have plans in place. Most had a comprehensive assessment of conditions, strategies, and goals, and one was a simple list of goals. All the plans were drafted or revised within the 10-year standard.

Only one plan included an estimation for the cost of implementation strategies. (Some plans had estimates for specific sections, such as capital improvements, which are discussed later.)

BENCHMARK COMPARISON

- In keeping with best practices, all the park departments have a recent plan, though they vary in comprehensiveness.
- **42.8% have implementation plans and strategies, or a progress monitoring system in place.**
- There is no exact standard for “Plan implementation cost estimated?” but only one plan included cost estimates beyond the capital improvement section.

Of the departments studied, 57% (4/7) reported the inclusion of funding for planning

Natural Resources Planning

Maintaining natural resources within parks is a fundamental part of healthy and enjoyable open spaces. Open spaces can be considered their own category of infrastructure and require a plan in order to understand the system, identify improvements and address priority needs (Fallding 2000).

SI investigated the following natural resource planning questions: (1) In the last ten years, has the park prepared or updated a natural resource management plan? (2) Does it address corridors and linkages outside of park boundaries? (3) Does it address invasive species monitoring and restoration? (4) What is the estimated cost of implementing its plan? (5) Has there been progress in implementing the plan?

NATIONAL BENCHMARK

General best-practices say that natural resource plans are updated regularly, include a schedule for implementation and monitoring activities, and to call out specific management objectives (Hubbard 1992).

The CAZCA steering committee suggested, based on their experience, that if plans address invasive species and wildlife corridors as standard management objectives, then this would indicate a basic level of plan comprehension for healthy and maintained open spaces in Arizona.

CENTRAL ARIZONA FINDINGS

Of the natural resource plans, three of seven were drafted or updated within the last ten years.

None of the parks departments included cost estimates for implementation in their plan or monitoring/reporting strategies for implementation.

Has a comprehensive master plan?	5/7
Incl cost estimates?	1/7
Total costs	Unknown
Incl implementation/ monitoring plan?	3/7
Planning expenses incl in annual budget?	4/7
Total costs estimated	Unknown

(1) In the last ten years, has the park conducted a visitor use survey? (2) What was the overall level of satisfaction/dissatisfaction? (3) Have these concerns been addressed? (4) What are the most popular activities? (5) What are the trends in visitation numbers and demographics?

NATIONAL BENCHMARK

The average of all recorded park and recreation agencies in the NRPA register approximately 225,000 contacts every year. Agencies serving a community greater than 250,000 typically have 1.4 million contacts per year. The most populated park and recreation agencies, those at the 75th percentile, will service nearly 4.8 million people annually (NRPA 2019).

BENCHMARK COMPARISON

- Most parks (5/7) have a natural resource plan.
- **However, the findings here suggest that these plans are not always comprehensive, or they are out of date. Monitoring, restoration, and maintenance of natural open spaces and watersheds are below the national benchmark standards.**
- **Without cost estimates or monitoring plans, the actual needs in these areas are unknown.**

METHOD NOTES

The methods of calculating visitation rates vary across systems and may not accurately reflect open space use. Maricopa County is the only park system with the ability to track actual park users because they have a staffed entry stations. This also enables them to survey their park users directly to understand the trends in park use, satisfaction, and economic value.

Other park systems are able to count visits to facilities and campgrounds, or they approximate usage through trail cameras and counters, while others conduct their satisfaction and use surveys as part of the Park System Master Planning effort in that jurisdiction.

Visitation

SI investigated the following visitation questions:

Questionnaires were sent to the community-at-large,

TABLE 4. Visitation overview of parks studied

	VISITATION RATE	SATISFACTION
Total	18,443,010	N/A
Average	3,073,835	91%
Minimum	307,000	80%
Maximum	12,400,000	97%
Stand. Dev.	4,621,033	7%

which includes non-park users, and this represents community satisfaction more so than visitor or user satisfaction.

These community surveys were conducted at different years and slightly different phrasing or methods.

CENTRAL ARIZONA FINDINGS

The average visitation rate in the study area was 3,073,835 in FY 2018 which includes visits to facilities (NRPA 2019). See Figure 1. Five out of seven park departments do not measure park-use visitation rates due to the open-access nature of most parks. The parks that have specific entry points, like regional mountain parks, are able to track visitors using fee stations, trail cameras, and car-counters.

Five out of seven local park departments had completed a satisfaction survey. Of the studies conducted, one department was able to survey actual visitors, and the rest were community surveys undertaken as part of broader planning processes. The overall level of satisfaction reported in the community surveys is around 91%.

Two out of seven community surveys indicated a community preference for maintaining existing parks and facilities over expanding the amenities into new areas.

Three out of seven had information on visitation rates over time: 2/7 were increasing, and 1/7 was relatively constant.

BENCHMARK COMPARISON

- **Visitation rates are within the national average range presented by the NRPA Park Performance Metrics.**
- **Visitor satisfaction rates are generally high.**
- **There were no standards for frequency of visitor use surveys, though all but one of the park system surveyed the community during their strategic planning.**

Operations and Maintenance Budgets

SI investigated the following operations and maintenance questions: (1) To what extent does the park budget rely on self-funding, other dedicated funding sources, or annual appropriations? (2) Has the park system kept pace with its maintenance needs? (3) How much of the Operations and Maintenance (O&M) is dedicated to personnel or operating expenses? (4) How much is spent per acre or per full-time employee (FTE)? (5) Has funding kept up with visitation or inflation?

NATIONAL BENCHMARK

NRPA analysis lists the sources of operating expenditures. See Figure 2. The average sources across agencies reporting to the NRPA on a national scale are:

- 59% general fund tax support
- 25% earned/generated revenue
- 11% dedicated levies/other dedicated taxes
- 5% other (including grants, scholarships)

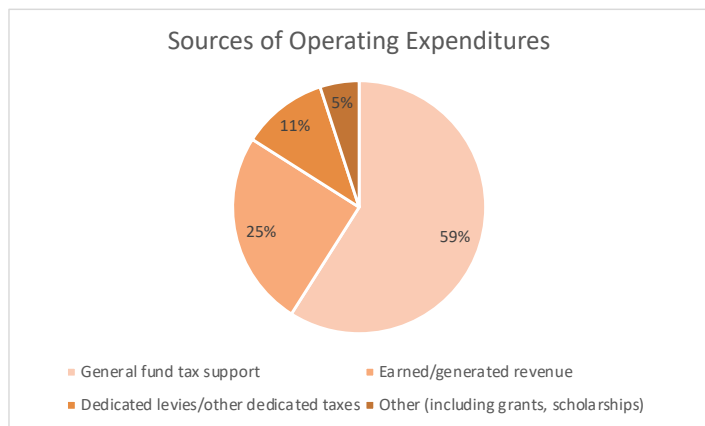


Figure 2. Sources of operating expenditures

According to the NRPA, “The typical agency recovers 27.3 percent of its operating expenses from non-tax revenues. Agencies serving denser population jurisdictions tend to have higher rates of cost recovery. Agencies serving an area with less than 500 people per square mile have a median percentage cost recovery of 23.5 percent. Cost recovery rises to 30.8 percent of operating expenditures for agencies serving jurisdictions with between 1,000 and 2,500

people per square mile.”

Following a recession, an economy is considered “in recovery” after a period of sustained growth. A “full recovery” is met when the economy has returned close to, or higher than, pre-recession levels. The same logic can be used to analyze the trends and recovery of park department budgets following the 2008 recession.

METHOD NOTES

Budget information was taken from the annual budget books and the NRPA metrics database. Where possible, budget line items were removed if they did not clearly apply to parks or open space. For example, many park departments in Central Arizona manage professional sports stadiums. These and other non-open space expenses were removed whenever clearly noted.

All seven departments have budget trends reported since 2015, but local governments are not required to maintain records prior to that year. For the purposes of analyzing trends, the data from 2008-2015 was reported wherever possible.

Gaps were filled with a basic recession trend line

up to the earliest known budget year, then all years were averaged across the number of jurisdictions represented. See Table 5.

CENTRAL ARIZONA FINDINGS

Budget Sources:

On average, 63% of the park budgets are covered by the general fund, 4% are from dedicated levies and taxes, 27% is self-generated, 6% is from other sources like sponsorships and grants, or enterprise funds. The average cost recovery rate (ratio of revenue to operating expenses) is 33%. See Table 6.

Budget Allocation:

In FY 2018, the average O&M budget was \$31,029,140.71 (min. \$4.4M, max. \$106M; standard dev. \$35.7M). The average allocation of that is 56% to personnel, 39% to operating expenses (OE), and 3% to capital projects not covered in the CIP. On average, the seven departments spend \$9,838 per managed acre (includes parks and non-park sites) and \$113,658 per FTE. See Table 7.

None of the park departments had a confident assessment of deferred maintenance needs in their system nor full cost estimates.

TABLE 5. Budget trends of parks studied

YEAR	AVERAGE OF RANGE	AVERAGE CONVERTED INTO 2019 EQUIV.	CHANGE OVER TIME (FY 2018 – FY 2019 EQUIV)	COMPARISON
2008 O&M budget	\$31,200,000	\$37,200,000	\$-6,170,859	2008 budget was higher than current day
Earliest available post-recession (combination of FY2010-2013)	\$25,021,741	\$29,140,076	\$1,889,064	2010 – 2013 avg. budget was less than current day
2015 O&M budget	\$28,989,015	\$31,731,825	\$-702,684	2015 budget was roughly the same as current day
FY 2018/19 (Current)	\$31,029,140	31,029,140	n/a	n/a

TABLE 7. Budget allocation breakdown for parks studied

	STUDY AREA AVG.	MIN.	MAX.	STD. DEV.	NAT'L AVG NRPA
FY 2018 O&M	\$32 M	\$4.4 M	\$106 M	\$35.7 M	\$3.8 M
% for personnel	56%	41%	78%	12%	55%
% for OE	39%	21%	51%	11%	38%
% for other CIP	4%	0%	11%	5%	5%
\$ per acre	\$ 11,478	\$ 73	\$ 28,961	\$ 11,276	\$ 6,750
\$ per FTE	\$ 132,601	\$ 66,913	\$ 287,360	\$ 83,420	\$ 93,230

TABLE 6. Budget sources breakdown for parks studied

% FROM	STUDY AREA AVG.	MIN.	MAX.	STD. DEV.	NAT'L AVG NRPA
General fund	63%	10%	99%	32%	59%
Dedicated levies, taxes	6%	0%	15%	6%	11%
Self generated	27%	1%	90%	30%	25%
Other	9%	2%	32%	13%	5%

Funding Trends:

To understand funding trends, the Consumer Price Index, which measures inflation, was used to compare budgets over time by calculating the 2019 purchasing power equivalent. This calculation allows observations on the rate of change against inflation.

Budgets from pre-recession (2008), post-recession (2010-2013 based on availability), and a mid-point (2015) were used as benchmarks for trend analysis. Since entities are only required to maintain records for seven years, few departments had budgets from pre-recession years. However, all seven departments had budgets from post-recession and the trend midpoint. See Table 5.

From this data, park department budgets average approximately \$6.1 million below the pre-recession rate, slightly above post-recession (\$1.8 million), and have reduced somewhat again since 2015.

To simplify looking at each department's budget change over time, the FY 2018 budgets were compared against two points in time: immediately post-recession (2010-2013) and halfway (2015). Since 2015, three out of the seven budgets have increased, but four of them are smaller. In comparison, from 2018 to post-recession (2010-2013,) five departments currently have a larger budget, but two continue to have smaller budgets than immediately after the recession.

BENCHMARK COMPARISON

The percentage of funding that comes from dedicated levies or taxes was beneath the national average. In average, the park departments studied are more reliant on the general fund than the national average.

Examining trends over time shows that budgets have not recovered from the universal budget

cuts that followed the 2008-2010 recession.

Capital Improvement Planning and Funding

SI investigated the following capital improvement planning and funding questions: (1) In the last ten years, has the park prepared or updated a capital improvements plan, other than the CIP budget book? (2) What is the estimated cost of implementing its plan? (3) Has there been progress in implementing the plan? (4) What proportions of the budget are dedicated to new development, renovation, land acquisition, or other?

NATIONAL BENCHMARK

Beyond day-to-day operations, park and recreation agencies have an annual median of \$4,007,250 in capital expenditures budgeted over five years (NRPA 2019). On a national average, just over 50% of the capital budget is designated for renovation, while 30.9 percent is geared toward new development (NRPA 2019).

CENTRAL ARIZONA FINDINGS

Four out of seven had long-range assessments and plans, like a Trails Master Plan, that were created by the park department and three out of seven park departments relied on the CIP Budget process for their planning.

The 5-year CIP plan is the best estimate of implementation costs for projects that span several phases, however you can also look at single-year snapshots.

TABLE 8. FY 2018 CIP budget projections and actual budget of parks studied

	FIVE-YEAR PROJECTED CIP BUDGET	FY2018 CIP BUDGET
Combined Total	\$376,592,396	\$85,943,843
Average	\$75,318,479	\$14,323,974
Minimum	\$1,934,592	\$1,339,326
Maximum	\$564,000,000	\$30,835,330
Stand. Dev.	\$221,899,777	\$11,066,135
NRPA Standard	\$4,007,250	N/A

TABLE 9. Breakdown of 5-year CIP budget across departments

% OF FY18 CIP BUDGET	STUDY AREA AVG.	MIN.	MAX.	STD. DEV.	NRPA NAT'L AVG
For renovation	49%	6%	84%	26%	55%
For new development	42%	15%	91%	26%	31%
For land acquisition	4%	0%	19%	8%	7%
For other	5%	0%	12%	6%	7%

The average 5-year CIP for the park departments studied was \$75,318,479. The FY 2018 average CIP budget was \$14,323,974. The range of CIP budgets across the departments studied was considerable: from \$1,934,592 to \$564,000,000. On average, 49% was for renovation, 42% was for new development, 4% was for land acquisition, and 5% was for other expenses.

To put this in perspective, parks and recreation departments received 2% of the total FY18 CIP funding within the jurisdictions studied. See Tables 8 and 9.

BENCHMARK COMPARISON

- All the jurisdictions have total budgets that are comparable to total budgets for jurisdictions of their size.

The percentages allocated to different expense categories are different than the national benchmark.

Central Arizona jurisdictions were found to allocate more than average to new development, slightly less than average to renovation, and less than average to land acquisition or “other” expenses.

Staff Observations of Funding

SI investigated the following questions for park department staff: (1) To what extent have you observed funding levels change?

METHOD NOTES

This was posed as an open-ended question during a phone interview with park department staff. One interview was held per department.

If they needed prompting, the interviewer would say “for example, have you seen changes in funding for capital improvements, land acquisition, operations and maintenance, research, monitoring, marketing, or another area?”

CENTRAL ARIZONA FINDINGS

Staff that did experience financial pressure mentioned the following challenges caused by or exacerbated by lack a funding:

- General cutbacks
- Marketing
- On-going maintenance needs
- Wages are too low to entice qualified candidates
- Improving the accessibility of trails
- Reduced administrative support
- Impacts of increasing visitation rates on water supply and delivery infrastructure
- Early stages of design and planning are rushed, leading to problems in the future
- Increased discussion but no funding for sustainability initiatives

In two of seven interviews, staff said they generally do not feel financial pressure. The first of these respondents considered this to be the case because their open spaces are relatively “new” to the park department, and they do not have the accumulated expenses that other systems might have. The second explained they are well-supported by their mayor and council and do not feel financially limited.

Land Acquisition

SI investigated the following questions in regards to land acquisition: (1) In the last ten years, has the park prepared or updated its land acquisition plan? (2) What is the estimated cost of implementing its plan? (3) Has there been progress in implementing the plan? (4) How much acquisition dollars spent and or land acquired over the last ten years? (5) What is the current level of service?

NATIONAL BENCHMARK

TABLE 10. Land acquisition breakdown of parks studied

	ACRES OF PARKLAND PER RESIDENT	NUMBER OF RESIDENTS PER PARK
Total	194	352,557
Study Area Average	27.75	50,365
Minimum	4	2,149
Maximum	106	320,615
Std. Dev.	36	119,194

According to the NRPA, “at the typical agency, there is one park for every 2,181 residents. The number of people per park rises as the population of the town, city, county, or region served by an agency increases. For agencies with jurisdictions of fewer than 20,000 residents, there is one park for every 1,231 residents. The ratio increases to one park for every 2,451 residents in jurisdictions with populations between 50,000 and 99,999 and rises further to one park for every 5,602 people.

The typical park and recreation agency oversees 10.1 acres of parkland for every 1,000 residents in its jurisdiction. The smallest agencies— those serving fewer than 20,000 residents— typically have 11.8 acres of parkland per 1,000 residents. That ratio increases to 12.5 acres per 1,000 residents in jurisdictions where agencies serve a population higher than 250,000 people.

Agencies serving communities between 100,000 and 250,000 have 8.5 acres of parkland per 1,000 residents.”

METHOD NOTES

A formal “land acquisition” plan by name is rarely found because it is a politically charged term. For that reason, this study included any level of service or open space planning document that included a process for identifying opportunities for future parklands as if it were a formal land acquisition plan.

CENTRAL ARIZONA FINDINGS

Three of seven had a land acquisition plan of some

kind. One additional park department had assessed its goals for the total land area but did not have a plan because another department within the jurisdiction handles park land acquisition.

Two of seven had costs estimates included. These estimates range between \$353 – \$653 million but vary due to several external factors.

None of them had a clear means of monitoring land acquisition plans outside of the CIP budgets. Over the last 10 years, two of seven required the actual acquisition of land and spent a total of \$8,674,200. However, two other systems expanded without spending land acquisition dollars because those properties were leased or donated to the jurisdiction. Three out of the seven systems studied did not report any expansion.

On average, the parks departments studied had 27.75 acres of park per 1,000 residents and 50,365 residents per park. See Table 10.

BENCHMARK COMPARISON

- **Just under half of the park systems had land acquisition plans or a document that outlined level of service goals.**
- **On average, park systems are well above the national standard for acres per resident and number of parks per resident. A more localized standard for the Southwest would lend further insight into park provision in Central Arizona.**

TABLE 11. Staff, volunteer and partnership breakdown of parks studied

FY 2018	TOTAL	AVG AREA	MIN.	MAX.	STD. DEV.
Staff FTE	2012	287	47	968	319
Vol. FTE	154	22	0	47.7	21
Total FTE	2166	309	52.6	1021	502
Partnerships	118	9	4	39	19

Staff Capacity, Volunteers, Partnerships

SI investigated the following questions about human capacity: (1) Are there vacant or eliminated positions due to a lack of funding? (2) To what extent is the park using volunteers to augment their resources/budget? (3) What activities are volunteers engaged in? (4) To what extent is the park using partnerships to supplement its resources/budget? (5) What activities are partners involved in?

NATIONAL BENCHMARK

The NRPA Performance Review reports multiple factors that affect the amount of park department FTEs. For our metric we chose size of the population served. Average national FTE for an area with more than 250,000 people is 273.3 FTE.

There were no metrics found for number of partnerships or volunteers.

CENTRAL ARIZONA FINDINGS

The average parks department has 287 staff FTE and approximately 21 FTE from volunteers. The average parks department reported 17 partnerships. Partnerships vary widely and are considered an agreement or arrangement with a private company, NGO, or another government entity outside of the immediate jurisdiction. See Table 11.

No park system has quantified the in-kind benefits received from partnerships, with an exception for non-profits that raise funds for parks.

BENCHMARK COMPARISON

- All parks were at or above the national average for FTEs.
- No comparisons available for volunteers or partnerships.

Funding Initiatives

SI investigated: Does the park system have plans or have recently made efforts to find additional public funding sources?

FINDINGS

Currently, only two out of the seven parks departments studied have some sort of recently passed or additional, on-going source of revenue for parks. Two of the departments reviewed have plans to initiate a new fund, and one has plans-to-plan a funding initiative. The status of the last two is currently unknown but any new initiative will require both strong political and public support.

Summary

The results from these surveys show four striking areas related to financial status of parks in Central Arizona. It should be noted that these are initial from 7 Park Directors from the study region.

1. Rapid and cyclical growth in population is compromising our park, open space and trails systems in Central Arizona. This ebb and flow cycle

without stable funding sources for land acquisition, park development and maintenance creates a level of service lag in providing appropriate stewardship and visitation opportunities for residents; both of these are essential to the region's desirability for new industries, future residents, and tourists.

2. Natural resource plans neglect monitoring and implementation strategies, thus there is little understanding of the true cost of appropriate open space maintenance and restoration. Further, plans do not adequately consider other jurisdictions or the region as a whole, leaving gaps in open space connectivity.

3. The jurisdictional budget books are regularly used to forecast into costs of plan implementation for the next 5 years, but the implementation costs of projects with longer planning horizons are not evaluated. Parks would need to assess the accumulated deferred maintenance to know whether the amount of capital improvement projects budgeted is meeting the needs of the parks.

4. The majority of park systems still feel financially stressed since the 2008 recession. On average the O&M budgets have not returned to the pre-recession levels.

5. In comparison to the national average, park systems in Central Arizona underfund land acquisition and maintenance. They receive less funding from dedicated sources than the national average.

This assessment and subsequent feedback from park department directors helped us identify four broad concerns tied to the need for greater financial support:

1. Rapid and cyclical growth in population is compromising local parks, open space and trails systems in Central Arizona. This pressure from population growth coupled with unstable funding sources for land acquisition, park development, and maintenance creates a lag in appropriate visitor opportunities for residents and a low level of stewardship of park and open space resources.

2. Developed areas are encroaching upon parks, resulting in greater maintenance needs, congested

trails, and isolated or fragmented ecological habitats which lessen the quality of the natural resources.

3. Fewer staff and less training make it challenging to meet the changing interests and access needs of diverse and growing communities.

4. A lack of maintenance and restoration leading to invasive species expansion, erosion, fire risk, and unsafe recreation conditions.

5. Limited financial resources can be overcome through innovation, but low staff capacity girdles the conditions that foster new ideas, such as peer-to-peer exchange, research, and pilot program development.

6. There is no single entity charged with regional park, open space and trail oversight or advocacy which leads to uncoordinated land acquisition, regional park and trail development and stewardship efforts, all of which diminish the effectiveness and return on investment for the limited dollars being spent.

Next Steps

Future due diligence could include research into benchmark alternatives, such as the Southwest region or stakeholder-identified "sister cities," that would provide a regional comparison. The benchmark comparison sections would be more conclusive if local benchmarks were available for comparison. The national average includes statistics from cities that are very unlike Central

Arizona in population size, lifestyle expectations, and environmental climate. A regional or customized benchmark dataset would further inform needs and complement the national level comparisons. It was difficult, both in research and in dialogue, to parse out the different needs between natural open space preserves and traditional "developed" parks (playgrounds, mown fields).

Figures may include facilities, developed parks, and special events in some cases, particularly in economic benefits, visitation.

Finally, the motivation for this research was to assess whether there was interest in a county-wide conservation funding initiative. The feedback we received indicated there were differing priorities around developed and undeveloped parks, making a county-wide effort unrealistic. Future due diligence work focused in sub-regions may find more synergies.

Conclusion

Taken the data and qualitative data gathered from interviews park leadership the four significant areas of need identified at the start of this document are evident. There is more to do to address and strategize to potential solutions within these areas of need.

- 1. Peer to Peer Connectivity:** There is a need for sharing methods & processes amongst staff and across communities to create standard datasets and best practices;
- 2. Park to Park Connectivity:** There is a need for significant park expansions to protect wildlife connectivity, land use buffers, and open space integrity;
- 3. Park to Person Connectivity:** There is a need for equity in access to open spaces and level of service in urban areas, as well as park staff development and training to support meaningful visitor experiences;
- 4. Monitoring and Maintenance:** There is a need for comprehensive and effective monitoring, adaptive management, maintenance & restoration programs.

KEY REFERENCES

Fallding, M. (2000), What makes a good natural resource management plan?. Ecological Management & Restoration, 1: 185-194.
Godschalk, David. David Rouse. 2015. Sustaining Places: Best Practices for Comprehensive Plans.

American Planning Association.

Hubbard, W. (ed.) 1992. What's in a management plan?. The Florida Forest Steward, vol. 1, no. 2, Forest Stewardship Publication. Gainesville: University of Florida Institute of Food and Agricultural Sciences.

National Recreation and Park Association. 2019. Agency Performance Review Park and Recreation Agency Performance Benchmarks. <https://www.nrpa.org/siteassets/nrpa-agency-performance-review.pdf>

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