

CITY AUDITOR'S REPORT



AUDIT OF PARK MAINTENANCE

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EXECUTIVE SUMMARY

At the request of the Acting City Manager, this audit was conducted to evaluate the efficiency and effectiveness of the City's park maintenance function, and the adequacy of controls in safeguarding city assets. This report addresses six operational issues and includes fifteen recommendations to improve the function. The deficiencies identified should not be construed as criticism of the current manager, who was recently redeployed from recreation to oversee maintenance. The following is a summary of the audit issues.

The City's in-house park maintenance costs, at an estimated hourly rate of \$80-\$100, were significantly higher than the rates of \$25-\$35 typically charged by grounds maintenance contractors. To be cost effective, the entire park maintenance function could be outsourced to save over \$1 million per year.

Since the current union agreement prohibits the City from outsourcing before the end of FY2013-2014, park maintenance management should pursue other cost containment measures, through increased productivity, staff optimization, overhead reduction, organization realignment, and elimination of unnecessary expenses.

Maintenance workers spent an average of 2.5 hours per day on driving, instead of working inside the parks. Productivity could improve if workers stop making unnecessary trips back and forth between their work sites and the office, for punching time cards, taking breaks, or other activities due to poor planning.

As a result of budget cuts and staff reduction, maintenance workers were inundated by the labor intensive tasks, such as picking trash and cleaning restrooms. As semi-skilled labor, the full-time workers should focus their efforts on landscape maintenance and fixing irrigation problems, instead of the low-skilled cleaning tasks, which would be more cost effective to be performed by community service workers.

BACKGROUND

Park Services, a division of Parks and Recreation Department, is responsible for the maintenance of approximately 418 acres of developed parkland, as shown in the following table.

Name	Location	Size (acres)	Utilization
Craig Ranch Regional Park	628 W Craig	152	n/a
Cheyenne Sports Complex	3500 E Cheyenne	37.7	high
Seastrand Park	6330 Camino Eldorado	22	high
Nature Discovery Park	2627 Nature Park	20	high
Aviary Park	6750 Aviary	15	high
Sandstone Ridge Park	1661 W Hammer	14.7	medium
Petitti Park & Pool	2505 N Bruce	14.3	low
Municipal Golf Course	324 E Brooks	14	medium
City View Park	101 E Cheyenne	13	medium
Desert Horizons Park	3750 Simmons	11	medium
Deer Springs Park	6550 Aviary	10	high
Eldorado Park	5900 Camino Eldorado	10	high
Goynes Park	3909 W Washburn	10	high
Silver Mesa Rec. Center & Pool	4025 Allen	10	low
Hartke Park & Pool	1900 E Tonopah	9.3	low
Gold Crest Park	714 Craig Creek	7.8	medium
Monte Vista Park	4911 Scott Robinson	5	medium
Richard Tam Park	4931 Rockpine	5	low
Flores Park	4133 Allen	5	medium
Cheyenne Ridge Park	3814 Scott Robinson	5	medium
Valley View Park	2000 Bennett	5	medium
Hebert Memorial Park	2701 Basswood	3.5	low
Willie McCool Park	4400 Horse	3.4	low
Walker Park & Pool	1509 June	3.4	low
Windsor Park	2227 W Evans	3.1	low
Neighborhood Rec. Center	1638 N Bruce	3	low
Joe Kneip Park	2800 Judson	2.2	medium
Boris Terrace Park	2200 E Cartier	1.2	low
College Park	2613 E Tonopah	1.2	medium
Tonopah Park	204 E Tonopah	0.7	low
Brooks Tot Lot	1421 E Brooks	0.2	low
Rotary Tot Lot	2600 Magnet	0.1	low
	Total	417.8	

Source: Parks and Recreation Department

In addition to maintaining 30 parks, 4 swimming pools, 3 school parks, 2 recreation centers, and the Municipal Golf Course by in-house staff, the division also oversees the Aliante Golf Course management contract, the citywide landscaping and grounds maintenance contracts for street medians, public buildings, and walking trails. The division's other responsibilities include park rentals and allocation of athletic fields.

To cope with the economic recession, the City had drastically reduced its park maintenance budget and staffing levels over the past two years. The division has an operating budget of \$5.37 million for fiscal year 2010-2011, including 31 full-time positions, utility expenses, and costs for vehicles, equipment, services, and supplies.

AUDIT OBJECTIVES

At the request of the Acting City Manager, the main objectives of this audit were: (1) to evaluate the efficiency and effectiveness of the park maintenance function; and (2) to determine whether adequate controls are in place to safeguard the city assets.

SCOPE AND METHODOLOGY

This audit focused primarily on the period from July 2009 through September 2010. The audit was performed in accordance with generally accepted governmental auditing standards. Audit procedures included:

- Interviewing management and staff involved in park maintenance;
- Reviewing budgets, financial reports, policies and procedures;
- Conducting field observations and on-site interviews;
- Examining all relevant records related to: budgets, daily activities, equipment, inventory, payroll, and purchases; and
- Analyzing financial and operational information.

FINDINGS AND RECOMMENDATIONS

The City Auditor's Office would like to thank the employees of Parks and Recreation, Administrative Services, and Finance for their cooperation and assistance during the audit. This audit identified issues management should address to improve the effectiveness and efficiency of the City's park maintenance function. These issues are summarized in the following sections. While other issues were identified and discussed with management, they were deemed less significant for reporting purposes.

1. HOURLY MAINTENANCE COSTS

Criteria

- Prudent managers periodically compare their operating costs with those of other service providers to ensure the cost effectiveness of their operations.
- If the operating costs are too high, managers must identify cost containment measures and streamline their operations.

Condition

- During FY2009-2010, approximately \$781,000, 13% of the City's annual park maintenance expenditures were paid for contracted services, including:
 - Repair of damaged rubberized playground surfaces;
 - Repair of damaged playground equipment;
 - Park security services;
 - Pond maintenance;
 - Tree pruning and transplanting; and
 - Landscape and grounds maintenance for street landscapes, trails, and public buildings.
- Contracting out these services were mainly for the following reasons:
 - Lack of specialized knowledge, skills, tools, or equipment;
 - Insufficient or fluctuating work activities to justify hiring full-time specialists or purchasing expensive equipment that would be underutilized;
 - Safety and liability concerns; and
 - Grounds maintenance works outside of city parks.
- Due to competition among service providers, contractors tend to offer quality service at competitive prices. They strive to reduce costs through high worker productivity and equipment utilization, low overhead, and economy of scale. Nevertheless, it is critical to develop specific contract terms and establish effective contract oversight to monitor the performance of external service providers.
- In comparison, government employees are inherently more expensive due to relatively high costs for wages, benefits, equipment, tools, and overhead.
- The park maintenance workers were paid nine hours per day, four days per week for approximately \$30 per hour.
- With an additional 40% of pay for benefits, the payroll cost increased to \$42 per hour.

- Excluding non-working days for holidays, vacation and sick leave, full-time employees were paid 1,872 hours but only worked approximately 1,584 hours annually. As such, the direct park maintenance labor cost further increased to approximately \$50 per hour.
- To support the maintenance workers, there were also indirect costs for administrative and supportive staff (i.e. management, mechanic, office assistant) as well as overhead costs for vehicles, equipment, and tools.
- Including the direct, indirect, and overhead costs, the total in-house cost was estimated to be \$80 to \$100 per hour, significantly higher than the \$25 to \$35 hour rates typically charged by grounds maintenance contractors.
- Most of the maintenance workers being interviewed during the audit were apprehensive of their job security. Nevertheless, they took pride in providing high quality services and also offered various ideas to improve their operations.

Cause

- Traditional practice of employing full-time public employees to provide public services.
- Loss of part-time staff due to budget cuts.

Effect

- The City could potentially save over \$1 million per year by outsourcing the park maintenance function. However, the current union agreement prohibits the City from outsourcing before the end of FY2013-2014.

Recommendation

- 1.1 The Park Services Manager should develop a cost containment plan to ensure the City's in-house costs for park maintenance are competitive with the rates of external service providers.

Management's Response

- 1.1 A cost containment plan can be developed. However, a determination must be made on the level of service the City would like to see for the maintenance of the parks. We are currently operating at a Mode 3 at the neighborhood parks, which is a very lean level of maintenance. In order to continue operating at a Mode 3, the division cannot operate with any additional loss of staff.

Target Completion Date: May 2011

2. WORKER PRODUCTIVITY

Criteria

- Park maintenance workers are most productive while working inside the parks to perform maintenance activities.

Condition

- Beginning in August 2010, maintenance workers were required to record their daily activities using location codes and task codes.
- The preliminary results based on the activities of August and September indicated that the maintenance workers and crew leaders spent 26% of time (2.47 hours daily) on driving and 12% of time (1.14 hours daily) on lunch and breaks.
- During their 9.5 hours work shift, these employees were entitled to one 30-minute lunch break and two 15-minute breaks. As such, they had exceeded their total break time of one hour per day.
- A review of the daily activity reports indicated several reasons for such unproductive use of time.
- All maintenance workers were required to punch their time cards at the beginning and end of each day. Some workers spent approximately one hour each day driving back and forth to punch time cards.
- Several workers, especially the weekend crews, spent a lot of time driving from park to park to unlock gates and restrooms, and perform trash removal in the morning.
- Some employees frequently drove back from their parks to the maintenance office during the day for lunch, breaks, or other activities. Each return trip usually took 20-30 minutes of drive time.
- Most workers began their shift at either 5:00 a.m. or 5:30 a.m. while some started as early as 4:00 a.m. These work hours were suitable in the summer due to early sunrise and afternoon heat. However, for the remainder of the year, especially during the winter, the sun does not rise until after 6:30 a.m. most of the days. Without adequate lighting, work productivity in the parks could be negatively impacted.

Cause

- Long-term practice established by the former Park Services Manager.

Effect

- Reduced employee productivity.

Recommendation

- 2.1 The Parks Services Manager should reevaluate the necessity of requiring maintenance staff to punch time cards, considering their work hours are recorded on their daily activity reports.
- 2.2 The Parks Services Manager should instruct the maintenance workers to start and end their work shifts at their assigned park sites, instead of driving back to the maintenance office.
- 2.3 The Park Services Manager should assign each of the maintenance workers a designated home-site where:
 - Assigned city vehicles could be parked at the end of each shift; and
 - Regularly used equipment, tools, parts, and supplies would be securely stored.
- 2.4 The Park Services Manager should evaluate the costs and benefits of locking and unlocking city parks every day.
- 2.5 The Park Services Manager should consider changing the park opening hours to match the time of sunrise, instead of fixing it at 5:00 a.m. the entire year.
- 2.6 The Park Services Manager should consider delaying the start time of maintenance staff in the winter months, except for golf course mowing duties, to improve productivity.

Management's Response

- 2.1 Development of formal expectations and tasks for parks maintenance duties will eliminate the need for punching a time clock. Once this is completed, each maintenance worker will know what is expected of him/her while on the job. Evaluation of performance will be based on their ability to meet the expectations. It is still important to make sure employees arrive to work on time.

Target Completion Date: May 2011

- 2.2 This may not be totally feasible as employees need to pick up their work trucks at the main yard that are supplied with the necessary tools to do their job.

Target Completion Date: May 2011

- 2.3 Currently all vehicles are assigned at the yard on Brooks Street. This is a secure location. Parking vehicles at the park site would invite vandalism and theft once a pattern has been established.

Parks that have restrooms are used for storage of supplies for maintenance of the parks. Not all parks have restrooms and supplies have to be brought in when they are visited.

Current restroom/park design does not provide secure space. This is typically found in bigger regional facilities.

Target Completion Date: Home site is located at Brooks Street. Once the Maintenance yard at Craig Ranch Regional Park is completed, this could be used as a site for the north zone parks.

2.4 This task will be eliminated due to the elimination of the security contract. In their specs, the security locked down the parks at closing time. Because staff will no longer need to unlock the gates, staff is able to get to their site sooner.

Target Completion Date: Completed

2.5 This will be discussed with the Director of Parks and Recreation, which ultimately will need to go before Council for approval.

Target Completion Date: July 2011

2.6 The work schedule coincides with the opening of the parks, primarily because we try to clean the restrooms from the day before first thing. This can be changed and restrooms can be cleaned as we have staff at each park site.

Delaying the start time of maintenance staff is dependent also on Recommendation 2.5.

Target Completion Date: July 2011

3. STAFF OPTIMIZATION

Criteria

- To ensure operational efficiency and cost effectiveness, managers strive to maintain a flat organizational structure, assign workers to fully utilize their skills, and use the least cost alternative to accomplish their tasks at the agreed upon standard.

Condition

- Park maintenance workers performed various tasks at different frequencies throughout the year, as shown below:
 - Daily tasks - trash pickup and removal, restroom cleaning, inspections;
 - Weekly tasks - turf mowing, edging, trimming, pressure washing;
 - Monthly tasks - tree and shrub pruning, fertilizing, weed control;
 - Seasonal tasks - aeration, top dressing, over seeding.
- These tasks could be grouped into two categories: (1) low-skilled tasks, such as cleaning and trash removal; and (2) semi-skilled tasks, such as maintenance of turf, plant, and irrigation.

- As a result of staff reduction over the past two years, each maintenance worker had to cover more parks and acreages, but at lower service levels, than before.
- To cope with their increased workload, some maintenance workers regularly used community service workers (CSW) as free labor, to assist them on the labor intensive unskilled tasks. However, some maintenance workers would prefer working on their own instead of taking on any CSW.
- Based on their deteriorating conditions, the irrigation systems, turf areas, plants, and trees had apparently not been properly maintained, and might result in costly repairs or replacements of these valuable city assets.
- Most of the 20 maintenance workers were knowledgeable of their daily routine and worked mostly on their own without supervision.
- Some workers wondered how management could justify having three layers of management within the division: (1) three crew leaders (2) three supervisors, (3) one manager, while kept on laying off the frontline staff.

Cause

- Traditional organizational structure and work assignment.

Effect

- High operating costs.
- Reduced service levels.

Recommendation

3.1 The Park Services Manager should require all maintenance workers to take community service workers, if available, and keep track of the cost savings from utilizing the community service workers program.

Management's Response

3.1 Community Service Workers (CSW) are not always available for hours. Staff will work with Detention Services to try to guarantee a set number of workers specifically for Parks Maintenance. Staff will then be required to have a set number of CSW to work with them.

Additionally, if the parks maintenance division can be guaranteed a set number of CSW, part time staff can be hired to lead the CSW crews for trash and garbage detail.

Target Completion Date: March 2011

4. ORGANIZATIONAL REALIGNMENT

Criteria

- Organizations operate effectively and efficiently if their functions are properly aligned.

Condition

- The Park Services Division performed the following maintenance related functions:
 - Oversight of contracted grounds and landscaping maintenance services for public buildings (e.g. city hall campus, police and fire stations) and street medians;
 - Grounds and landscaping maintenance of all city parks, golf course, and swimming pools;
 - Oversight of park design and construction;
 - Maintenance of facilities and structures within city parks, recreation centers, and sports fields;
 - Restroom cleaning and litter controls at all city parks; and
 - Maintenance of motorized equipment used for park maintenance.
- Within the City, several maintenance functions for buildings, computers, and vehicles had been centralized within the Administrative Services Department.
- The Administrative Services Department was also involved in the oversight of various citywide contracts, including janitorial services.
- As a result of budget cuts, the divisions of Building Services and Fleet Services had fewer staff left.
- Both the divisional managers in Administrative Services had established reasonably sound business processes and were willing to take on additional responsibilities related to park maintenance.
- In the Park Services Division, the manager and the mechanic had been recently redeployed, from the Recreation Division and the Building Services Division, respectively.

Cause

- Park maintenance had traditionally been performed by staff within the Parks and Recreation Department.

Effect

- The park maintenance employees could make use of the established processes and technical support of the existing building maintenance and vehicle maintenance functions within the Administrative Services Department.

Recommendation

- 4.1 The Parks and Recreation Director should consult with the Fleet Manager, the Administrative Services Director, and the City Manager's Office to make arrangements for transferring the Equipment Mechanic position, along with the powered equipment, parts, and mechanic shop to the Fleet Division.
- 4.2 The Parks and Recreation Director should consult with the Building Maintenance Manager, the Administrative Services Director, and the City Manager's Office to make arrangements for transferring the maintenance staff, along with their vehicles, tools, parts, supplies, and facilities to the Building Services Division.

Management's Response

- 4.1 This can be accomplished provided that parks specialized equipment is serviced as a "priority". Delays in service will impact the maintenance levels of parks. Mowing turf may be delayed if blades are not sharpened regularly and/or equipment is not functioning properly.

With limited staff we are concerned with Fleet's ability to respond and strong emphasis is on support for Parks Division and Recreation Division.

Target Completion Date: June 2011

- 4.2 This recommendation needs thorough analysis by all parties to determine feasibility and best fit to head this realignment. We would argue that the quality of work is superior, plus the park system has over one million annual visitors. Parks and Recreation is the only maintenance program to deal directly and regularly with external customers. Additionally, the parks are our home and office. They're where we program our activities and events. It would be extremely cumbersome to have to work through other Department's to schedule use of the park system. Additionally, we have a growing number of buildings we operate. It makes better sense to allow Parks to manage the building/custodial function.

Target Completion Date: June 2011

5. VEHICLES, EQUIPMENT, AND TOOLS

Criteria

- Adequate controls should be in place to properly manage city assets and to minimize their costs.

Condition

- Over the past two fiscal years, the Park Services Division spent an average of \$447,000 annually on vehicles and large equipment.
- With over thirty city vehicles, the Division had more vehicles than its employees.
- Most of the city vehicles were assigned to individual employees, who worked nine hours per day and four days per week.
- While the employees were off-duty, the trucks usually sat idle in the maintenance yard.
- Consequently, these city vehicles had relatively low utilization.
- In addition to the vehicles, the Division had over sixty pieces of heavy equipment, as well as numerous small powered equipment and hand tools.
- Equipment utilization, repair and maintenance records were not formally tracked.
- As such, it was impossible to determine whether a piece of expensive equipment had been:
 - Regularly serviced to meet the warranty requirements; and
 - Fully utilized to justify the costs of ownership.
- The Division also spent an average of approximately \$25,000 per year on minor equipment and tools.
- However, these city properties were not formally tracked to ensure all equipment and tools were properly accounted for.
- Following a recent theft incident, a complete inventory count was conducted. However, management had not established a formal process to account for the subsequent additions, movement, and disposals of the inventoried items.

Cause

- Inadequate controls.

Effect

- Increased operating costs.

Recommendation

- 5.1 The Park Services Manager should evaluate the necessity of assigning one city vehicle to each of the employees for exclusive use and designate additional pool vehicles for shared use.
- 5.2 The Park Services Manager should consult with the Fleet Manager to determine the right size of fleet to meet park maintenance's operational needs and turn in the surplus vehicles.
- 5.3 The Park Services Manager should establish a formal process to track the utilization and maintenance records of large equipment.
- 5.4 The Park Services Manager should establish formal controls to properly account for all the minor equipment and hand tools.

Management's Response

- 5.1 The Maintenance Division currently has 24 vehicles for staff use. The Division has turned in 4 vehicles into Fleet, which include 2 units to be used as pool vehicles. Additionally, a plan is being developed to conduct maintenance in the form of "work crews" that would allow multiple staff to perform duties at each park site. This would include breaks, and lunch breaks to be taken together (creating efficiencies by reducing drive time). This would also result in fewer vehicles needed as the "work crew" would travel together.

Target Completion Date: January 2011

- 5.2 Four vehicles have been turned in or pooled.

Target Completion Date: Completed

- 5.3 The Division will consult with Fleet Management to use the Faster System currently used in Fleet Services.

Target Completion Date: December 2010

- 5.4 Currently we are using a software system called TRIMMS that allows us to inventory supplies. We will look into developing the system that will inventory the minor equipment and hand tools as well.

Target Completion Date: January 2011

6. WATER CONSERVATION

Criteria

- The City should set a good example for water conservation.

Condition

- The Park Services Division spent over \$1 million per year on water.
- It cost over \$100,000 per year to water each of the largest parks, as shown in the following table:

Park Name	Annual Cost	Size	Cost/Acre
Cheyenne Sports Complex	\$115,366	37.7 acres	\$3,060
Nature Discover Park	\$109,346	20 acres	\$5,467
Seastrand Park	\$104,674	22 acres	\$4,758
Aviary Park	\$35,489	15 acres	\$2,366
Sandstone Ridge Park	\$18,157	14.7 acres	\$1,235
Municipal Golf Course	\$51,925	14 acres	\$3,709
City View Park	\$71,026	13 acres	\$5,464
Eldorado Park	\$40,544	10 acres	\$4,054

- The annual water costs of these parks ranged from the lowest of \$1,235 to the highest of \$5,467 per acre.
- Newer parks such as Sandstone Ridge (built in 2007) cost significantly less water than older parks such as City View (built in 1968) per acre due to their differences in design and water conservation emphasis.
- Some parks had turf covering from edge to edge, including slopes, high-traffic and very low-use areas.
- If 10% to 20% of the existing turf areas, especially those located at the perimeters, slopes, and medians, were converted to desert landscape, the City could save at least \$100,000 annually on water.

Cause

- Most of the city parks, especially the older ones and some built by developers, were not designed with water conservation in mind.

Effect

- Excessive maintenance costs.
- Waste of water.

Recommendation

- 6.1 The Park Services Manager should review all the existing turf areas at city parks, street medians, and public buildings to identify 10-20% of turf areas for conversion to desert landscape.

Management's Response

- 6.1 Elimination of turf areas in parks may not be the best practice to consider. The division will look at areas within parks where turf is used as an aesthetic feature and can recommend conversion. Landscape medians and buildings will definitely be looked into. It should be pointed out that not always can we see a savings from maintenance when we convert grass to xeriscape. Maintenance is increased due to the need of more hands on time to perform the function. Water savings will definitely be realized.

Current water conservation controls:

- No over seeding at the parks
- Use of hybrid Bermuda grasses
- Conversion to Cal sense controllers to monitor water usage
- Implementation of new design standards in parks and streetscape

Target Completion Date: Turf conversion projects will be evaluated during the annual CIP process.