Audit Report

PARK MAINTENANCE

February 2002

Austin City Council

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On February, 26, 2001, the Office of the City Auditor presented this audit report to the City Council Audit and Finance Committee. The Committee accepted the audit report and requested that further information on developing an investment strategy be brought back at a subsequent committee meeting.

This report is also available at our website, **http://www.ci.austin.tx.us/auditor**, in pdf format. You may also request additional hard copies through the website or by email at **oca_auditor@ci.austin.tx.us.** Please request Audit No. AU01306.

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City of Austin MEMO

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February 26, 2002

To: Mayor and Council Members

From: Stephen L. Morgan, City Auditor

Subject: Parks Maintenance Audit Report

I am pleased to present our report on parks maintenance. Our objectives in this audit were to

- determine how well the Parks and Recreation Department manages maintenance priorities,
- evaluate the efficiency of demand-based maintenance, and
- evaluate the effectiveness of daily servicing.

This audit was undertaken because parks help establish Austin as a great place to live and to visit. As a major investment in the economic, environmental, and cultural life of the City, parks are a high priority of the City Council.

The City has made substantial investment in acquiring parks and providing programs. However, we found indications that investment in maintenance is too low and needs to be enhanced. The Parks and Recreation Department does not have in place the most fundamental asset management practices, such as a functional maintenance inventory, routine assessment of facility condition, and planning for maintenance reinvestment based on the value and requirements of each facility. Existing management information is incomplete and unreliable.

Improving these conditions will require that the maintenance process be overhauled and strengthened. Our report includes nineteen recommendations intended to improve management systems, management information, and accountability for use of maintenance resources. We also identified some opportunities to increase the level of investment in parks maintenance.

We appreciate the courtesy and full cooperation that we received from the Parks and Recreation Department Director, the Operations Division Manager and the rest of the staff during this audit.

Stephen L. Morgan, CIA, CGAP, CFE, CGFM
City Auditor

PARKS MAINTENANCE
COUNCIL SUMMARY

This report presents findings and recommendations from our audit of parks maintenance performed by the Austin Parks and Recreation Department (PARD). This audit was undertaken because parks help establish Austin as a great place to live and to visit. As a major investment in the economic, environmental, and cultural life of the City, parks are a high priority of the City Council.

Available data on the condition of City parks is mixed.

We cannot generalize directly about the condition of Austin parks because PARD has not developed clear maintenance standards, useful performance measures, and comprehensive data on the condition of park assets. From the available evidence on the condition of parks and our own observations we are able to draw these conclusions:

- City recreation and senior center supervisors are satisfied with many areas of park and facility maintenance.
- *Voice of the Customer* surveys since 1996 show that customer satisfaction with the condition of City parks is declining.
- Our observations supported the validity of the *Voice of the Customer* survey information insofar as overall park conditions were poorest in areas where citizen satisfaction was lowest.
- Generally, larger parks are not maintained as well as smaller parks.
- Parks in the Operations Division's North District are not maintained as well as those in the Corridor and South Districts.
- Daily servicing of parks emphasizes custodial duties that improve appearance, but maintenance and repair that maintain the asset's value are largely deferred.
- We observed significant unmet and undocumented maintenance needs in all parks we evaluated.

PARD's data on maintenance backlog does not provide a standard for judging the condition of parks or describe the extent of unmet maintenance needs.

PARD has made two significant efforts to characterize the maintenance backlog. These efforts and our own observations indicate that there are many unmet maintenance needs. However, PARD's efforts to characterize the backlog are not useful because PARD has neither defined the terms necessary to discuss the backlog meaningfully nor developed standardized information on park conditions. Moreover, the methods used for estimating costs to address backlogged items were neither sound nor rigorous.

The City of Austin does not manage parks according to fundamental asset management practices.

Authoritative literature emphasizes certain fundamental practices for managing a large real estate portfolio. In managing the parks system, the City of Austin needs to improve in respect to the following practices.

- **The Operations Division does not have a comprehensive maintenance inventory of parks and facilities.**
  The Operations Division does not have a complete inventory of park assets that provides full information on each asset that is relevant to its maintenance. This is a necessary first step in maintenance planning for a large system.

- **PARD does not routinely assess the condition of park assets.**
  PARD does not perform routine documented assessments of the physical condition of buildings, parks, and amenities. Without condition information in place, PARD is unable to demonstrate effectively monetary and human resource needs for routine and preventive maintenance to the City Manager or to the City Council.

- **PARD lacks a comprehensive strategy for reinvestment in park assets.**
  Austin's maintenance investment per acre and maintenance investment as a percentage of program expense are among the lowest of all the cities compared. Maintaining the value of a real estate portfolio requires reinvestment in each asset based on its value and maintenance needs. Developing a reinvestment strategy requires planning operations based on reliable cost estimates for each activity undertaken, and results in a shift to preventive maintenance. PARD has not developed a strategy that targets reinvestment levels and funding sources.

- **The Operations Division has not defined and separated maintenance duties from other duties to ensure accountability.**
  The Operations Division has wide-ranging responsibilities, including both maintenance and non-maintenance activities, as well as activities that are not related to parks. A wide range of responsibilities is not necessarily inappropriate, but controls are required to ensure that resources are used for their intended purposes. To ensure that park maintenance is not short-changed, activities must be categorized and accounted for separately, and operations must be guided by standard operating procedures.

Critical park maintenance management information is unavailable.

Pervasive management information problems hamper PARD's ability to manage maintenance. PARD purchased a maintenance management software package, but it is not fully implemented and data is not reliable. PARD is unable to monitor the cost of maintenance activities by facility, and some reported performance measures lack credibility. Failure to capture management information inhibits PARD's planning and resource management. Moreover, managers lack a systematic way to meet maintenance priorities and make informed budget decisions.

ACTION SUMMARY
PARKS MAINTENANCE

Rec#	Recommendation Text	Management Concurrence
01	To improve data on customer satisfaction by planning area, the City Manager should direct the Director of the Human Resources Department to improve the Voice of the Customer survey by • increasing the sample size, • selecting a sample that yields valid data for each of the 26 City planning areas, and • changing the calculation of satisfaction for all questions to be a proportion of all responses, as calculated in this report.	Partial
02	To link park maintenance with external customer satisfaction, the Director of PARD should set a target for the measure, "satisfaction with park maintenance" from the Voice of the Customer survey, once the City has established its method of calculation. The Director of PARD should also analyze the number of "dissatisfied" and "neutral" responses by City area and establish strategies for turning more respondents into satisfied customers.	Do Not Concur

Rec#	Recommendation Text	Management Concurrence	Proposed Implementation Date
03	The PARD Operations Division Manager should • review the workload, staffing, training, and logistics between the North, Corridor, and South districts to determine whether management span of control is appropriate and • establish a more equitable division of workload among districts.		Concur
04	The PARD Operations Division Manager should continue to develop and implement a plan to complete a comprehensive inventory of PARD facilities and to specify the facilities' maintenance requirements.		Concur
05	To provide a basis for ongoing planning, the PARD Operations Division Manager should develop a plan and schedule for completing baseline condition assessments for all parks and facilities.		Concur
06	The City Manager should identify funding outside of current parks maintenance funding for the maintenance inventory and baseline condition assessments needed as a basis for ongoing planning.		Partial
07	To improve planning for maintenance and accountability for the condition of Austin parks and facilities, the PARD Operations Division Manager should establish an ongoing program of assessment for all parks and facilities.		Concur

Rec#	Recommendation Text	Management Concurrence	Proposed Implementation Date
08	To protect the City's investment in park assets, the City Manager and Director of PARD should develop for presentation to the City Council a comprehensive strategy for reinvestment in park assets based on their value and should develop suggested funding for those strategies.		Do Not Concur
09	To enhance funding of park maintenance, the City Manager should examine the feasibility of allocating funds from the Hotel-Motel Bed Tax for maintenance of the Town Lake Corridor because of its importance to tourism.		Concur
10	The Director of PARD and PARD Operations Division Manager should establish long- and short-range maintenance plans for each park asset based on initial condition assessments. Plans should establish an accepted standard of maintenance for each type of park asset and hold the applicable supervisors accountable for meeting those standards.		Concur
11	The Director of PARD should adopt and maintain preventive maintenance programs for all parks and facilities.		Concur

Rec#	Recommendation Text	Management Concurrence	Proposed Implementation Date
12	In order to improve accountability for park asset maintenance, the City Manager should assign responsibility for maintenance of rights-of-way, medians, blind corners, and other nonpark maintenance to Public Works or other appropriate departments, as recommended in previous improvement efforts. The Operations Division of PARD should retain positions and appropriate funding to perform forestry and landscape maintenance duties on dedicated parkland.		Partial
13	In order to establish accountability for park asset maintenance, the Director of PARD should clearly define maintenance responsibilities, distinguish park maintenance duties from custodial and other operational duties, establish appropriate controls to ensure that maintenance duties are not subordinated to nonmaintenance duties, and improve cost accounting to account separately for park maintenance and other duties.		Partial
14	In order to make informed decisions about the distribution of maintenance resources and support effective maintenance planning, the Director of PARD should continue to develop work standards, implement standard operating procedures for all activities, and more closely relate the financial reporting structure to work unit performance.		Concur

Rec#	Recommendation Text	Management Concurrence	Proposed Implementation Date
15	To ensure complete and accurate maintenance information and to report correct performance data, the PARD Operations Division Manager should implement fully the MS 2000 maintenance management software, because there is too large a volume of maintenance and asset condition information to manage manually.		Concur
16	The Director of PARD and the PARD Operations Division Manager should continue to shift the Operations Division from management by experience to management by complete, accurate, and documented information and experience.		Concur
17	In order to ensure implementation of maintenance improvement initiatives, the City Manager should require the Director of PARD to establish an Action Plan, which addresses the recommendations in this report, identifies barriers that hinder the implementation of a modern maintenance system, and addresses these barriers.		Concur
18	In order to ensure implementation of maintenance improvement initiatives and protection of the value of parks asset, the City Manager should direct that parks maintenance activities be designated as core activities and that any budget reduction decisions take this designation into account.		Partial

Rec#	Recommendation Text	Management Concurrence	Proposed Implementation Date
19	The City Manager should create a task force comprised of representatives of the departments with significant asset management responsibility to evaluate management of real assets citywide. The task force should be charged with • developing a citywide asset management policy, • determining whether departments' asset management responsibilities are consistent with their respective missions, • determining whether asset management practices are coordinated effectively, • defining efficient and effective asset management practices, and • evaluating alternative funding sources and methods of service delivery for maintenance of real assets.		Partial

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BACKGROUND

Austin is proud to call itself "A City Within A Park." And for good reason. The City has made substantial investments in an extensive system of parks and preserves over many years. The City has been widely recognized for the diversity and quality of City park facilities and programs. In its *Annual Report for 1999-2000*, the City Parks and Recreation Department (PARD) summarized a few of its accomplishments:

- PARD was recognized as a finalist in the National Recreation and Park Association (NRPA) and National Sporting Goods Association 2000 Gold Medal Award, which recognizes excellence in parks and recreation administration and outstanding service.
- For Pioneer Farm, the department won the Dorothy Mullen Arts and Humanities Award, given by the NRPA in recognition of excellence in arts and humanities programs.
- Other awards included the State Arts and Humanities Award for the Creativity Club at Dougherty Arts Center and the Texas Recreation and Park Society Innovations in Park Development Award to honor Springdale Park.

More important than state and national recognition, however, is the importance of the park system in the lives of Austin's residents. Over the years, Austin has demonstrated its commitment to parks and recreation by acquiring and maintaining one of the largest municipal park systems in the nation. Exhibit 1, on page 2, summarizes land managed by PARD as parks and preserves. Additional holdings, such as water acres, are not shown. Also, this exhibit does not include land maintained by PARD that is not used as parks or preserves, such as rights-of-way and medians. The forestry unit of PARD also clears the City's intersections from obstruction by bushes and trees, and maintains trees in rights-of-way and medians.

Facility Services Program

Maintenance duties in PARD are funded from multiple sources and budgeted in several activities and programs. PARD's budget presents funding separately for each fund providing resources. Each fund is broken down into programs and each program into budget activities. Several park-related funds include some maintenance services in their budgets: the Golf Enterprise Fund, the Softball Enterprise Fund, the Balcones Canyonland Preserve Fund, and some grants funds. However, most maintenance funds are budgeted in the General Fund under PARD's Facility Services program, with other funding in the General Fund under the Natural Resources Program and the Sports Management Program. Since most of our work was concerned with the Facilities Services program, we are providing background primarily on this program. (A complete presentation of identified maintenance funding is included in Appendix B.)

EXHIBIT 1
Summary of Land Managed by PARD

	NUMBER	ACRES	ATTRIBUTES
Neighborhood Parks	83	875	Serve neighborhoods generally within a one-mile radius.
District Parks	11	678	Smaller than metropolitan parks and more highly developed to serve the needs of neighborhoods within a two-mile area.
Metropolitan Parks	10	7,698	Offer the largest and most diversified recreational experiences. Serve the entire city, and may be tourist attractions as sites of special events. Usually in excess of 200 acres in size.
School Playgrounds	22	157	Parks on or adjacent to school property.
Greenbelts	24	3,829	Property on Austin creeks and canyons.
Golf Courses	6	1,069	
Nature Preserves (a)	14	919	Sanctuaries for native plants, native animals and unique natural features. They provide educational and scientific opportunities for the people of Austin.
Senior Activity Center Sites	3	11	Centers that offer a great variety of programs and services for people fifty years of age and older.
Tennis Center Sites	4	27	
Special Parks	26	329	Those parks with unique features and history.
Subtotal	**203**	**15,592**	
Balcones Canyonlands Preserves (BCP)	20	9,127	These very special preserves conserve endangered species, their habitat and our natural heritage. These preserves are not dedicated parkland.
Total	**223**	**24,719**	

SOURCE: Data from the Austin Parks and Recreation Department Resource Inventory October 2001 and website of the Austin Parks and Recreation Department. Acreages vary in some other internal PARD documents.

Note a: Two hundred sixty additional acres of nature preserves are located in metropolitan parks and this acreage is included in the metropolitan park total. Total acreage in nature preserves is 1,179 acres, not including BCP lands.

The Facility Services program supports the mission, goals, and objectives of PARD through its maintenance activities. According to the *City of Austin 2001-02 Proposed Budget*, PARD's mission is to "provide, protect and preserve a park system that promotes life-enhancing experiences for the Austin community." FY 02 goals to achieve this mission include the following:

- increasing participation in structured community recreation in the Austin community,

- addressing the fundamental social needs of the Austin community,
- promoting a safer park system,
- enriching the Austin community's artistic and cultural environment,
- protecting Austin's investment in recreational land, urban forest ecosystem, water, and facilities, and
- increasing the efficiency of administrative services.

The objective of the Facility Services program is "to provide planning, construction and preservation services for the Austin community in order to have safe, properly maintained parks and recreation facilities and natural resources." Exhibit 2, on page 4, presents a partial summary of facilities under PARD's care. The summary does not include all PARD structures. Many maintenance structures, for example, are not listed in the resource inventory provided by PARD.

The Facilities Services program is comprised of the following five budget activities, which are not all exclusively maintenance:

- *Facility Maintenance* provides for maintenance, repair, and replacement of PARD buildings, structures and related infrastructure.
- *Special Events* provides support for special events at recreation centers, museums, the Dougherty Arts Center, Pioneer Farm, and the Austin Nature Center.
- *Park Maintenance* provides for operation, maintenance, repair, inspection, and other related parkland tasks.
- *PARD Construction* provides for renovating existing parks and facilities, and develops new parks and facilities.
- *Park Planning* develops the Capital Improvement Plan for PARD, designs parks and playground systems, and prepares and monitors park acquisition and development grants.

PARD also obtains expense refunds from other City departments. Exhibit 3, on page 5, shows the funding for the Facilities Services program for the last four fiscal years.

Exhibit 4, also on page 5, summarizes PARD's Facility Services program full-time equivalents (FTEs), which over a four-year period increased by about 31 FTEs. In Fiscal Year 2001-2002, the apparent increase in FTEs in the Special Events activity is due to a budgeting change, not to a change in assigned duties. A proportion of the workers who support special events as a part of their duties are now recognized in this budget activity.

EXHIBIT 2
PARD Facilities

ATHLETIC FIELDS	**175**
Softball fields	35
Baseball fields	30
Football fields	10
Soccer fields	12
Multi-use fields	88
BUILDINGS	**155**
Recreation centers	16
Senior activity centers	3
Arts center	1
Central maintenance complex	1
Garden center	1
Millennium Youth Complex	1
Nature center	1
PARD Headquarters	1
Museums	3
Party houses	2
Park shelters	43
Park restrooms	82
GOLF COURSES	**6**
18-hole courses (1 leased from the Univ. of Texas)	5
9-hole course	1
PLAYSCAPES	**78**
SPECIAL FACILITIES	**271**
Hard-surfaced, multi-purpose slabs	46
Volleyball courts, separate from play slabs	11
Outdoor basketball courts	33
Boat ramp/launches	10
Boat lanes	11
Fishing structures	5
Amphitheaters	6
Miles of designated hike & bike trails	51
Archaeological sites	32
Tent campsites	46
R/V campsites	20
SWIMMING POOLS	**57**
Municipal pools (admission charged)	7
Neighborhood pools	27
Wading pools	21
Beach with dressing facilities	1
Beach without dressing facilities	1
TENNIS COURTS	**106**
Plexipave courts at 4 centers	36
Neighborhood courts	70

SOURCE: Resource Inventory from PARD as of October 2001, with OCA's addition of PARD headquarters. Some facilities may not be listed.

EXHIBIT 3
Facility Services Program Financial Information

ACTIVITY	1998-99 Actual	1999-00 Estimate	2000-01 Approved	2001-02 Proposed
SPECIAL EVENTS				
General Fund	$871,751	$892,330	$922,210	$688,982
Expense Refunds	$0	$0	$40,000	$46,512
PARK MAINTENANCE				
General Fund	$6,119,562	$6,153,254	$7,160,778	$7,109,683
Expense Refunds	$847,419	$1,387,489	$2,015,522	$1,238,339
Grants	$25,000	$125,000	$10,000	$0
FACILITY MAINTENANCE				
General Fund	$1, 395,513	$1,598,552	$1,678,668	$1,761,838
Expense Refunds	$0	$1,500	$1,500	$0
PARD CONSTRUCTION				
General Fund	$156,922	$204,468	$209,472	$226,600
Expense Refunds	$431,045	$1,090,750	$1,270,900	$640,000
PARK PLANNING				
General fund	$245,591	$360,843	$415,964	$476,022
Expense Refunds	$460,179	$1,367,834	$1,512,308	$845,684
Totals	**$10,552,982**	**$13,182,020**	**$15,237,322**	**$13,033,660**

SOURCE: City of Austin Approved Budget 2000-01 and Proposed Budget 2001-02.

EXHIBIT 4
Facility Services Program Full-Time Equivalents (FTEs)

ACTIVITY	FTEs 1998-99 ACTUAL	FTEs 1999-00 ESTIMATE	FTEs 2000-01 APPROVED	FTEs 2001-02 PROPOSED
Special Events	1.00	1.00	1.00	10.75
Park Maintenance	127.00	129.00	159.00	153.46
Facility Maintenance	40.00	39.00	39.50	33.54
PARD Construction	11.00	11.00	11.00	11.00
Park Planning	14.50	14.50	15.50	15.50
Totals	**193.50**	**194.50**	**226.00**	**224.25**

SOURCE: City of Austin Approved Budget 2000-01 and Proposed Budget 2001-02.

Some maintenance services are budgeted in the General Fund under other programs and activities, as follows:

- *Horticultural* activity in the Natural Resources Management program. This activity maintains flowerbeds and perennial plantings at parks and City-owned public buildings and supports a public tree-planting program.
- *Aquatics* activity in the Sports Management program. This activity provides most of the maintenance of pools.
- *Facility Expenses* activity in the Support Services program. This activity is to provide maintenance, custodial service, and security for facilities (excluding

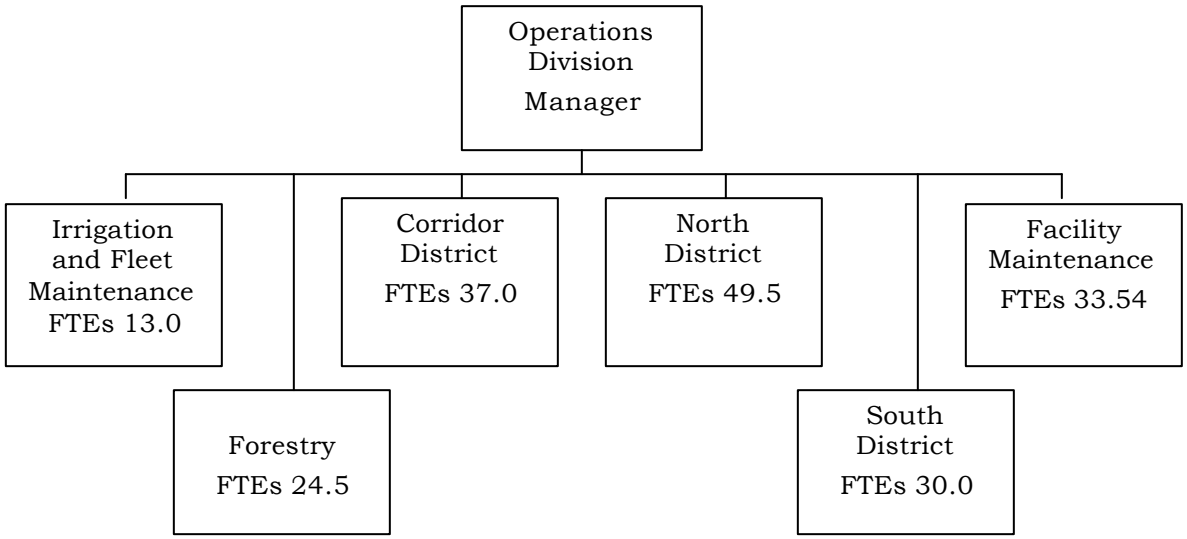
treatment and generation plants, tennis courts, park shelters/restrooms/ parkland, golf courses, swimming pools).

- *Central and Eastern Preserves Management* activity in the Natural Resources Management program. Preserve Management is responsible for revegetation, land management for preservation, trail maintenance, and trail construction.

The Operations Division

As a result of the business plan process, budgeting units within PARD (programs, activities, and services) do not necessarily relate directly to organizational units. In the case of park maintenance, the Operations Division is the organizational unit that carries out most maintenance work. Exhibit 5 shows the organizational chart for the Operations Division.

EXHIBIT 5
Operations Division Organizational Chart and Budgeted FTEs
as of December 2001



SOURCE: PARD's Administration and Management Division.

Functions provided by the Operations Division are related to the Facility Services program in the following way:

- The Corridor, North, and South districts provide the majority of park maintenance services for the budget activity Park Maintenance. Forestry and Irrigation also provide some maintenance.
- The Corridor district provides support for special events, both PARD and non-PARD sponsored.
- Facility Maintenance in Operations is directly correlated to the budget program of the same name.

- There are no services provided by the Operations Division that are related to the Park Planning budget activity.

Previous Office of the City Auditor Audits

The Office of the City Auditor has reviewed various activities involving PARD seven times since 1991. The *Parks and Recreation Department Audit, January 1993*, dealt with issues directly related to park facilities maintenance, specifically, whether management planning and controls were adequate to accomplish departmental goals and objectives and whether financial controls were sufficient to ensure economy of operations. Relevant findings from the 1993 audit include the following:

- PARD had not implemented previous audit recommendations aimed at improving accountability and control over limited resources.
- Inadequacies of PARD's planning and management controls existed, among other reasons, because of an inadequate management information system.
- PARD needed to coordinate with other City departments to ensure that appropriate consideration of PARD's maintenance workload was included in costing estimates for added facilities and rights-of-way.
- PARD needed to evaluate the workload of enforcing City Code requirements for tree trimming by property owners.

Benchmarking for Parks Maintenance

The literature on benchmarking is full of warnings and laments about the dearth of useful data on municipal parks and the difficulties of drawing comparisons from park system to park system, especially with respect to park maintenance. These warnings relate to the lack of reliable, comparable data from jurisdiction to jurisdiction.

These problems in benchmarking arise from several sources. Some are organizational: each jurisdiction's parks and recreation department is organized to be responsible for different duties, so "apples to apples" comparisons are hard to make. Further, accounting systems variations create difficulties in expressing financial data in similar terms. Other difficulties in benchmarking are definitional. Cities have not agreed on the most basic terms, such as "developed acreage." For example, a city may consider acres developed when the acres are fenced and have natural or man-made trails—or the acreage is considered developed when a playscape, restrooms, ball fields, or landscaped beds are available. Some of the difficulties simply relate to the varying preferences and circumstances of each jurisdiction. The book *Municipal Benchmarks* states that an acceptable level of maintenance in a given jurisdiction is influenced by several factors, including local taste, resource availability, local climate, and property use.

Nonetheless, benchmarking data is available, however imperfect. The International City/County Management Association (ICMA) solicits and maintains self-reported data from many cities on park systems. Since this is self-reported, the information's reliability is not certain. Further, controlling the factors mentioned above is difficult. Another source of data is *Inside City Parks* by Peter Harnik, a consultant for the Trust for Public Land (TPL). This source has the advantage that the data has been evaluated critically using a single set of assumptions to express information that is as uniform as possible. *Inside City Parks* breaks out the operating budgets of cities in 25 of the 26 most populated Metropolitan Statistical Areas into maintenance expenditures and programming expenditures.

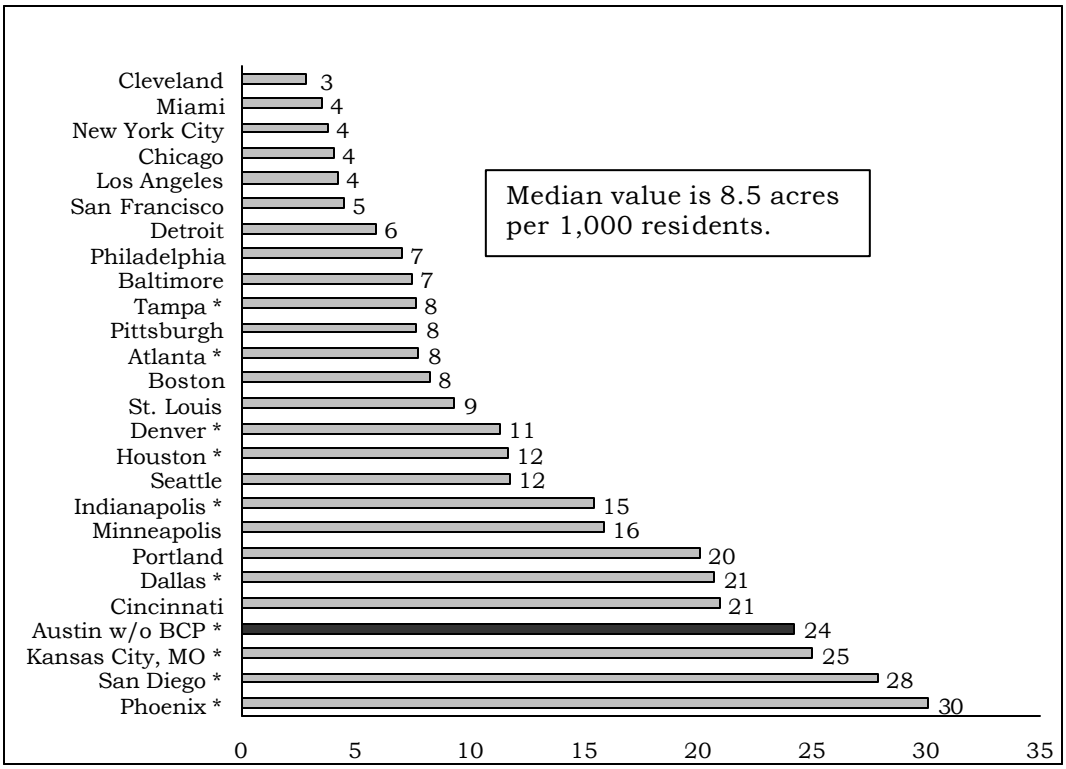
Both ICMA and *Inside City Parks* use acres per 1,000 residents as a benchmarking measure for comparative purposes. However, in compiling numbers for *Inside City Parks*, Harnik counted all the parkland within each city's limits (but not in the surrounding metropolitan region). Acreage includes not only municipal parks but also those run by federal, state, county and regional agencies. The ICMA survey data only requires the reporting of acres that the city owns and manages.

Inside City Parks characterized the 25 cities studied by population density based on 1990 city acreages and 1996 city population estimates. Although not included in the study, Austin would be classified as a low-density city. The study reasons that low-density cities have houses with bigger yards thereby reducing the need for public parks. We have indicated the low-density cities in the exhibits below, since these may be the most useful comparisons.

Our exhibits below are based on information obtained from *Inside City Parks* with only data for city parkland included. *Inside City Parks* does not distinguish whether the city parkland acres are developed or undeveloped. Acreage is important, although TPL recognizes that far-flung systems are not necessarily better than small ones if a big system is poorly laid out, maintained or utilized. Exhibit 6, on page 9, illustrates that Austin without the Balcones Canyonland Preserves is ranked as having the fourth largest parkland acreage per 1,000 residents.[1] Austin ranked well above the median of 8.5 acres per 1,000 residents. Appendix B shows how we calculated Austin's numbers, and Appendix C shows detailed statistics for all of the cities compared.

[1] We present data for Austin without Balcones Canyonland Preserves because this seemed to make the most appropriate comparison with most other cities, few of which have extensive land holdings for preserves. *Inside City Parks* does, however, include municipally owned preserves in their data. If BCP is included in Austin's total, Austin has 38 acres per thousand residents, the highest of the cities presented. PARD does perform maintenance on portions of BCP.

EXHIBIT 6
Parkland Acres per 1,000 Residents



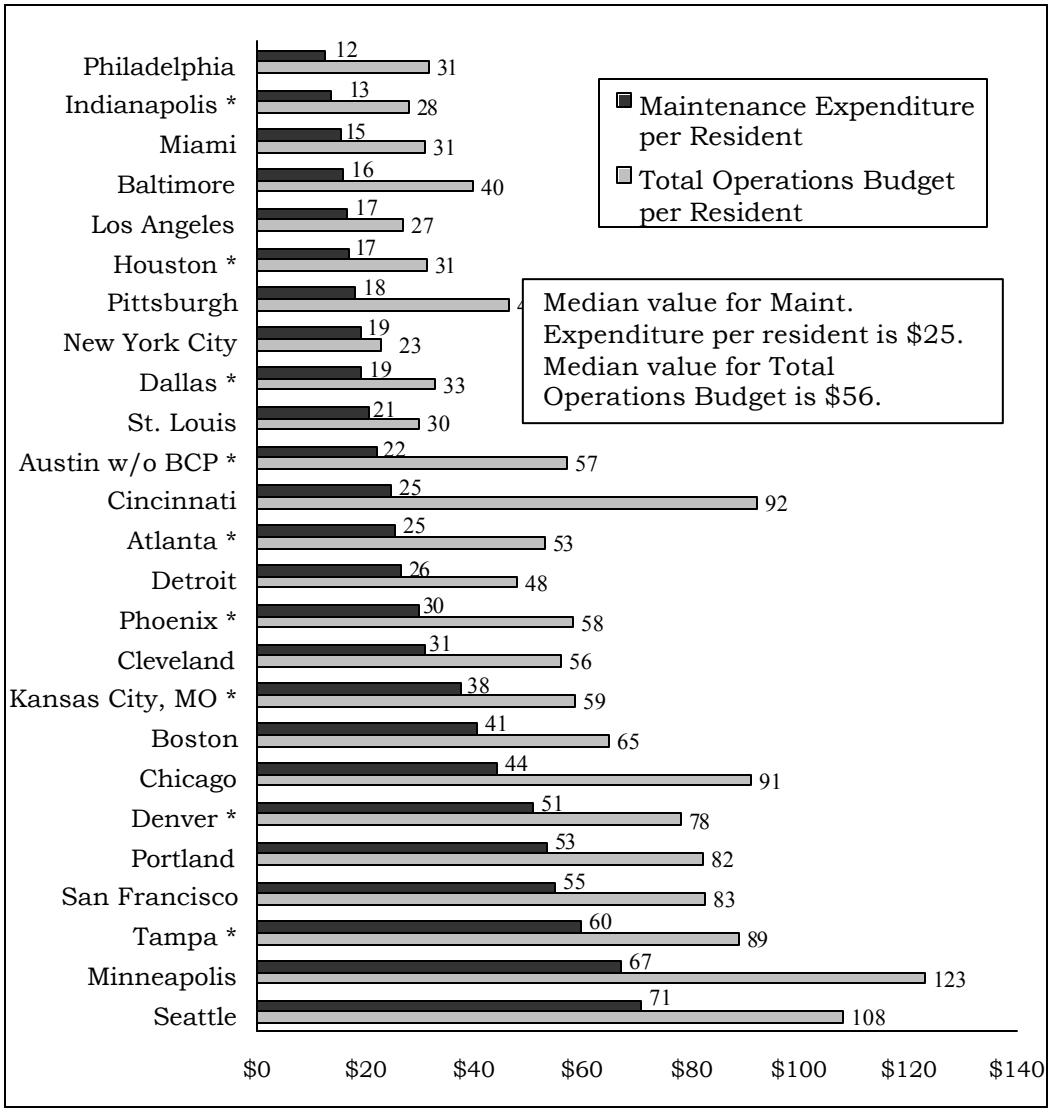
SOURCE: All information (except for Austin) from the book *Inside City Parks*. City of Austin population data as of January 2000 and park acreage is from Austin Parks and Recreation Department Resource Inventory October 2001.

Note *: These cities are designated as low-density cities.

For total operations budget per resident, Austin ranked above the median of $56 per resident. However, for maintenance expenditure per resident, Austin ranked below the $25 median. See Exhibit 7, on page 10, for details.

Exhibit 8, on page 11, shows that Austin spends an average of $905 per acre without BCP included. This was the second lowest of the cities compared. With BCP included, Austin spends an average of $578 per acre, significantly lower than any of the cities compared.

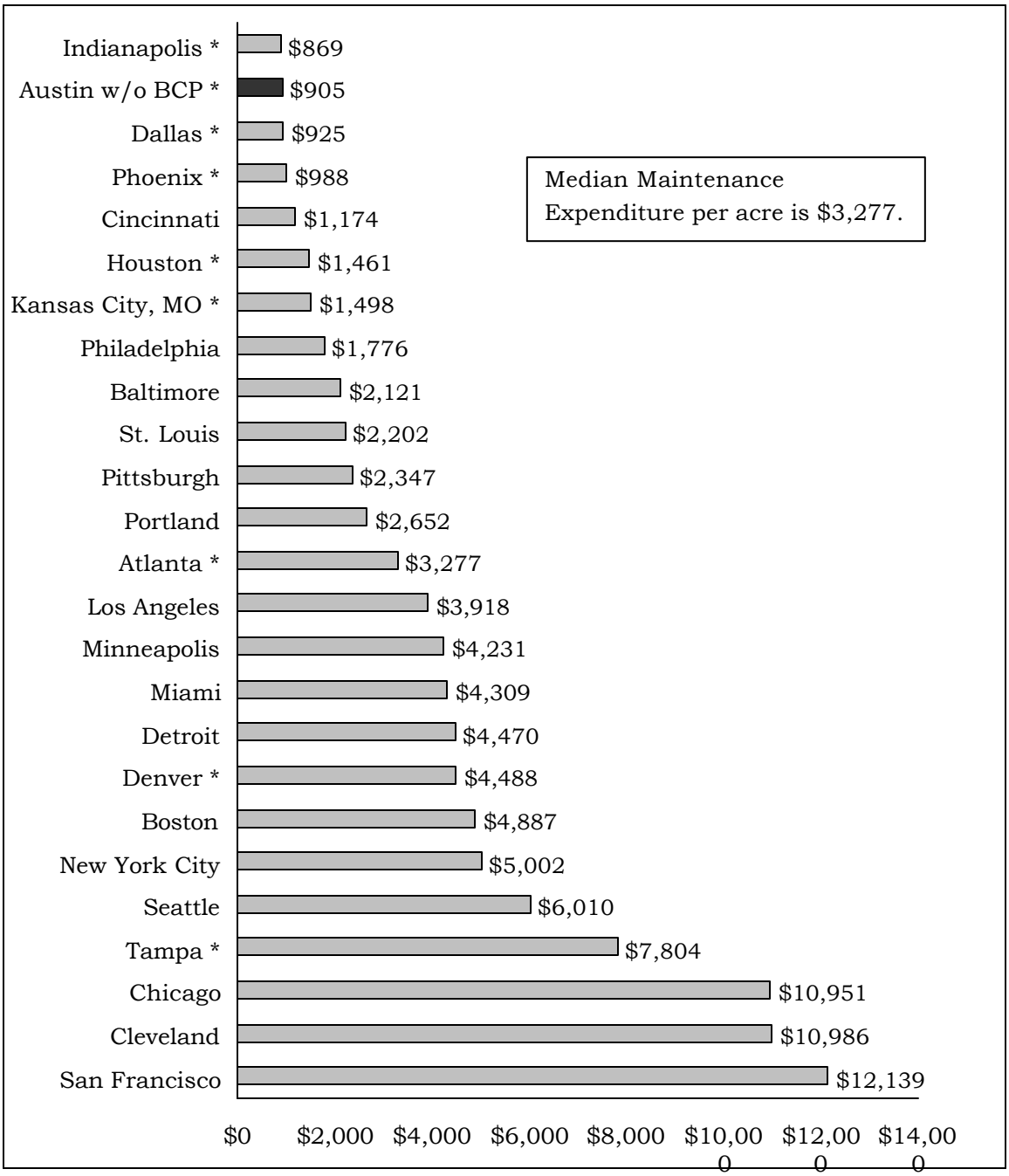
EXHIBIT 7
Cities Ranked by Maintenance Expenditure per Resident



SOURCE: All information (except for Austin) from the book *Inside City Parks*. Austin data from OCA analysis (for detailed information on the calculations of the numbers see Appendix B).

Note *: These cities are designated as low-density cities. San Diego has been omitted from this chart because maintenance expenditures could not be separated from total operations dollars.

EXHIBIT 8
Cities Ranked by Maintenance Expenditure per Acre



SOURCE: All information (except for Austin) from the book *Inside City Parks*. Austin data is from OCA analysis (for detailed information on the calculations of the numbers see Appendix B).

Note *: These cities are designated as low-density cities. San Diego has been omitted from this chart because maintenance expenditures could not be separated from total operations dollars.

OBJECTIVES, SCOPE & METHODOLOGY

Objectives

This audit had three objectives:

- Evaluate PARD's management of maintenance priorities.
- Evaluate the efficiency of the demand-based facility maintenance tasks.
- Evaluate the effectiveness of routine/repetitive maintenance tasks.

Scope

We included PARD financial and performance information from fiscal years 1999 through 2001. We reviewed data from the Human Resources Department's *Voice of the Customer* citizen surveys of 1996, 1998, and 2000, and we reviewed historical information on efforts to identify unmet City park maintenance needs.

Methodology

The *FY 2001 Annual Performance Plan* for OCA included a scheduled audit of park development and facility maintenance to reflect the importance placed on parks by both the citizens and City Council. In this audit, we addressed facility maintenance and deferred the park development component.

To evaluate PARD's management of maintenance priorities, we:

- researched effective maintenance management practices as described in professional literature,
- reviewed past efforts to identify, quantify, and manage the maintenance backlog,
- interviewed appropriate staff to determine current practices in managing maintenance priorities and efforts to identify the maintenance backlog, and
- reviewed responsibilities assigned to PARD's Operations Division to determine congruency with the PARD mission.

To evaluate the efficiency of the demand-based facility maintenance tasks, we:

- reviewed internal PARD documentation related to maintenance management,
- conducted a survey of recreation program supervisors at City recreation and senior centers to determine their satisfaction with maintenance services,
- interviewed PARD Operations Division staff to obtain an understanding of the maintenance processes involved, as well as the management controls currently in effect,
- observed crews performing maintenance activities to determine how priorities were set and monitored,

- reviewed City financial data from the accounting system of record and data from PARD's maintenance management software system, and
- computed labor costs for maintenance and compared these with labor statistics for the Austin-San Marcos metropolitan statistical area.

To evaluate the effectiveness of routine/repetitive maintenance tasks, we

- reviewed PARD's *Business Plan* and other internal documents to determine how PARD manages routine and repetitive park maintenance activities, such as mowing, trail maintenance, and daily park servicing,
- interviewed appropriate PARD employees to gain an understanding of how daily servicing activities are managed,
- reviewed professional literature to determine how other entities manage routine maintenance and which daily servicing factors most influence customer satisfaction with parks,
- analyzed the data from the *Voice of the Customer* surveys regarding customer satisfaction with parks,
- conducted inspections of park conditions using a standardized data collection instrument,
- observed service crews in each park district to determine how time was spent and which duties were performed or omitted, and
- benchmarked the City of Austin against other cities on items such as maintenance expenditure per resident.

This audit was conducted in accordance with generally accepted government auditing standards.

AUDIT FINDINGS

Any assessment of a maintenance program requires a critical look at the condition of the assets maintained. However, the lack of clear maintenance standards, useful performance measures, and data on the condition of parks and park amenities makes valid generalization about the overall condition of Austin parks impossible.

Indirect evidence on the condition of Austin parks is mixed. On one hand, the park system is recognized nationally for its excellence, and recreation center supervisors are generally satisfied with maintenance support for the facilities they manage. On the other hand, citizen satisfaction with parks, as measured by the *Voice of the Customer* survey, is declining. In areas of the City where citizens indicated the lowest levels of satisfaction, we observed poorer park conditions overall.

In addition, park maintenance employees, managers, and involved citizens often cite a large maintenance backlog. In support of these opinions, we observed many unmet and undocumented maintenance needs. However, we are unable to estimate the extent of the backlog because there is no functional definition of what constitutes maintenance backlog, and useful data on condition of park assets does not exist. The Parks and Recreation Department (PARD) has made two recent attempts to describe the backlog. Neither of these defined the terms necessary to characterize the backlog usefully. Nor were they based on assessments of the actual condition of park assets. Moreover, the methodology for estimating costs to address specific backlogged items was neither sound nor rigorous. These opinions and studies do not provide a standard for judging the condition of parks in general or meaningfully describe the extent of unmet maintenance needs.

To maintain parks effectively, the City must treat the parks as a major real estate asset. The Austin parks system is a vast real estate portfolio, ranging from structures to preserve land, which should be managed through consistent maintenance and a rational approach to reinvestment. Available literature and authoritative opinions on managing an assets portfolio, as well as literature on maintenance practices, generally agree on the elements required for effective maintenance of the asset portfolio:

- a complete inventory of assets with defined service levels and maintenance requirements for each,
- a systematic, documented process for routine assessment of each asset's condition,
- a comprehensive strategy for ongoing reinvestment in the assets through maintenance, including long-range and annual maintenance plans by asset,

- clear definition and separation of maintenance responsibilities from other responsibilities through standard operating procedures and work standards, and
- the development and use of sound management information on performance and costs.

Comprehensive cost accounting for all parks and recreation functions is particularly important in guiding funding decisions for maintenance priorities. Lastly, effective parks maintenance requires a reliable process for implementing opportunities to improve maintenance information and operations.

Available data on the condition of City parks is mixed.

While City recreation center supervisors indicated overall satisfaction with the maintenance of their facilities, citizen surveys since 1996 show a decline in satisfaction with the condition of City parks. Our onsite observations in selected City parks corroborate that there are significant unmet and undocumented maintenance needs. We found that our observations supported the validity of the *Voice of the Customer* survey information, insofar as overall park conditions were poorest in planning areas where citizen satisfaction was lowest. In addition, our observations indicated that larger parks are not being maintained as well as smaller parks and that parks in the North District are not as well maintained as those in the Corridor and South Districts.

The Operations Division satisfies recreation and senior center supervisors with many areas of park and facility maintenance. In a survey by the Office of the City Auditor (OCA), supervisors at recreation and senior centers and the supervisor of athletics indicated that their facilities were, for the most part maintained in good condition. Twenty of 21 supervisors responded to the survey. Overall, the Operations Division received its highest ratings for quality of work completed, courtesy of maintenance staff, and cleanliness of playgrounds. Exhibit 9, on page 17, summarizes the results of the supervisor survey.

However, several supervisors expressed dissatisfaction with the manner in which the Operations Division was responding to their maintenance needs. For example,

- Four of 18 supervisors stated dissatisfaction with the mowing and trimming of park areas adjacent to their facilities;
- Three of 13 expressed dissatisfaction with the maintenance and repair of outside restrooms; and
- Three of 20 were dissatisfied with the maintenance and repair of inside restrooms.

EXHIBIT 9
Supervisor Satisfaction with
Park and Facility Maintenance

MAINTENANCE ITEMS IN SURVEY	PERCENT SATISFIED
Cleanliness of playgrounds (14)	100%
Maintenance and repairs in centers (19)	100%
Overall cleanliness of park grounds (17)	94%
Maintenance and repair of playgrounds (13)	92%
Maintenance of athletic fields (13)	92%
Cleanliness of outside restrooms (12)	92%
Cleanliness of park pavilions (13)	92%
Maintenance and repair of inside restrooms (20)	85%
OTHER ITEMS IN SURVEY	
Quality of work completed (20)	100%
Courtesy of maintenance staff (20)	100%
Accessibility of maintenance staff (20)	80%
Response time of maintenance staff (20)	80%
Overall work order system (20)	80%

SOURCE: OCA survey results collected in July 2001.
Note: Number of respondents is in parentheses. Not all questions were applicable at each facility.

In the survey responses, 8 of 20 supervisors expressed concern that preventive maintenance at their facilities was not effective and that the Operations Division should do more preventive work. One respondent suggested that the Operations Division needs to acquire expertise in boiler operation and maintenance because many locations depend on boilers for heat, and boilers are subject to a rigorous inspection every two years by the State of Texas. Another respondent stated that the Operations Division should designate specific maintenance staff to be accountable for preventive and demand-based maintenance at each facility. Supervisors at four of the older facilities in the park system expressed a wider range of concerns than the supervisors at newer facilities.

A constant problem that plagues some recreation centers according to the managers is leaking roofs and the associated problems, such as damaged ceiling tiles and water in walls. In some cases, the roof problems are caused by poor building design that can only be addressed as a redesign and construction project. Other items identified included bad foundations and poor drainage around the facility.

The *Voice of the Customer* survey indicates that citizen satisfaction with overall park maintenance is declining. Periodically, the Division of Organization Research of the Human Resources Department (HRD) randomly selects households to provide feedback on City customer relations and basic City services. With this feedback, HRD prepares a report entitled the *Voice of the Customer*. We analyzed

responses from the survey to the questions that follow. Although worded slightly differently, they address the same issue:

- "Would you say you are Very Satisfied, Satisfied, Dissatisfied, or Very Dissatisfied with parks maintenance?" (from the 1996 and 1998 *Voice of the Customer* surveys), and
- "Would you say you are Very Satisfied, Satisfied, Dissatisfied, or Very Dissatisfied with maintenance of parks grounds?" (from the 2001 *Voice of the Customer* survey).

The respondent is also given the opportunity to respond with two other responses,

- "don't know" if they are unfamiliar with the service or
- "neutral" if they are borderline between satisfied and dissatisfied.

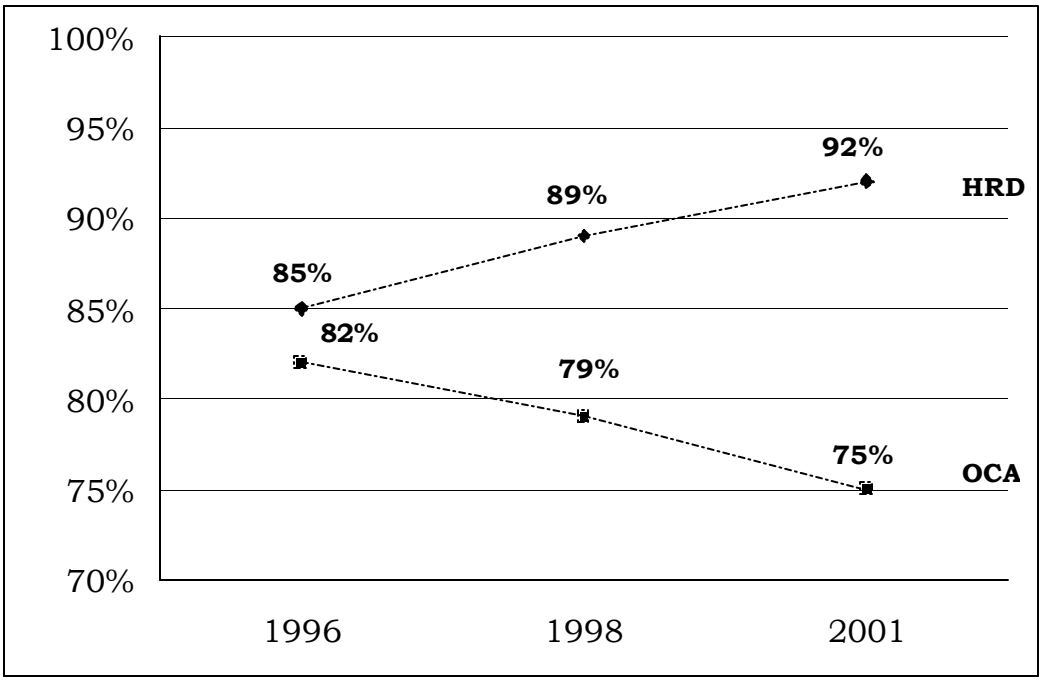
Using data supplied by HRD, we calculated satisfaction level based on adding responses of satisfied and very satisfied and dividing by HRD's sample size of 500. HRD uses a different methodology that is based on adding responses of satisfied and very satisfied and dividing that sum by the sample size of 500 minus the sum of "don't know/not applicable" and "neutral" responses. Instead of showing increased citizen satisfaction as reported by HRD, statistically appropriate calculation of the responses indicates a decrease both in satisfaction and in dissatisfaction. Moreover, not including the "don't know/not applicable" and "neutral" responses in the analysis distorts the actual range of opinions that were expressed.

Our calculations demonstrate a decline in citizen satisfaction over the three survey years from 82 to 75 percent, while HRD reports an increase from 85 to 92 percent. Exhibit 10, on page 19, shows the results of the two methods for calculation. The raw data in Exhibit 11, on page 19, shows a significant increase in the number of neutral respondents in 2001. This change could indicate that the survey was administered differently than in previous years or more significantly that more people lack a strong opinion about park maintenance. Coupling declining satisfaction with the increase in neutral responses indicates that Operations can improve its services.

Observations of park conditions are congruent with citizen dissatisfaction as measured by survey results. Using HRD data from the combined 1996, 1998, and 2001 *Voice of the Customer* surveys, we divided survey respondents by City planning area to observe parks in areas where the greatest levels of dissatisfaction and satisfaction with park maintenance occurred.[2] Of the 26 City planning areas, we identified five planning areas

[2] To be selected, a planning area had to have at least 50 respondents in the combined survey years and either 10.5 percent dissatisfaction or greater or 79.9 percent satisfaction or greater.

EXHIBIT 10
Citizen Satisfaction with Parks Maintenance: OCA and HRD Results



SOURCE: OCA analysis of 1996, 1998, and 2001 *Voice of the Customer* survey data.

EXHIBIT 11
Voice of the Customer Survey Data

	VERY SATISFIED	SATISFIED	NEUTRAL	DISSATISFIED	VERY DISSATISFIED	DON'T KNOW/ NA
1996	88	324	16	52	6	14
1998	71	325	4	40	7	53
2001	28	349	65	33	1	24

SOURCE: Data from 1996, 1998, and 2001 Voice of the Customer survey.

in the City's core with the greatest dissatisfaction. A map and definition of the planning areas in which we conducted observations is shown in Appendix D. Data collection measures are discussed in Appendix E, along with observed conditions.

When we conducted observations, we used a rating form that included eight categories. (See Appendix E.) In 14 neighborhood parks and 6 district parks, we observed many conditions that are the responsibility of Forestry staff, such as the presence of dead trees, low hanging branches, or fallen trees. Other conditions seen at several parks included nonworking water fountains, unclean or nonworking restrooms, substandard fall-zones around playground equipment, and tennis courts in cracked and poor condition. Exhibit 12, on page 20, shows the district and neighborhood parks located in the five

planning areas selected for the greatest dissatisfaction and the conditions observed.

EXHIBIT 12
Park Conditions by Planning Area

DISTRICT PARKS	*NEIGHBORHOOD PARKS*	*OBSERVED CONDITIONS*
Planning Area 10, North District, 19.1% Dissatisfaction		
Bartholomew	**Dottie Jordan**[a] St. John's, Patterson	Tennis courts are not playable, lots of litter, picnic tables need paint, water fountains not operational, creek erosion problems create potential safety hazards, low pea gravel in playground fall zones, playground equipment does not appear to meet standards
Planning Area 11[c], North District, 18.0% Dissatisfaction		
Givens	**Metz, Govalle**, Lott, Comal, Alamo, Pan-Am, Rosewood, Springdale, Parque Zaragoza	Lots of bulky litter, graffiti, picnic tables need to be painted, restrooms dirty, toilets and hand dryers not operational, low pea gravel in playground fall zones, playground equipment needs paint, erosion problems along creek- potential safety hazards, unsafe picnic shelter, dead trees on ground
Planning Area 2[c], North District, 12.1% Dissatisfaction		
Pease[b]	**Eilers**, **Westenfield**, Clarksville, Tarrytown, West Austin, Reed, Perry	Lots of low limbs, surface of basketball court in poor condition, no volleyball net, safety hazards, graffiti, picnic table needs paint & repair, low pea gravel in playground fall zones & damage to some of the ADA surfacing material, damage to backstop netting
Planning Area 17[c], South District, 11.4% Dissatisfaction		
None	**Zilker Neighborhood**, **South Austin**, Dawson, Ricky Guerrero, Big Stacy, Little Stacy, Gillis	Tennis court nets in poor condition, ball field did not have appropriate play lines, low pea gravel in playground fall zones
Planning Area 1[c], North District, 10.6% Dissatisfaction		
Pease[b]	**Palm, Ramsey,** Bailey, Shipe, Duncan, Adams-Hemphill, Eastwoods, Waterloo	Transient sleeping in the bathroom shelter, large tree limbs down, dead newly planted trees, graffiti, tennis court in poor condition, low pea gravel in playground fall zones, some playground equipment doesn't appear to meet standards

SOURCE: OCA observations during July and August 2001.
Note a: Parks in **bold** were observed by OCA.
Note b: Pease Park is the only district park in both planning areas 1 and 2.
Note c: In planning areas 1, 2, and 11, Palm, Eilers, and Metz parks are in the Corridor District. In planning area 17, Zilker Neighborhood park is in the Corridor District.

We also identified planning areas in the City's core where citizens expressed satisfaction with park maintenance in the *Voice of the Customer Survey*. Our observations at parks in these areas corroborated the survey result. More information on the observed conditions is located in Appendix E.

From observations, some larger parks appeared less well maintained than smaller parks. We defined larger parks as those having 20 or more acres. In the larger parks, we observed more litter, nonworking water fountains, graffiti, and problems with restrooms, such as toilets that would not flush or hand dryers not working. For example, at Givens, areas across the creek from the recreation center were littered with large articles including a mattress and a suitcase. Other areas appeared to have not been serviced in weeks. Also, Givens had an unsafe picnic shelter, fallen dead trees, missing picnic tables, and a vandalized snow cone trailer on the property. At Bartholomew, tennis courts were without nets, three water fountains were not operational, two very large trees were on the ground, picnic tables were littered with trash, and several picnic tables were in need of paint to cover up graffiti. At both Givens and Bartholomew, we observed creek erosion problems that needed attention. In addition, the large quantities of ground litter left a poor impression of the quality of grounds maintenance.

Parks in the Corridor and South Districts were better maintained than those in the North District. PARD's Operations Division divides park maintenance work into three districts (North, South, and Corridor). A wide variety of maintenance work, including custodial type of work such as regularly cleaning restrooms, emptying trashcans, and picking up litter, is part of the daily servicing activity of the crews. The quality of service at each park is the responsibility of the individual crews, but accountability for the quality rests with each district manager.

The North district manager is accountable for the condition of a greater number of parks and more acreage than the South or Corridor districts. During our observations in the North district, we saw many unmet maintenance needs. For example, at Brentwood neighborhood park, we found picnic tables that needed repair or painting, a water fountain that needed repair, many dead trees that needed attention, graffiti on the restroom doors, and weeds and cracks in the tennis courts. In addition, most parks in the North district with playgrounds did not have the recommended amount of pea gravel in fall areas. Nearly every park had trees that either had low hanging or dead branches that needed pruning. Exhibit 13, on page 22, shows number and acreage of parks in each district.

EXHIBIT 13
Number and Acreage of Parks by District

DISTRICT	NUMBER OF PARKS	ACREAGE OF PARKS
North	120	1,417
Corridor	15	1,122
South	51	959

SOURCE: PARD data.

The Operations Division has established an expected number of days in each week that parks must be serviced; this varies from seven days per week to "as needed." In this context the term "day" means "visit," rather than a consistent length of time, such as the eight-hour day. The number of "expected service days" indicates the number of days each week a park should be visited each week for routine servicing. Without work standards that indicate expected times to complete the routine servicing, actual staffing needs cannot be calculated. We used the hypothetical measure "number of expected park service days per employee per week" to compare the districts. Exhibit 14 shows how the three districts compare.

EXHIBIT 14
Comparison of Districts' Weekly Number of Expected Park Service Days per Employee

DISTRICT	TOTAL EXPECTED PARK SERVICE DAYS	NUMBER OF FILLED POSITIONS	EXPECTED SERVICE DAYS PER FTE PER WEEK
North	626.5	23.3	26.9
Corridor	105	24.6	4.3
South	221	12.3	18.0

SOURCE: PARD data and OCA analysis. Filled positions differ from budgeted positions that were referenced in the Background of this report.

This measure supports *Voice of the Customer* survey results and our observations that parks in the North district are not receiving the same level of servicing as the other two districts. Assuming equivalent times for servicing the parks in each district, we could estimate that the North district needs approximately 12 additional people to have the same number of service days per FTE as the South district. Considering this measure, we can conclude that resources may not be equitably distributed among the districts.

Daily servicing of parks emphasizes custodial tasks that improve park appearance, but other maintenance is deferred. When we rode along with park maintenance crews during the summer, the majority of their time was spent on duties such as cleaning the restrooms, blowing leaves and dirt off of sidewalks and playscapes, picking up trash, and emptying trash cans. We did not observe anyone performing other types of maintenance duties that are listed in the parks inspection form, such as painting barbecue pits, pulling weeds from sand volleyball courts, or checking playscapes for loose bolts or

sharp items. However, the Operations Division Manager stated that, during winter months, crews are able to perform maintenance duties in addition to custodial duties that improve the appearance of the parks. We did not conduct any observations during winter, so we could not verify this assertion.

PARD's data on maintenance backlog does not provide a standard for judging the condition of parks or describe the extent of unmet maintenance needs.

Past efforts by PARD to quantify the park maintenance backlog indicate many unmet maintenance needs, which park employees and citizens have described as the "maintenance backlog." Our observations verified that unmet maintenance needs were quite common. However, we cannot estimate the extent of the backlog because PARD has not defined the terms necessary to discuss the backlog meaningfully. Also, useful data on the condition of park assets and the cost of corrective measures does not exist. Unidentified or unaddressed maintenance needs can result in poor service to the public, reduced public safety, and higher subsequent repair costs.

PARD has not defined terms necessary to discuss backlog meaningfully. There are many possible definitions of maintenance backlog. To define the term usefully, an organization must have some way of detecting which maintenance needs are being addressed and which are not, and must make decisions on when a condition qualifies as a backlog item rather than just normal wear and tear. One purpose in defining the backlog is to determine workforce requirements and to forecast maintenance requirements in time to meet needs. The *Maintenance Manager's Standard Manual* states, "If the weeks of backlog are running four or more, and if utilization and performance are high and emergencies are low, this is a strong indication that the group is understaffed." PARD, however, has no functional definition of what constitutes maintenance backlog; therefore, we will refer to unmet maintenance needs as all conditions that should be addressed to maintain the functionality and useful life of real assets.

PARD methods to estimate the size and cost of the backlog are not standardized, thereby resulting in deficient backlog data. Department employees and involved citizens often cite a large maintenance backlog. On two occasions PARD has attempted to describe the backlog. Neither of these efforts defined the terms necessary to characterize the backlog usefully, nor were they based on assessments of the condition of specific parks and facilities.

In 1996, the City Council created the Parks Maintenance Task Force with the purpose of enabling the City "to deal more effectively with the problem of parkland maintenance." PARD, working with the above Task Force,

generated a list of general categories of maintenance needs. These needs, however, focused in general more upon capital improvement projects and not upon operating expenses. The purpose was mainly to determine what work should be accomplished with bond funding in a given period and not what actually constituted a backlog. The Task Force estimated that approximately $33 million was needed to address identified projects.

The second review of the maintenance backlog was performed in 2000. PARD held a one-day retreat and asked staff in attendance to list all known park maintenance needs. The result was a long list of unmet needs of various kinds; however, PARD determined that the department did not have the resources to do a reliable estimate from the list.

Given that the methods employed in the two studies differed, their results cannot be compared meaningfully. Neither was based on a comprehensive assessment of the condition of park assets compared to established criteria. Operations Division management has stated that they believe the backlog is not growing overall, given funding increases in recent years and their efforts to address the most significant needs. However, Operations Division management also stated that the backlog of serious unmet maintenance could grow significantly very quickly in light of the size of the park system and the lack of reserve capacity for maintenance if funding is reduced.

Every park observed during our audit had unmet maintenance needs. We observed many unmet and undocumented maintenance needs when conducting observations at various parks. Supporting these observations is the decline in citizen satisfaction with overall park maintenance as noted in the *Voice of the Customer,* discussed earlier in this report. The unmet needs observed ranged from minor, such as the need to apply a new coat of paint to a park bench, to as serious as an erosion problem posing a potential safety hazard to park users. See Appendix E for a summary of conditions observed in parks. We also determined that very few of the observed unmet maintenance needs were recorded in PARD's maintenance management software system.

The City of Austin does not manage parks according to fundamental asset management practices.

Authoritative literature on managing an asset portfolio in general, and more specifically for managing maintenance operations, emphasize the following fundamental practices for managing a large real estate portfolio:

- establishing a complete inventory of land assets, facilities, and their components that require maintenance,
- maintaining a system and a schedule for periodically assessing and documenting the condition of each asset,

- establishing a comprehensive strategy for reinvestment in assets, which includes:
    1. investing in maintenance activities as defined in inventory records (backlog is an indication of failure to make reinvestment a priority),
    2. planning by asset both long-range and annual maintenance requirements (defines and sets service levels), and
    3. emphasizing preventive maintenance rather than demand-based services;
- defining and separating maintenance responsibilities clearly through standard operating procedures and work standards; and
- creating effective management information systems, including complete cost accounting related to service levels and workload management data.

In managing the parks system, the City of Austin needs to improve in respect to all of these practices.

The Operations Division does not have a comprehensive maintenance inventory of parks and facilities. A maintenance inventory provides information on each asset that is relevant to its maintenance. For a park system, basic information on both land and facilities should be included. Land information would include both the size and location of the parks, as well as utility locations, land uses, and maintenance service levels within each of those uses. Ideally, the land inventory data would be supported by as-built drawings, land plans, and/or geographic data for each park site. Facility information would include the location, square footage, replacement value, and age of each structure or facility, as well as data on structural, electrical, plumbing, and mechanical systems. Again ideally, facility information would be supported by architectural drawings and specifications. This basic information is necessary to assess conditions routinely as a precursor to planning, funding, and executing a meaningful asset portfolio management strategy.

The Operations Division does not have a complete inventory of park assets that meets these criteria. PARD's Planning Division does maintain the Austin Parks and Recreation Department Resource Inventory, but the Operations Division has not utilized this document for maintenance purposes. The Resource Inventory lists parks and acreages and contains summary information on the number of each type of facility. However, the inventory lacks basic information on the size and age of facilities, utility locations, and system maintenance requirements. PARD has also recently made available on its website geographic information about parks, but this is presented strictly from a parks customer viewpoint and is not integrated with maintenance activities. For maintenance planning purposes, the Operations Division does not maintain even simple data such as the number and age of buildings, and building maintenance and repair (M & R) histories.

The Operations Division purchased maintenance management software (MS 2000) in 1997 that is capable of providing an integrated maintenance management system. However, implementation of the system is incomplete. Because the elements of a good inventory of assets are not available, the Operations Division is not able to maximize its use of the MS 2000 features. In addition, the Division has not entered baseline asset conditions into the MS 2000. In fact, the Operations Division is now only using the system to generate some work orders for demand-based maintenance, but not for routine and preventive park maintenance work.

PARD does not routinely assess the condition of park assets nor has PARD established condition standards. A facility condition inspection function is necessary for planning cost-effective preventive and corrective maintenance. Scheduled visual inspection of all architectural, civil/structural, mechanical, plumbing, and electrical components of each asset provides data that can be used for assigning priorities and estimating costs for maintenance. A program of this nature ensures that unmet maintenance needs are documented and provides data for setting priorities and evaluating the performance of maintenance activities.

PARD does not perform routine documented assessments of park conditions or the physical condition of buildings, parks, and amenities. However, PARD has made many documented references to condition assessments. The *Long-Range Plan for Land and Facilities, 1998* makes reference to "a deferred maintenance plan" which prioritizes its most critical needs for repair and replacement of its aging infrastructure. And the *Park and Recreation Assessment, 1995* states that "PARD keeps tabs on the condition of its physical system through site checks, onsite staff and citizen reports, special surveys, and inventories of potential major repairs or replacements. This information is regularly rolled up into various reports related primarily to the budget." Finally, in business planning and budget documents, PARD lists a service under the Construction activity of "maintaining an inventory of park maintenance needs." However, PARD has not sustained any of these efforts.

The continuing effect of not having a complete inventory with condition information in place is that PARD is unable to demonstrate effectively monetary and human resource needs for routine and preventive maintenance to the City Manager or to the City Council.

PARD has not developed a comprehensive strategy for reinvestment in park assets. A comprehensive strategy for reinvestment requires the periodic assessment of the condition of assets coupled with ongoing, substantive measures designed to preserve the value of those assets. Such a strategy requires that service levels and standards be defined for every facility and that reliable cost estimates be developed for every maintenance task required to

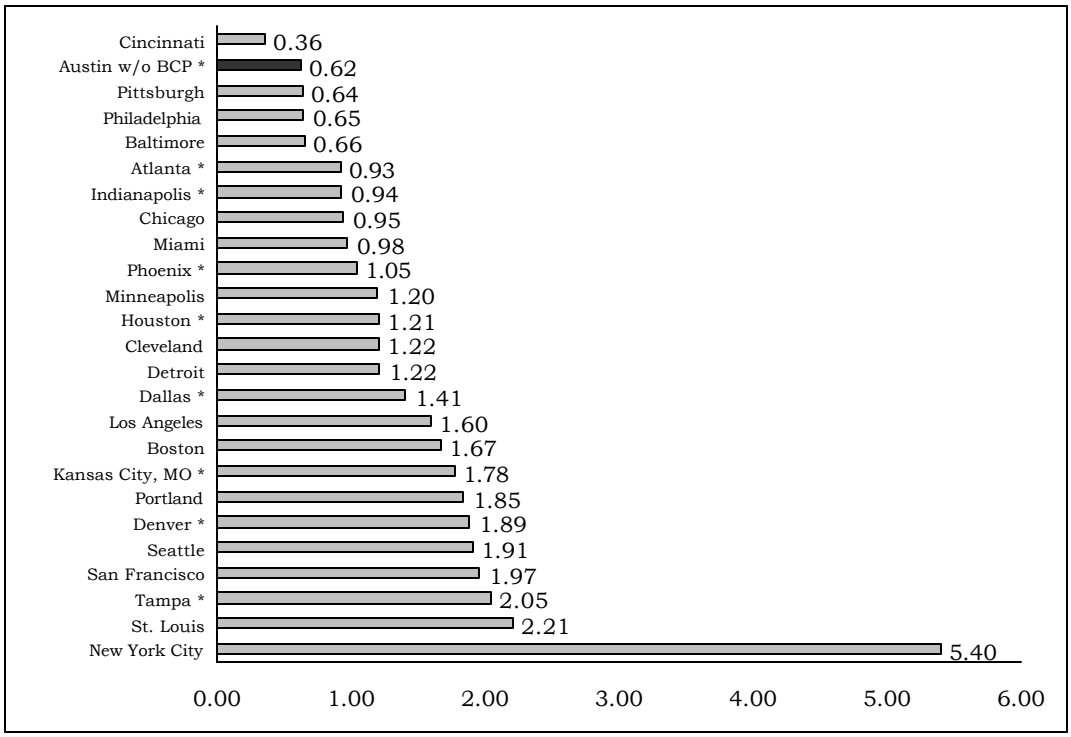
achieve the defined service levels. *Ad hoc*, demand-based, or custodial maintenance is insufficient to maintain the value of a complex, multi-million dollar asset portfolio consisting of extensive land holdings and facilities. Appropriate measures include preventive, scheduled, and day-to-day ongoing maintenance, as well as an ongoing strategy for funding required maintenance.

Comparisons with other cities are problematic because so many variables affect parks maintenance. In addition, record keeping is inconsistent from city to city. However, the best comparative data suggests that Austin may be under-investing in park maintenance. The appropriate level of investment can only be determined by developing plans for each facility that define service levels and provide sound cost estimates of all tasks required to meet those service levels. These plans require that distinctions be made between custodial tasks, such as cleaning restrooms and picking up litter, and maintenance and repair for the preservation of the asset, such as painting, pruning, and maintaining structural and mechanical systems. In the absence of a strategy supported by facility plans, PARD has been providing maintenance primarily on a demand basis, rather than on a preventive basis.

Comparative data suggests that Austin may be under-investing in maintenance. No single standard for the amount or source of funds for reinvestment in parks systems has been promulgated by authoritative sources. However, general guidelines for developing a reinvestment policy and process are available. The National Research Council and other industry experts recommend that two to four percent of major real estate facilities' current replacement value be allocated annually for maintenance. Because of the variety of maintenance needs of differing parks facilities and the differences in community standards, each community must develop its own reinvestment targets. Experts also suggest that reducing a substantial maintenance backlog may entail budgeting much more than four percent of current replacement value for as many years as are necessary.

PARD does not know the replacement value of facilities or have a clear accounting of maintenance expense by facility, and so cannot tell what percentage is being reinvested. Comparative data, however, shows that Austin's parkland holdings are among the most extensive in the country, while per capita investment in maintenance is lower than the median. On the basis of maintenance investment per acre, Austin is among the lowest of the cities for which we have data. Further, as shown in Exhibit 15, Austin's spending on maintenance relative to program expenditures is among the lowest of the cities for which we have data. While these statistics do not prove that Austin is under-investing in maintenance, they suggest that Austin may not be investing sufficiently given the size of its holdings and the extent of park programs.

EXHIBIT 15
Cities Ranked by Ratio of Maintenance Expenditures to Program Expenditures



SOURCE: All information (except for Austin) from *Inside City Parks, 2*000. Austin data from OCA analysis detailed in Appendix B.

Note *: These cities are designated as low-density cities. San Diego has been omitted from this chart because maintenance expenditures could not be separated from total operations dollars.

PARD lacks long-term and annual maintenance plans for each facility. The appropriate level for investment can only be determined directly by defining service levels and realistically estimating costs to achieve various levels of service. According to Lee Springgate, former Parks Director for Bellevue, Washington, who now consults on municipal park system management, an organization should calculate values for all the assets in the system and invest according to value. Doing so can allow the development of investment targets that guide the budgeting process. Further, by defining service levels and developing full cost figures for every activity and every program, not just maintenance, a jurisdiction can set priorities more rationally from long-term and annual plans based on actual costs of the services being considered. This approach, called activity-based costing, allows the community to make more rational choices about service levels by identifying the full cost of every activity and program.

To establish accountability for achieving maintenance standards, service levels must be defined for each site and facility, and performance must

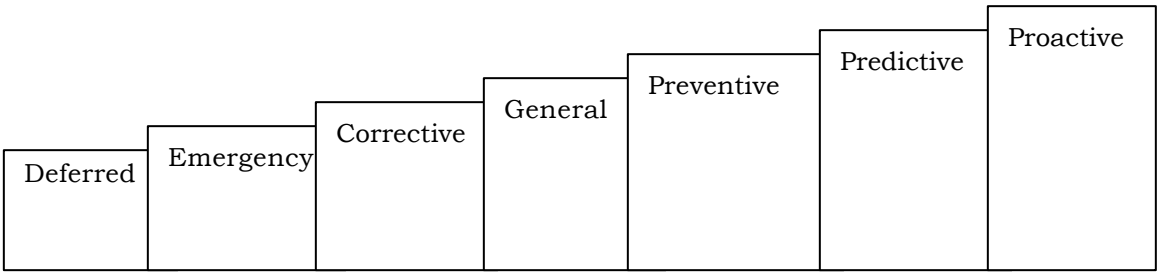
be verified thorough an inspection and reporting program. The effectiveness of this approach depends on distinguishing maintenance investment from both new development and custodial tasks, or else the actual maintenance investment cannot be determined.

The demand-based park maintenance provided by PARD's Operations Division is not consistent with managing efficient operations and ensuring maximum usefulness of City park assets. According to industry sources, managers of efficient and effective maintenance programs follow a standard ratio of 90 percent scheduled maintenance to 10 percent demand-based maintenance. As shown in Exhibit 16, on page 30, maintenance operations comprise a continuum of activities based on the level of planning. At one end is deferred maintenance, which occurs when projects are identified as necessary but do not get done. Next along the continuum are unplanned activities including emergency maintenance and corrective maintenance, which occur as the need arises; neither is planned far in advance. Planned maintenance follows on a continuum, although the maintenance categories are not mutually exclusive. General maintenance is the upkeep of building components to restore them to their original conditions or to keep them in good working conditions. Preventive maintenance follows on the continuum as a planned program of periodic inspections, adjustments, and replacements. Predictive maintenance presents another degree of planned maintenance. A step beyond this is proactive maintenance, a highly structured practice that uses information to identify origins, not just symptoms of problems. Generally speaking, the more activity that is planned, the more efficient the operation.

However, Operations Division managers stated that PARD maintenance is performed on a demand basis without a standardized process for equitably allocating the maintenance and repair (M & R) budget. Maintenance is viewed primarily as a day-to-day operational concern. The Operations Division has established a priority ranking for incoming work orders for maintenance. However, only a portion of the work done by the Operations Division is recorded in MS 2000. Of 5,579 completed work orders recorded in MS 2000 for FY 00, over 50 percent were of the highest priority as shown in Exhibit 17, on page 30. By providing primarily demand-based services, the Operations Division gives a low value to equity in asset reinvestment as indicated by priority four work orders. Detailed information on Operations Division work priorities is found in Appendix F.

EXHIBIT 16
Continuum of Maintenance for Facilities

¬ **Unplanned----------Planned**®



SOURCE: *Preventive Maintenance for Local Government Buildings*, Office of the Legislative Auditor, State of Minnesota, April 2000.

EXHIBIT 17
Distribution of Completed Work Order Priorities Recorded in MS 2000

FY 00

PRIORITY	DESCRIPTION	WORK ORDERS
1	Health, safety, security, interruption of service	55.60%
2	Special service projects, routine plumbing/irrigation	17.49%
3	General repairs	19.70%
4	New construction, preventive maintenance	7.08%
	Miscoded	0.13%

SOURCE: OCA analysis of PARD FY 00 data from MS 2000.
Note: While PARD's priorities were not designed with the continuum above in mind, priority 1 seems to coincide largely with "Emergency" measures. Priorities 2 and 3 appear to coincide with "Corrective" and "General" measures. Priority 4 includes "Preventive" measures, as well as new construction, which is not considered a maintenance function.

The Operation Division has not established ongoing preventive maintenance. Preventive maintenance (PM) is a standard operating procedure for effective operations. Effective PM is a planned approach designed to avoid breakdowns and prevent minor problems from escalating into major ones. In a 1999 award application, PARD refers to a preventive maintenance program:

> Along with the increases in programming, approximately $600,000 was added to the department's base budget in 1997 and 1998 for preventive maintenance of facilities. This funding allows the department to schedule routine maintenance checks to prevent further deterioration of facilities and amenities. The routine maintenance checks allow for better scheduling and management of personnel by preventing many situations to reach a crisis stage causing the need for wasted overtime costs.

> Facilities that once reached a stage of disrepair are now being maintained without unnecessary shutdowns.

This statement clearly acknowledges that PARD understands the value of preventive maintenance; however, PARD was unable to demonstrate that ongoing preventive maintenance had continued, and both the work order system and our observations indicated that preventive maintenance was not taking place.

Without PM in place, taxpayer's return on investment in public facilities will diminish, and overall costs will be higher. The typical life span of facility components will be depleted and not fully utilized. Also, facilities will not function as they were intended and will operate in an inefficient manner. Failures of facility systems may interrupt occupants' activities and the delivery of public services, or cause safety concerns for both the citizens and employees.

The Operations Division has not defined and separated maintenance duties from other duties to ensure accountability. According to the *Maintenance Manager's Standard Manual*, "The best productivity results when each individual in an organization has a definite job to do in a definite way and a definite time." This principle is assured through clear definitions of responsibilities and clear standard operating procedures. The responsibilities of the Operations Division are wide-ranging and include both maintenance and nonmaintenance activities, as well as activities that are not related to parks. A wide range of responsibilities is not necessarily inappropriate. However, when one organizational unit has multiple responsibilities, controls are required to ensure accountability for use of maintenance resources for maintenance purposes.

The Operations Division does not budget and account for maintenance and repair (M & R) separately from work that is not related to parks maintenance. Some of the Operations Division's responsibilities do not relate to park maintenance and repair duties. These other duties compete for the same limited resources and, without separate accounting and other controls to ensure that maintenance resources are used for maintenance, increases in the demand for other services may interfere with the performance of maintenance responsibilities. The National Research Council's maintenance budget guidelines promote the appropriate categorization of activities. Maintenance and repair activities should be budgeted and accounted for separately from building alterations and improvements and other nonmaintenance activity; otherwise, the investment in M & R activities can be obscured so that the actual expenditures cannot be determined. Some of the duties that the Operations Division performs include:

- clearing branches overhanging city streets, clearing blind street corners, and maintaining road rights-of-way,
- assisting with special events, both PARD and non-PARD sponsored,
- distributing and retrieving voting devices for elections,
- picking up litter and mowing on City roadways, and
- mowing City-owned vacant and surplus property.

As will be discussed later, the MS 2000 system captures only a portion of the expenditures of the Operations Division. Of the expenditures recorded, approximately $246,000, or about 18 percent, could be identified as related to the first three items in this list.

The Forestry activity in the Operations Division does most of its work outside of parks, but its work is all budgeted in the Operations Division. In fact, the Operations Division management estimates that 85 to 90 percent of Forestry's work is spent on road rights-of-way and blind corners. While Forestry is tending to things outside of parks, the backlog of forestry-related work orders recorded on the MS 2000 system stood at 1,932 as of September 2001.

In order to support special events, the Operations Division diverts staff from daily maintenance to fence the perimeter for the event, set up other equipment, and take equipment down after the event. Even though there is a budget item for special events, the majority of cost for labor used is recorded under the maintenance expenditures. The Operations Division could not provide OCA with the amount of time spent on special events. However, Operations Division management stated that employees spend considerable time on these events. For example, starting right before Thanksgiving and continuing until early January, employees spend most of their time on events such as Thanksgiving parties at the recreation centers and the Trail of Lights. While these activities are congruent with PARD's mission, the assistance provided for special events prevents the Operations Division from performing needed parks maintenance and repair, and the failure to account for them separately hinders any calculation of how much is spent on maintenance.

In addition to Operations Division staff time spent on special events, expenses related to these activities may be charged to the maintenance budget activities. Expenses for wages, electricity, water, materials and other items used at special events are not all entered as Special Events activity expenditures. Thus recorded expenditures for maintenance and repair are overstated.

The Operations Division lacks written standard operating procedures for park and facility maintenance and work standards to measure task performance. Therefore, Operations Division management and staff cannot be held accountable for maintenance work quality and high productivity. When the Operations Division implements work standards, management will have a mechanism to:

- describe tasks that must be accomplished in each park,
- identify an expected level of performance for each task,
- estimate budget needs for each park and asset, and
- set priorities and allocate available funds to each park or asset.

Critical park maintenance management information is unavailable.

Pervasive management information problems hamper PARD's ability to manage maintenance. Even though the department purchased a maintenance management software package, the information generated from the system has not substantially improved the quality or reliability of performance information in the Operations Division. An absence of cost accounting data impairs PARD's ability to determine and monitor the cost of specific maintenance activities by facility. The performance measures for facility maintenance reported to the Budget Office lack credibility because the methods of calculation are not standardized and documented. Failure to capture complete and accurate information regarding maintenance work inhibits PARD efforts to forecast expected expenditures and human resources during budget preparation and to develop plans to appropriately reinvest in its assets. Moreover, managers lack a systematic way to meet maintenance priorities and make informed budget decisions.

Numerous MS 2000 data integrity and reliability problems surfaced during audit testing. As mentioned earlier, the Operations Division purchased maintenance management software (MS 2000) in 1997 that is capable of providing an integrated maintenance management system. However, controls do not exist that could prevent or detect errors in data. MS 2000 automatically assigns sequential numbers as work orders are entered in the system, an important control over fraud. We found that the Operations Division was unable to account for 10 percent of sequential work order numbers. Further, an absence of standard operating procedures for data entry has resulted in incorrect coding and illogical relationships among the data. For example, 17 percent of completed work orders had invalid service codes. These unidentifiable jobs accounted for 35 percent of expenditures. Illogical relationships exist among the requested, issued, and completed dates because work orders may be entered at a later date than the date the work was done, making the completed date precede the issued date.

The inability to fully implement MS 2000 results in the Operations Division having to rely primarily on informal and decentralized maintenance management methods. We found that only a fraction of Operations Division M & R activities are accounted for in the MS 2000 system because not all of the work performed by maintenance staff is recorded with a work order. In addition, records entered into the system are likely to be incomplete or inconsistent. Some PARD staff have stated that employees are not held accountable for submitting a work order when work is performed. Managers, supervisors, and workers must rely on prior work experience rather than documented maintenance histories in deciding what work is done. These methods give little assurance that maintenance objectives are met or that personnel are used efficiently.

The Operations Division lacks comprehensive and accurate job cost accounting data needed for performance measurement, planning needs, and management decisions. We found that because MS 2000 is only partially implemented, the department is unable to track daily operational costs or monitor the exact number of hours spent by employees performing work. In addition, the MS 2000 data does not reconcile with the City's financial system of record. Our analysis showed that only 16 percent of the expenditures in FY 00 were captured in MS 2000. Currently, neither system is designed to generate accurate and complete cost data by type of maintenance activity or by facility. Two reasons that a reconciliation of the systems is not possible are that the codes used in MS 2000 do not relate one-to-one with the coding scheme used in the City's financial system and that MS 2000 records are incomplete and inaccurate.

Performance measures tested for maintenance are not reliable because the Operations Division lacks controls over performance data and procedural guidelines for calculating performance measures. The Operations Division lacks standard definitions for performance measures as well as a review process to check reported information against supporting data. For the most part, park maintenance performance measures are calculated so differently from the way they are defined that little useable information is produced. For example, included in the calculation of the measure "number of emergency trees pruned or removed" are low limbs that are simply inconveniencing someone. Another deviation from the definition for this measure occurs because the number of work orders is counted not the number of trees involved in the work. The "average cost per daily servicing" measure loses meaning because total costs are divided by an idealized number of acres PARD would like to have serviced rather than the actual acreage serviced. Further, we found that the Operations Division was unable to reproduce the facility maintenance performance measures reported to the Budget Office in FY 00 because the division did not maintain supporting documentation for any of these measures.

PARD has not established a process for consistently implementing improvement opportunities.

PARD has not always implemented recommendations from previous audits and internal improvement initiatives. Audit findings in this report are very similar to findings reported by our office in 1993, and first reported in 1986. In 1993 we reported that "…[PARD's] failure to maintain a facilities condition inventory prohibits effective planning of the maintenance budget." Decision making in the Operations Division, then as now, was not based on quantitative information, but on staff knowledge and judgment. Maintenance was not planned, but performed on demand. The Department didn't know its true maintenance needs or backlog.

Previous recommendations have not been implemented to develop a system of cost accounting for performance. The 1993 audit recognized that "…PARD can produce little data on whether the Operations Division will be able to get the most for the money. This is because the division has no systems in place to ensure that work groups are working efficiently." At that time, as now, the financial reporting structure was not correlated with work-unit performance.

PARD has not implemented a reliable performance measurement system either. This system was to include, but not be limited to:

- performance standards which establish routine procedures and minimum quality levels to guide staff efforts and enable managers to identify performance anomalies for prompt evaluation;
- routine performance reports, which quantify unit accomplishment of established objectives and enable managers to track progress against standards, and compare across all similar units; and
- planning systems (including facilities and program inventories and work standards) that routinely incorporate feedback from performance data as well as from PARD customers, for preparing budget documents, prioritizing improvements, and changing or adding goals and objectives.

In addition, PARD was directed to develop an as yet unimplemented time accounting system that would facilitate tracking of staff costs against expenditures and revenues.

PARD failed to improve its performance measure reporting after our 1996 audit of the City's performance measurement system revealed that PARD's measure, number of days between mowings, had little support to justify the number reported and no formal calculations. This measure continues to be reported in the same fashion, without improvement.

Furthermore, the Parks Maintenance Task Force commissioned by the City Council in 1996 described many of the same conditions, which are still

present in the parks. The task force reported that problems with park maintenance were severe and new strategies were needed to keep pace with ongoing minimum maintenance. One task force recommendation was to transfer certain maintenance functions to other departments. Some of these functions include:

- maintaining grass and trees in public rights-of way, and
- maintaining cemetery roads.

This issue was also addressed in our 1993 audit of PARD when we noted that PARD fulfills a number of responsibilities, which "may be incongruent with its mission of providing recreational and leisure opportunities." Some of these responsibilities include:

- distributing and retrieving voting devices;
- tree and bush trimming on City rights-of-way;
- litter pick up on City roadways;
- mowing street medians; and
- mowing police substation and library yards, City-owned vacant lots, and surplus property.

Finally, abandoned internal improvement initiatives include a cycle pruning program, a preventive maintenance program for facilities, and a program for evaluating playscape safety.

Recommendations and Management Response

01. To improve data on customer satisfaction by planning area, the City Manager should direct the Director of the Human Resources Department to improve the *Voice of the Customer* survey by

- increasing the sample size,
- selecting a sample that yields valid data for each of the 26 City planning areas, and
- changing the calculation of satisfaction for all questions to be a proportion of all responses, as calculated in this report.

Management Response: Partial Concurrence
This recommendation partly speaks to the notion that the methodology used by the Human Resources Department to calculate satisfaction rates is flawed because it excludes respondents who answered "don't know" or "not applicable". The calculation methodology suggested by OCA includes the "don't know" and "not applicable" respondents in the sample size, hence lowering the satisfaction rates.

The Parks and Recreation Department does not influence the calculations performed by HRD, but supports the concept that if a question does not apply, then that respondent should be excluded from the sample count. We have always understood the numbers to mean that *of those who hold an opinion,* certain percentages reflect satisfaction, while the rest reflect otherwise. The "don't know and not applicable" respondents are viewed as not having an opinion on the particular question, hence should not be factored into the rates.

Increasing the sample size and reporting on planning areas are ideas with which the department concurs. The calculation process is an HRD issue and until that is resolved, we are unable to concur with that portion of the recommendation.

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02. To link park maintenance with external customer satisfaction, the Director of PARD should set a target for the measure, "satisfaction with park maintenance" from the *Voice of the Customer* survey, once the City has established its method of calculation. The Director of PARD should also analyze the number of "dissatisfied" and "neutral" responses by City area and establish strategies for turning more respondents into satisfied customers.

Management Response: Do not concur.
The Parks and Recreation Department can not concur with this recommendation until the methodology in calculating satisfaction rates and the sampling selection is resolved between HRD and OCA.

The Parks and Recreation Department presently sets a target of maintaining the satisfaction rates above 90%. Under the current methodology, survey results reflect a 91% satisfaction rate. The survey performance data is reviewed and tracked annually as it is produced, and operational adjustments are made as appropriate. The data is not presently presented by planning areas. The PARD will work with HRD to examine the feasibility of collecting data by planning area.

Suggested Strategies:

2.a Track the performance of this measure and if performance declines, make necessary adjustments to improve operations.
2.b Use more targeted methods—such as on-site surveys—for gathering customer satisfaction data for specific parks.
2.c Place boundary markers in parks and signs that tell who to call if the patron notices unacceptable conditions in the park.
2.d Convey accurately to patrons the use and limitations of facilities through the PARD web site, signs, and printed brochures.
2.e Address excessive litter problems through information campaigns, volunteer clean-ups, community service workers, and stricter enforcement of anti-littering laws.
2.f Address safety by increasing visibility of Park Police and Austin Police Department patrols in parks with known social problems.
2.g Find ways to reward employees in the City areas where customer satisfaction is high.

03. The PARD Operations Division Manager should

- review the workload, staffing, training, and logistics between the North, Corridor, and South districts to determine whether management span of control is appropriate and
- establish a more equitable division of workload among districts.

Management Response: Concurrence.
Additional funding and additional staffing would be required in order for this to be implemented to the extent that workloads are equitable. District workload and staffing level reviews occur on a regular basis throughout the organization. The most recent example of staffing realignment in Operations is the splitting of the North District into two separate districts. Current staffing and span of control levels, however,

are presently stretched to meet operational needs and these levels are not always consistent with having equitable workloads among the districts.

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04. The PARD Operations Division Manager should continue to develop and implement a plan to complete a comprehensive inventory of PARD facilities and to specify the facilities' maintenance requirements.

Management Response: Concurrence.
Efforts have been underway for several months to develop a facility inventory that includes parks and facilities. This preliminary asset inventory that makes use of GIS and GPS technology is accessible through the department's web site. However, the recommendation to implement a comprehensive inventory that includes all assets and specifies maintenance requirements, as described in the suggested strategies, is an impressively large task that requires significant funding levels.

The department will continue developing and adapting the inventory database using the MS 2000 system. Implementation of related strategies will be made in accordance with available resources.

Suggested Strategies:

4.a Use fully the capabilities of the MS 2000 software to track facilities and requirements.
4.b Include references to available site plans, architectural plans, as-built drawings, specifications, and manufacturers product information.
4.c Develop a process for creating engineering and architectural data where this data is missing.
4.d Adapt existing web pages and GIS data to maintenance purposes.

05. To provide a basis for ongoing planning, the PARD Operations Division Manager should develop a plan and schedule for completing baseline condition assessments for all parks and facilities.

Management Response: Concurrence.
Given the size of the department's inventory, a plan and schedule for completing baseline condition assessments for all assets will again require a serious investment.

Developing a valid and reliable plan will entail the use of outside consultants, or will require that current resources shift their focus from meeting the daily operational demands to preparing the plan.

Provided that funding is available, hiring a consultant is the preferred alternative. The Parks and Recreation Department does not support re-allocation of existing department resources to fulfill this recommendation, but will continue to strategize on methods to implement a baseline condition assessment and a maintenance schedule without impacting current service levels.

Suggested Strategies:

5.a Hire a consultant for all or part of the assessment in order to ensure accountability for completing assessments and consistency in assessment approach.
5.b Create functional definitions for categories of unmet maintenance needs based on safety, effect on customers, and protection of assets.
5.c Describe all unmet maintenance needs and enter them into the MS 2000 system.
5.d Estimate labor, material, and equipment necessary to perform the maintenance.

06. The City Manager should identify funding outside of current parks maintenance funding for the maintenance inventory and baseline condition assessments needed as a basis for ongoing planning.

Management Response: Partial Concurrence.
The City Manager's Office will evaluate this in light of the City's current financial ability to meet these demands and other departmental and citywide priorities.

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07. To improve planning for maintenance and accountability for the condition of Austin parks and facilities, the PARD Operations Division Manager should establish an ongoing program of assessment for all parks and facilities.

Management Response: Concurrence.
Although we concur with the intent of the recommendation, it is important to acknowledge that certain detailed condition assessments are intensely involved processes that require expertise currently unavailable within the organization. The Parks and Recreation

Department does not support re-allocation of existing department resources to fulfill this recommendation.

The current practice of addressing maintenance needs on-demand will be compromised if staff is re-allocated to implement this recommendation However, in order to fulfill the intent of this recommendation, and in accordance with the ability to pay, the department will:

- ✓ continue to offer training opportunities for staff to conduct ongoing or intermittent condition assessments on components that do not need specialized knowledge,
- ✓ assess assets periodically using guidelines and standardized checklists,
- ✓ record relevant maintenance and condition information in the MS2000 system.

Suggested Strategies:

7.a Assess asset condition periodically using written guidelines, standardized checklists, and data from the MS 2000 system.
7.b Identify benchmark parks for each of the quality items in the OCA park-rating instrument.
7.c Initially use a small, dedicated group to develop and administer assessments in order to ensure consistency.
7.d Train appropriate staff and managers to conduct ongoing condition assessments on components that do not need specialized knowledge.
7.e Hire outside consultants as necessary to perform assessments that require a higher level of expertise.
7.f Record assessment information in MS 2000.
7.g Rate annually the physical condition, performance, and estimated repair cost for all assets.
7.h Report annually on the relative quality of maintenance in individual parks compared to internal benchmarks and the extent of maintenance backlog.
7.i Use data to plan which specific backlog items will be addressed in the next fiscal year.
7.j Supplement data from assessments by surveying appropriate staff and managers on facility conditions, park conditions, and customer service.

08. To protect the City's investment in park assets, the City Manager and Director of PARD should develop for presentation to the City Council a comprehensive strategy for reinvestment in park assets based on their value and should develop suggested funding for those strategies.

Management Response: Do not concur.
As part of the budget process, the City Manager's office and the Director of PARD will evaluate the status of park assets and submit appropriate recommendations based on the City's financial ability to meet those demands.

Suggested Strategies:

8.a Establish the value of each asset in PARD's portfolio.
8.b Establish an annual target reinvestment rate of at least two percent of the current value of the park assets.
8.c Use the ratio of maintenance expenditure to program expenditure as a guide for investment in maintenance and shift funding from programs to maintenance to achieve a ratio that is consistent with the median ratio presented in Exhibit 15.
8.d Develop partnerships and corporate sponsorships to help fund maintenance.
8.e Evaluate existing fees and funding sources, as well as sources used in other jurisdictions, to see whether funding can be enhanced by appropriate increases from existing sources or development of new sources.

09. To enhance funding of park maintenance, the City Manager should examine the feasibility of allocating funds from the Hotel-Motel Bed Tax for maintenance of the Town Lake Corridor because of its importance to tourism.

Management Response: Concur.
The City Manager will examine the feasibility of allocating funds from the Hotel-Motel Bed Tax. However, any redistribution of funds presents a potential adverse affect on such programs as the Cultural Arts Program, which is funded from this tax.

10. The Director of PARD and PARD Operations Division Manager should establish long- and short-range maintenance plans for each park asset based on initial condition assessments. Plans should establish an accepted standard of maintenance for each type of park asset and hold the applicable supervisors accountable for meeting those standards.

Management Response: Concurrence.
The Parks and Recreation Department believes that the recommendation has merit. Establishing a maintenance plan on each asset, based on

condition assessments, would require a substantial funding commitment as this is dependant on having a complete asset inventory.

However, the department will continue to build on the practice of using short-range maintenance plans, using the SSPR for accountability purposes, consulting industry literature, and developing standard operating procedures for implementing maintenance plans.

Suggested Strategies:

10.a Consult industry literature on potential maintenance standards for each type of asset.
10.b Develop cost information for all activities necessary to meet established service levels and alternative service levels.
10.c Use the Success Strategy Performance Review to hold supervisors accountable for meeting maintenance standards.
10.d Have a team of peers periodically inspect parks to determine whether the standards of maintenance are being met.
10.e Develop standard operating procedures needed to implement all plans.

11. The Director of PARD should adopt and maintain preventive maintenance programs for all parks and facilities.

Management Response: Concurrence.
Preventive maintenance programs are sound practices for addressing long-term maintenance needs of physical plants. However, historically, information and literature indicate that insufficient funding for preventive maintenance adversely impacts reactive maintenance and the ability to respond.

Although the department is not supportive of reallocating existing funding for preventive maintenance, we agree that preventive maintenance programs are effective and necessary. Full implementation of this recommendation is contingent on sufficient funding and resources. The department will continue addressing preventive maintenance needs and expand these services consistent with resource availability.

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12. In order to improve accountability for park asset maintenance, the City Manager should assign responsibility for maintenance of rights-of-way, medians, blind corners, and other nonpark maintenance to Public Works or other appropriate departments, as recommended in previous

improvement efforts. The Operations Division of PARD should retain positions and appropriate funding to perform forestry and landscape maintenance duties on dedicated parkland.

Management Response: Partial concurrence.
The City Manager has a team of departments examining where best to assign responsibility for maintenance of rights of way. On the second point, we concur. We agree on the approach for forestry and landscape maintenance duties. The City Manager and the Director of PARD will evaluate whether the maintenance of all PARD facilities other than forestry and landscape are better served under a centralized format.

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13. In order to establish accountability for park asset maintenance, the Director of PARD should clearly define maintenance responsibilities, distinguish park maintenance duties from custodial and other operational duties, establish appropriate controls to ensure that maintenance duties are not subordinated to nonmaintenance duties, and improve cost accounting to account separately for park maintenance and other duties.

Management Response: Partial concurrence.
The Parks and Recreation Department differs in philosophy and is not in concurrence with organizing work units to perform exclusively maintenance-oriented tasks. The department agrees, however, to examine ways of improving cost accounting to distinguish park maintenance from other duties.

Suggested Strategies:

13.a Organize work units to perform exclusively maintenance tasks to the extent feasible.
13.b Improve time accounting and/or MS 2000 system to capture better information on time spent in maintenance and nonmaintenance tasks.
13.c Create a separate budget program for nonmaintenance-related activities.

14. In order to make informed decisions about the distribution of maintenance resources and support effective maintenance planning, the Director of PARD should continue to develop work standards, implement standard operating procedures for all activities, and more closely relate the financial reporting structure to work unit performance.

Management Response: Concurrence.
Developing work standards and standard operating procedures are items the department agrees to continue to work on to the extent that available resources permit. The department will also continue to examine ways of improving financial reporting systems through the City's Financial Reporting System (AFS2), the City's payroll system (Banner), and through the MS 2000 system.

Suggested Strategies:

14.a Create standards for the tasks required in each park, identify an expected level of performance for each task, and develop standard operating procedures on how to carry out each task.
14.b Identify and establish resource requirements to accomplish tasks efficiently and effectively.
14.c Train staff to apply the work standards and follow the standard operating procedures.
14.d Use MS 2000 data, work standards, and benchmarking information to compare the efficiency of maintenance work across parks and districts, to set priorities for maintenance work, and to allocate funds to individual parks.
14.e Identify extenuating maintenance problems at individual parks that require the allocation of more resources.
14.f Use all of the above to establish an annual work plan for park maintenance.

15. To ensure complete and accurate maintenance information and to report correct performance data, the PARD Operations Division Manager should implement fully the MS 2000 maintenance management software, because there is too large a volume of maintenance and asset condition information to manage manually.

Management Response: Concurrence.
The department concurs that full implementation of the MS2000 maintenance management software will ensure complete and correct maintenance information and performance data. We also concur that a database administrator position would assist the department in achieving this objective.

The department has made incremental improvements on the implementation of the MS2000 maintenance management system consistent with limited available funding. This initial effort at developing an inventory database has already provided the department vital data for making management decisions about maintenance and park servicing

levels. Implementation progress and system improvements are contingent upon funding levels.

Suggested Strategies:

15.a Hire an outside consultant familiar with MS 2000 to act as project manager directing PARD staff in the collection of complete and accurate information on PARD assets.

15.b Create and fill a position of database administrator for the MS 2000 and make the administrator responsible for monitoring the completeness and accuracy of information in the system.

15.c. Complete the following components of MS 2000

- a complete inventory of all park assets,
- a breakdown of each asset into its component parts that require maintenance, i.e. air condition unit #1, air condition unit #2, meeting room #1, meeting room #2, etc.,
- a baseline assessment of condition of each asset and its components, and
- asset life expectancy and warranty information.

15.d Enter all work orders and cost estimates, labor, materials, and equipment, for routine servicing, demand-based maintenance, preventive maintenance, and capital projects.

15.e Enter actual costs upon completion of each work order, and program MS 2000 to automatically produce schedules for routine and preventive maintenance.

16. The Director of PARD and the PARD Operations Division Manager should continue to shift the Operations Division from management by experience to management by complete, accurate, and documented information and experience.

Management Response: Concurrence.

The department concurs in principle, but recognizes that experience based management is valuable and indispensable when working with a large park system. Concepts such as Succession Planning and internal benchmarking of best practices support the notion of managing by experience. However, data driven decision making is highly valued as well.

The department uses the information it has at its disposal and continues to develop databases and standards that will assist us in continuing to make the shift as recommended.

Additional funding for complete and accurate information is required for full and complete implementation. The primary reason for this is that inherent in this recommendation is the full implementation of the MS2000 system.

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17. In order to ensure implementation of maintenance improvement initiatives, the City Manager should require the Director of PARD to establish an Action Plan, which addresses the recommendations in this report, identifies barriers that hinder the implementation of a modern maintenance system, and addresses these barriers.

Management Response: Concur.
Inherent in the audit response process is the development of an Action Plan.

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18. In order to ensure implementation of maintenance improvement initiatives and protection of the value of parks asset, the City Manager should direct that parks maintenance activities be designated as core activities and that any budget reduction decisions take this designation into account.

Management Response: Partial concurrence.
The Director of PARD has completed his assessment of all the departmental activities based on the criteria issued to all departments. The core activities submitted by PARD are currently under review. Budget decisions will include consideration of this designation.

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19. The City Manager should create a task force comprised of representatives of the departments with significant asset management responsibility to evaluate management of real assets citywide. The task force should be charged with

- Developing a citywide asset management policy,
- Determining whether departments' asset management responsibilities are consistent with their respective missions,
- Determining whether asset management practices are coordinated effectively,
- Defining efficient and effective asset management practices, and
- Evaluating alternative funding sources and methods of service delivery for maintenance of real assets.

Management Response: Partial concurrence.
The City Manager's office recognizes the benefit of these activities. However, there may not be a single policy that fits management of all

City assets. Likewise, there may not be alternative funding sources or methods of service delivery for maintenance of real assets. Nevertheless, the City management will appoint a task force to work on a coordinated approach to asset management.

APPENDIX A
MANAGEMENT RESPONSE

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M E M O R A N D U M

To: Steve Morgan, City Auditor

From: Joe Canales, Chief of Staff, City Manager's Office
Michael McDonald, Acting Assistant City Manager

Date: February 25, 2002

Subject: Maintenance Audit – Parks and Recreation Department

I have reviewed the Parks and Recreation Department Management Response Report. As you can see from the department's responses, full implementation of a number of the recommendations in the audit report will be contingent on the department's ability to pay.

Please let me know if you have any questions or need additional information.

for Joe Canales, Chief of Staff
City Manager's Office

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Detailed management response is included in the report on pages 37-48.

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APPENDIX B
CALCULATIONS OF
PROGRAM AND MAINTENANCE EXPENDITURES

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The table below gives the basis for our calculations.

Description	Source	Result
City of Austin population as of January 2000	www.ci.austin.tx.us/citymgr/basicfac.htm	642,994
City of Austin Acreage without BCP	Austin Parks and Recreation Department Resource Inventory October, 2001	15,592
PARD's Operations Budget Total	OCA's Calculations	$36,686,347
PARD's Maintenance Expenditures	OCA's Calculations	$14,106,617
PARD's Programming Expenditures	OCA's Calculations	$22,579,730

The table below describes our methodology for the exhibits in this report.

Measures	Result	Calculation	Exhibit
Parkland Acres per 1,000 Resident	24	=15,592 (642,994/1,000)	Exhibit 6
Total Operations Budget per Resident	$57	=$36,686,347 / 642,994	Exhibit 7
Maintenance Expenditure per resident	$22	=$14,106,617 / 642,994	Exhibit 7
Maintenance Expenditure per acre	$905	=$14,106,617 / 15,592	Exhibit 8
Ratio of Maintenance Expenditures to Program Expenditures	.62	=$14,106,617 / 22,579,730	Exhibit 15

OCA used the following information for its calculations.

PARD by Fund	1999-2000 Actual Requirements	Budget Categories
General Fund	28,213,677	Operating Budget
Golf Fund	5,993,610	Enterprise Funds
Golf Surcharge Fund	204,000	Enterprise Funds
Recreation Fund	2,837,872	Enterprise Funds
Softball Fund	834,606	Enterprise Funds
Police Asset Forfeiture Fund	0	Enterprise Funds
BCP Fund	639,737	BCCP Fund
Cultural Arts Fund	3,207,859	Cultural Arts Fund
Grants	1,372,270	Operating Budget
New Capital Appropriations	21,748,000	Capital Budget
TOTAL	**$65,051,631**	
PARD FY 00 Actual Requirements broken down into categories		
Operating Budget	29,585,947	
Enterprise Funds	9,870,088	
BCCP Fund	639,737	
Capital Budget	21,748,000	
Cultural Arts Funds	3,207,859	
Total	**$65,051,631**	

OCA will use the following FY 00 Actual Requirements for comparison to *Inside City Parks* with BCP		
Operating Budget	26,888,439	
Enterprise Funds	9,870,088	
BCCP Fund	639,737	
Capital Funds actually spent-number provided by the Budget Office	14,211,611	
Total with Capital	**$51,609,875**	
Less Capital	14,211,611	
Total without Capital	**$37,398,264**	
OCA will use the following FY 00 Actual Requirements for comparison w/o BCP to the cities in Inside City Parks		
Operating Budget	26,816,259	
Enterprise Funds	9,870,088	
Capital Funds actually spent-number provided by the Budget Office	14,211,611	
Total with Capital	**$50,897,958**	
Less Capital	14,211,611	
Total without Capital	**$36,686,347**	

SOURCE: City of Austin Proposed Budget 2001-2002 and PARD's Financial Manager.

OCA used the following information for its calculations *(continued)*.

PARD Maintenance Expenditures with BCP for FY 00	
General Fund Maintenance	10,760,723
Golf Enterprise Maintenance	2,778,876
Softball Maintenance	301,831
BCP Maintenance	159,934
Grants- Maintenance	281,312
Total	**$14,282,676**
PARD Maintenance Expenditures without BCP for FY 00	
General Fund Maintenance	10,744,598
Golf Enterprise Maintenance	2,778,876
Softball Maintenance	301,831
Grants-Maintenance	281,312
Total	**$14,106,617**
Expenditures in either maintenance, program, or capital categories w/ BCP	
Maintenance Cost	14,282,676
Program Cost	23,115,588
Capital Actually Spent	14,211,611
Total with Capital	**$51,609,875**
Expenditures in either maintenance, program, or capital categories w/o BCP	
Maintenance Cost	14,106,617
Program Cost	22,579,730
Capital Budget	14,211,611
Total with Capital	**$50,897,958**

SOURCE: City of Austin Proposed Budget 2001-2002 and PARD's Financial Manager.

PARD's General Fund with exclusion of Public Safety & Museum Expenditures used for OCA's calculations

General Fund	99-00 Actual	99-00 FTE	Program Exp.	Program FTEs	Maint. Exp.	Maint. FTE
Community Recreation						
Community Recreation	4,354,807	68	4,354,807	68	0	0
East Side Story	496,094	4	496,094	4	0	0
Millennium Youth Entertainment Complex	851,506	0	851,506	0	0	0
Roving Leader	766,414	16	766,414	16	0	0
Senior Services	1,371,516	22.3	1,371,516	22.25	0	0
Summer Programs	526,242	0	526,242	0	0	0
Teen Academy	157,575	0	157,575	0	0	0
Totally Cool, Totally Art	197,297	0	197,297	0	0	0
Cultural Arts Services						
Art in Public Places	53,042	1	53,042	1	0	0
Arts Center Services	592,892	10	592,892	10	0	0
Cultural Contracts	129,592	3.5	129,592	3.5	0	0
Facility Services						
Facility Maintenance	1,869,793	39	0	0	1,869,793	39
PARD Construction	195,400	11	0	0	195,400	11
Park Maint.	5,753,951	129	0	0	5,753,951	129
Park Planning	297,394	14.5	0	0	297,394	14.5
Special Events	464,581	1	464,581	1	0	0

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PARD's General Fund with exclusion of Public Safety & Museum Expenditures used for OCA's calculations *(continued)*

General Fund	99-00 Actual	99-00 FTE	Program Exp.	Program FTEs	Maint. Exp.	Maint. FTE
Natural Resources						
Central and Eastern Preserves Mgmt.	72,180	2	54,135 [a]	1.5 [a]	18,045 [a]	.5 [a]
Environmental Education	524,993	12	524,993	12	0	0
Horticulture	636,267	9	0	0	636,267	9
Sports Management						
Aquatics	3,473,677	14	2,821,814 [b]	11.3 [b]	651,863 [b]	2.6 [b]
Athletics	725,033	3	725,033	3	0	0
Facility Expense	585,331	18.8	0	0	585,331	18.75
Total before Support Services with Facility Exp. included as a maint. Exp. & not as support services cost	**24,095,577**	**378**	**14,087,533**	**154**	**10,008,044**	**224**
% of total used to determine amount to charge for admin. overhead *			**58%**	**41%**	**42%**	**59%**
Support Services						
Admin. & Mgmt. *(Based on FTEs Ratio)*	427,665		173,802		253,863	
Financial Monitoring Budgeting *(Based on Budget Ratio)*	235,376		137,613		97,763	
Information Technology Support *(Based on FTEs Ratio)*	73,419		29,837		43,582	

Note a: Expenditures were broken out 75% Program Expenditures and 25% Maintenance.

Note b: For detail on how numbers were broken out, see Aquatics General Fund.

Note*: These numbers have been rounded. In actual calculations, an un-rounded proportion to four decimal places is used.

(Continued on next page)

PARD's General Fund with exclusion of Public Safety & Museum Expenditures used for OCA's calculations *(continued)*

General Fund	99-00 Actual	Program Exp.	Maint. Exp.
Personnel Training (*Based on FTEs Ratio)*	411,309	167,155	244,154
PIO/Community Services *(Based on Budget Ratio)*	163,923	95,838	68,085
Purchasing MBE/WBE *(Based on Budget Ratio)*	108,900	63,668	45,232
Total admin. Support w/o Facility Expense	**1,420,592**	**667,913**	**752,679**
TOTAL-broken out into Program & Maint. Exp.	**25,516,169**	14,755,446	**10,760,723**
Total without public safety and museums	**25,516,169**		
Public Safety	**2,115,828**		
Museums	**581,680**		
Total with public safety and museums	**28,213,677**		
Total –broken out into Program & Maint. Expenditures without Central and Eastern Preserves Mgmt.	25,443,989	14,699,391	**10,744,598**

SOURCE: City of Austin Proposed Budget 2001-02 and PARD's Financial Manager.
Note: Due to rounding to the nearest whole number; numbers may be slightly different due to rounding.

SOFTBALL ENTERPRISE FUND	
	1999-00 Actual
Administration Cost	447,054
Maintenance Cost	283,452
Salary- Other requirements	8,521
Encumbered Administration	44,648
Encumbered Maintenance	5,443
Interfund Transfers	35,578
OCA's Total	**824,696**
Actual Requirements	834,606
Amount Under	9,910
Softball Maintenance Before Admin. Overhead	
Maintenance Cost	283,452
Encumbered Maint.	5,443
Total Softball Maint. Before Admin. Overhead	**288,895**
Calculation of Admin. Overhead	
Athletics	780,597
Other Requirements **($34,952** is for Admin. Support)	54,009
Total	**834,606**
Amount that is Softball Maint.	288,895 (37%)
Amount that is Softball Programs	491,702 (63%)
Total	**780,597 (100%)**
Amount of Admin. Support that is Softball maint. (34,952 x 37.0095%)	12,936
Amount of Admin. Support that is Softball programs (34,952 x 62.9905%)	22,016
Total Softball Maint. Before Admin. Overhead	288,895
Amount of Admin. Support that is Softball maint.	12,936
Total Maintenance Exp. for Softball	**$301,831**

SOURCE: City of Austin Proposed Budget 2001-02 and PARD's Financial Manager.

AQUATICS GENERAL FUND	
	1999-00 Actual
Administration	211,920
Public Pools	2,230,797
Barton Springs	375,894
Encumbered Public Pools	2,049
Encumbered Barton Springs Pool	1,196
Program Costs*	**2,821,856**
Aquatics Maintenance Expenditures	532,183
Encumbered Maintenance	119,680
Maintenance Costs	**651,863**
OCA's TOTAL	**3,473,719**
Actual Requirements	3,473,677
OCA's Total amount over	42
Aquatics Maintenance Expenditures	
Aquatics Maintenance	532,183
Encumbered Maintenance	119,680
Total Maintenance Expenditures for Aquatics	**$651,863**

SOURCE: City of Austin Proposed Budget 2001-02 and PARD's Financial Manager.

Note: Program FTEs= 2,21,814/3,473,677=81% 81%*14=11.3
Maint. FTEs= 651,863/3,473,677=19% 19%*14=2.6

Note*: For the calculations in the *PARD's General Fund with exclusion of Public Safety & Museums Expenditures used for OCA's calculations*, we used Program Cost of $2,821,856 less OCA's amount overstated ($42) for a total of $2,821,814.

BALCONES CANYONLANDS PRESERVE	
	1999-00 Actual
Endangered Habitat Management	611,482
Other Requirements	28,255
Total	**639,737**
Maintenance expenditures is estimated at 25% of the total	**159,934**
Program expenditures is estimated at 75% of the total	479,803

SOURCE: City of Austin Proposed Budget 2001-02 and PARD's Financial Manager for the estimates.

GRANTS	
	1999-00 Actual
Park Maintenance	**281,312**
Programs	1,090,958
Total	**1,372,270**

SOURCE: City of Austin Proposed Budget 2001-02.

GOLF ENTERPRISE FUND	
	1999-00 Actual
Administration Cost	644,687
Encumbered Golf Admin.	156,117
Encumbered Clay/Kizer Pro Shop	21,915
Encumbered Morris Williams Pro Shop	26,208
Morris Williams Pro Shop	402,360
Clay/Kizer Pro Shop	834,802
Bergstrom Pro Shop	902
Salary Costs/Other Requirements	43,125
Interfund Transfers	1,116,759
OCA's Program Costs	**3,246,875**
Lions	390,557
Hancock	237,125
Encumbered Golf Maintenance	13,127
Encumbered Roy/Kizer Golf Course	25,485
Encumbered Golf Hancock	3,841
Encumbered Golf-Jimmy Clay	18,508
Encumbered Golf Morris-Williams	23,797
Encumbered Golf-Lions Golf Course	11,218
Morris	533,357
Jimmy Clay	599,902
Roy Kizer Golf	472,859
Golf Maintenance	330,062
OCA's Maintenance Cost	**2,659,838**
OCA's TOTAL	**5,906,713**
Actual Requirements	5,993,610
OCA's total amount under	86,897
Golf Maintenance Before Admin. Overhead	
Maintenance Cost	2,563,862
Encumbered Maintenance Cost	95,976
Total Golf Maint. Before admin. Overhead	**2,659,838**
Calculation of Administration Overhead	
Golf	4,746,729
Transfers & Other Requirements (**$212,435** is for Admin. Support)	1,246,881
Total	**5,993,610**
Amount that is Golf Maint.	2,659,838 (56%)
Amount that is Golf Program	2,086,891 (44%)
Total	**4,746,729 (100%)**
Amount of Admin. Support that is Golf Maint. (212,435 x 56.0352%)	119,038
Amount of Admin. Support that is Golf Program (212,435 x 43.9648%)	93,397
Total Golf Maint. Before admin. Overhead	2,659,838
Amount of Admin. Support that is Golf Maint.	119,038
Total Maintenance Expenditure for Golf	**2,778,876**

SOURCE: City of Austin Proposed Budget 2001-02 and PARD's Financial Manager.

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APPENDIX C
CITY PARK COMPARISON
FROM *INSIDE CITY PARKS*

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Low-Density Cities	San Diego	Denver	Houston	Dallas	Atlanta
CITY DEMOGRAPHICS					
Population (1996)	1,171,000	497,000	1,744,000	1,053,000	402,000
Area (in Acres) (1990)	207,360	98,112	345,536	218,880	84,352
Population Density Level	5.6	5.1	5.0	4.8	4.8
City Park Acres	32,650	5,643	20,363	21,828	3,122
Acreage per 1,000 Residents	27.9	11.4	11.7	20.7	7.8
PARKS TYPES					
Total	83	235	118	255	224
Regional	3	27	7	26	7
Neighborhood	80	208	111	229	217
FACILITIES					
Recreation Centers	48	29	55	44	39
Pools	11	26	44	63	23
Golf Courses	9	8	7	6	6
Tennis Courts	108	143	210	258	145
Sports Fields	None	325	305	408	71
Marina Slips	0	12	0	0	0
Beaches	21	0	0	0	0
Skating Rinks	0	0	0	0	0
Miles of Bike and Greenways	None	145	75	69	10
FINANCIAL INFORMATION *(All cities presented used FY 98 data)*					
Full-Time Employees	830	859	1,200	900	215
Seasonal Employees	470	1,430	365	400	59
Grounds & Facility Maint. & Repair Exp.	(a)	25,328,000	29,758,000	20,184,000	10,232,000
Rec. Prog. & Act. Exp.	(a)	13,405,000	24,526,000	14,306,000	11,018,000
Capital Cons. & Acq.	16,176,000	12,625,000	18,899,000	14,980,000	4,000,000
TOTAL	96,639,000	51,358,000	73,183,000	49,470,000	25,250,000
Exp. per Resident	$84	$103	$42	$47	$63

SOURCE: *Inside City Parks* by Peter Harnik

Note a: Agency was unable to separate figures; the combined figures are listed.

Low-Density Cities	Phoenix	Tampa [b]	Indianapolis	Kansas City, MO
CITY DEMOGRAPHICS				
Population (1996)	1,159,000	286,000	747,000	441,000
Area (in Acres) (1990)	268,736	69,568	231,488	199,360
Population Density Level	4.3	4.1	3.2	2.2
City Park Acres	34,901	2,183	11,547	11,047
Acreage per 1,000 Residents	30.1	7.6	15.5	25.0
PARKS TYPES				
Total	118	87	116	121
Regional	19	8	6	3
Neighborhood	99	79	110	118
FACILITIES				
Recreation Centers	29	27	18	12
Pools	28	13	19	19
Golf Courses	5	3	13	4
Tennis Courts	120	92	112	107
Sports Fields	665	123	158	138
Marina Slips	0	118	2	0
Beaches	0	4	1	0
Skating Rinks	0	1	2	1
Miles of Bike and Greenways	79	9	29	22
FINANCIAL INFORMATION *(All cities presented used FY 99 data with the exception of Tampa-see note b)*				
Full-Time Employees	1,096	487	206	720
Seasonal Employees	625	350	400	200
Grounds & Facility Maint. & Repair Exp.	34,480,000	17,037,000	10,031,000	16,551,000
Rec. Prog. & Act. Exp.	32,912,000	8,311,000	10,716,000	9,315,000
Capital Cons. & Acq.	12,912,000	2,827,000	3,400,000	14,868,000
TOTAL	80,304,000	28,175,000	24,147,000	40,734,000
Exp. per Resident	$77	$99	$32	$92

SOURCE: *Inside City Parks* by Peter Harnik.

Note b: Tampa figures were calculated by using: Tampa Parks Dept. FY 99 data, Tampa Recreation Dept. FY 99 data, and Tampa Sports Authority FY 00 data.

Medium-Density Cities	Detroit	Minneapolis	Cleveland	Pittsburgh
CITY DEMOGRAPHICS				
Population (1996)	1,000,000	359,000	498,000	350,000
Area (in Acres) (1990)	88,768	35,156	49,280	35,584
Population Density Level	11.3	10.2	10.1	9.8
City Park Acres	5,890	5,694	1,394	2,699
Acreage per 1,000 Residents	5.9	15.9	2.8	7.7
PARKS TYPES				
Total	278	133	118	156
Regional	4	26	4	4
Neighborhood	274	107	114	152
FACILITIES				
Recreation Centers	31	50	18	19
Pools	14	4	41	32
Golf Courses	6	6	2	1
Tennis Courts	120	167	133	138
Sports Fields	192	396	142	126
Marina Slips	369	0	0	1
Beaches	2	11	0	0
Skating Rinks	3	31	2	1
Miles of Bike and Greenways	11	75	14	35
FINANCIAL INFORMATION *(Minneapolis, Cleveland, and Pittsburgh used FY 98 data and Detroit which use FY 99 data)*				
Full-Time Employees	620	500	330	352
Seasonal Employees	700	1,000	110	480
Grounds & Facility Maint. & Repair Exp.	26,328,000	24,091,000	15,315,000	6,335,000
Rec. Prog. & Act. Exp.	21,654,000	20,034,000	12,603,000	9,864,000
Capital Cons. & Acq.	15,100,000	10,794,000	3,000,000	2,830,000
TOTAL	63,082,000	54,919,000	30,918,000	19,029,000
Exp. per Resident	$63	$153	$62	$54

SOURCE: *Inside City Parks* by Peter Harnik.

Medium-Density Cities	Seattle	St. Louis	Cincinnati [c]	Portland, Oregon
CITY DEMOGRAPHICS				
Population (1996)	525,000	352,000	346,000	481,000
Area (in Acres) (1990)	53,696	39,616	49,408	79,808
Population Density Level	9.8	8.9	7.0	6.0
City Park Acres	6,189	3,290	7,246	9,659
Acreage per 1,000 Residents	11.8	9.3	20.9	20.1
PARKS TYPES				
Total	185	105	368	216
Regional	17	2	27	20
Neighborhood	168	103	341	196
FACILITIES				
Recreation Centers	24	10	30	15
Pools	10	8	47	16
Golf Courses	4	3	7	4
Tennis Courts	165	99	125	122
Sports Fields	185	57	188	223
Marina Slips	3	3	30	3
Beaches	9	0	0	1
Skating Rinks	0	4	3	1
Miles of Bike and Greenways	8	15	70	105
FINANCIAL INFORMATION *(Seattle and Portland used FY 98 data, St. Louis used FY 99 data, see note c for Cincinnati data)*				
Full-Time Employees	910	192	380	371
Seasonal Employees	600	100	992	1,308
Grounds & Facility Maint. & Repair Exp.	37,196,000	7,245,000	8,504,000	25,613,000
Rec. Prog. & Act. Exp.	19,478,000	3,273,000	23,354,000	13,877,000
Capital Cons. & Acq.	29,164,000	15,274,000	13,231,000	25,770,000
TOTAL	85,838,000	25,792,000	45,089,000	65,260,000
Exp. per Resident	$164	$73	$130	$136

SOURCE: *Inside City Parks* by Peter Harnik.

Note c: Cincinnati figures were calculated by using: Cincinnati Park Board FY 99 data and Cincinnati Recreation Commission FY 98 data.

High-Density Cities	New York	San Francisco	Chicago [d]	Boston [e]
CITY DEMOGRAPHICS				
Population (1996)	7,381,000	735,000	2,722,000	558,000
Area (in Acres) (1990)	197,696	29,888	145,408	30,976
Population Density Level	37.3	24.6	18.7	18.0
City Park Acres	28,126	3,317	11,016	4,624
Acreage per 1,000 Residents	3.8	4.5	4.0	8.3
PARKS TYPES				
Total	864	94	204	254
Regional	None	0	46	13
Neighborhood	864	94	158	241
FACILITIES				
Recreation Centers	35	17	260	43
Pools	54	9	89	32
Golf Courses	16	6	6	2
Tennis Courts	584	153	703	100
Sports Fields	860	165	1,019	148
Marina Slips	5	681	4,930	0
Beaches	6	0	32	11
Skating Rinks	6	0	12	13
Miles of Bike and Greenways	None	180	25	19
FINANCIAL INFORMATION *(New York used FY 00 data, San Francisco used FY 99 data, for Chicago see note d, for Boston see note e)*				
Full-Time Employees	2,160	680	2,162	717
Seasonal Employees	3,000	355	568	1,040
Grounds & Facility Maint. & Repair Exp.	140,685,000	40,264,000	120,637,000	22,599,000
Rec. Prog. & Act. Exp.	26,070,000	20,473,000	126,963,000	13,532,000
Capital Cons. & Acq.	139,057,000	9,443,000	64,028,000	17,486,000
TOTAL	305,812,000	70,180,000	311,628,000	53,617,000
Exp. per Resident	$41	$95	$115	$97

SOURCE: *Inside City Parks* by Peter Harnik.

Note d: Chicago figures were calculated by using: Chicago Park District FY 99data and Cook County Forest Preserve District (Chicago)

Note e: Boston figures were calculated by using: Boston Department of Park and Recreation FY 99 data, Boston Department of Community Centers FY 99 data, Metropolitan District Commission (within Boston) FY 98 data.

High-Density Cities	Philadelphia [f]	Miami	Baltimore [g]	Los Angeles
CITY DEMOGRAPHICS				
Population (1996)	1,478,000	365,000	675,000	3,554,000
Area (in Acres) (1990)	86,464	22,784	51,712	300,352
Population Density Level	17.1	16.0	13.1	11.8
City Park Acres	10,364	1,291	5,048	14,987
Acreage per 1,000 Residents	7.0	3.5	7.5	4.2
PARKS TYPES				
Total	64	24	391	357
Regional	8	0	7	5
Neighborhood	56	24	384	352
FACILITIES				
Recreation Centers	158	25	47	127
Pools	85	10	24	58
Golf Courses	6	1	5	13
Tennis Courts	200	51	110	299
Sports Fields	125	24	362	385
Marina Slips	0	0	0	0
Beaches	0	1	1	1
Skating Rinks	6	0	3	0
Miles of Bike and Greenways	45	4	4	14
FINANCIAL INFORMATION *(Miami and Los Angeles used FY 9 data, Philadelphia see note f, Baltimore see note g)*				
Full-Time Employees	765	200	411	1,807
Seasonal Employees	1,800	120	611	None
Grounds & Facility Maint. & Repair Exp.	18,409,000	5,563,000	10,708,000	58,721,000
Rec. Prog. & Act. Exp.	28,129,000	5,690,000	16,176,000	36,683,000
Capital Cons. & Acq.	22,469,000	1,735,000	5,086,000	30,625,000
TOTAL	69,007,000	12,988,000	31,970,000	126,029,000
Exp. per Resident	$47	$36	$47	$35

SOURCE: *Inside City Parks* by Peter Harnik.

Note f: Philadelphia figures were calculated by using: Philadelphia Department of Recreation FY 98 and Fairmount Park Commission (Philadelphia) FY 98.

Note g: Baltimore figures were calculated by using: Baltimore City Department of Recreation and Parks FY 99 data and Baltimore City Department of Public Works FY98 data.

APPENDIX D
CITY PLANNING AREAS

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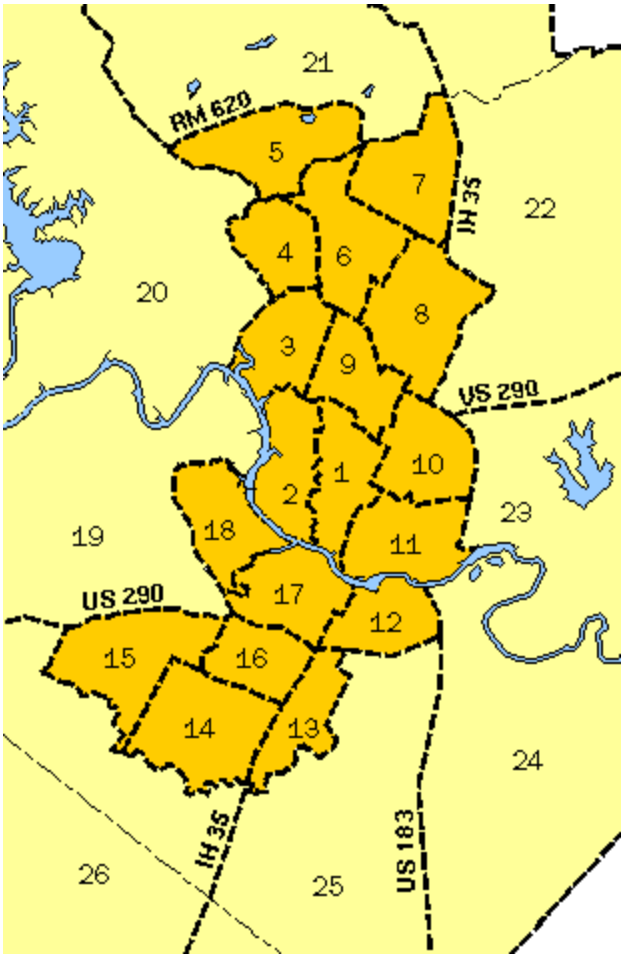
City Planning Areas

The following information was taken from the Comprehensive Planning Section, Department of Planning, City of Austin. The Planning Area Data Profiles are intended to describe, in demographic and socioeconomic terms, large sections or regions of metropolitan Austin. To best describe these conditions, Austin is divided into 26 Planning Areas covering both urban and rural environs. Each Planning Area has its own unique profile and its own set of demographic characteristics that help define it. Austin hosts a great degree of ethnic and socioeconomic diversity and this is reflected in the complete Planning Area Data Profiles. In this appendix, we include the geographic information on those planning areas where we conducted observations on park conditions.



SOURCE: Comprehensive Planning Section, Department of Planning, City of Austin.

Descriptions of the City Planning Areas in which OCA Observed Park Conditions

Planning Area 1

Planning Area 1 (PA1) is located in central Austin and contains the Central Business District, the University of Texas, and the State office complex. It is bounded by Town Lake to the south and Shoal Creek to the west. Its eastern boundary is created by IH-35, along with a small section located between Manor Road and Cherrywood Road and 38 1/2 Street. The northern boundary is a combination of FM 2222, Lamar Blvd, Nelray Blvd, and 53rd Street

Planning Area 2

Planning Area 2 (PA2) is located in west-central Austin and contains Camp Mabry, the Austin State School, the Texas Department of Transportation complex and the University of Texas Brackenridge Tract. Several of Austin's older communities, including Tarrytown and Clarksville, are also in this planning area. PA2 is bounded by Town Lake to the south and Lake Austin to the west. Its eastern boundary is created by Shoal Creek. The northern boundary is a combination of FM 2222 and Dry Creek.

Planning Area 3

Planning Area 3 (PA3) is a hilly section of the city west of the Balcones Fault and Northwest of downtown Austin. It contains various large single-family and multi-family developments as well as a mix of small office buildings. Much of the land in PA3 has not been developed. PA3 is bounded by FM 2222 and Dry Creek to the south. Its southwestern boundary is formed by Lake Austin and the northwestern boundary is the Capital of Texas Highway (Loop 360). The northeast corner is bounded by Jollyville Road, and the entire eastern border is the Missouri-Pacific Railroad.

Planning Area 4

Planning Area 4 (PA4) is located in northwest Austin. The Arboretum shopping mall and several large single-family and multi-family developments are located within its boundaries. Approximately one-third of PA4's area is unincorporated land that falls into Travis County's jurisdiction. PA4 is bounded by the Capital of Texas Highway (Loop 360) to the south. Its western boundary is formed by Spicewood Springs Road. The northern boundary is the Travis-Williamson County line, and the entire eastern border is formed by Research Boulevard (US 183).

Planning Area 9

Planning Area 9 (PA9) is located in north-central Austin and contains a substantial amount of postwar housing tracts, the Texas Department of Public Safety, Highland Mall, and Northcross Mall. PA9 is bounded by a combination of Rundberg Lane, IH-35, Powell Lane, Lamar Boulevard, and US 183 to the northeast. The northwestern boundary is the Union Pacific Railroad line. The southwestern boundary is formed by FM 2222, Lamar Boulevard, and US

183 to the northeast. The northwestern boundary is the Union Pacific Railroad Line. The southwestern boundary is formed by FM 2222, Lamar Boulevard, Nelray Boulevard, and 53rd Street. The southeastern boundary is IH-35, US 290 and Airport Boulevard.

Planning Area 10

Planning Area 10 (PA10) is located in east-central Austin and contains Robert Mueller Municipal Airport, Capital Plaza, and a substantial amount of post-war housing. PA10 is bounded on the west by IH-35, US 290, Airport Boulevard, and 53rd Street. The southern boundary is formed by 38 1/2 Street, Airport Boulevard, Manor Road, Redwood Avenue, and Martin Luther King Boulevard. The remaining eastern section is US 183.

Planning Area 11

Planning Area 11 (PA11) is located in east Austin and contains Huston-Tillotson College, the Texas State Cemetery, and the city's largest Hispanic and Black communities. PA11 is bounded on the west by IH-35. The southern boundary is Town Lake and the eastern boundary is Ed Bluestein Boulevard (US 183) and Shelton Road. The northern boundary is formed by Manor Road, Cherrywood Road, 38 1/2 Street, Airport Boulevard, Redwood Avenue, and Martin Luther King Junior Boulevard.

Planning Area 13

Planning Area 13 (PA13) is located in Southeast Austin. Half of its area falls within the City of Austin, while half falls within unincorporated Travis County. The portion within city limits contains primarily single-family housing. PA13 is bounded by Ben White Boulevard (SH 71) to the north. The western boundary is formed by IH-35. The remaining portion of the border is formed by Todd Lane, St. Elmo Road, Nuckols Crossing Road, William Cannon Drive, Onion Creek, and Slaughter Creek.

Planning Area 14

Planning Area 14 (PA14) is located in south-central Austin. The portion that is within Austin's city limits and its extra-territorial jurisdiction contains mostly single-family subdivisions. The ETJ also contains some vacant land. Both large-lot subdivisions and a lack of multi-family development contribute to PA14's low net population density. PA14 is bounded on the northeast by William Cannon Drive. The southeastern boundary is IH-35, and the southwestern boundary is Slaughter Creek. The northwestern boundary is Brodie Lane.

Planning Area 16

Planning Area 16 (PA16) is located in south-central Austin and contains mostly single-family housing within the City of Austin. PA16 is bounded on the southwest by William Cannon Drive. The southeastern boundary is IH-35, and the northeastern boundary is Ben White Boulevard (SH 71). The northwestern boundary is formed by West Gate Boulevard and US 290.

Planning Area 17

Planning Area 17 (PA17) is located in south-central Austin & contains St. Edward's Univ., the Texas State School for the Deaf, & city parkland along Town Lake including Palmer Auditorium & the City Coliseum. PA17 is bounded on the NW by Barton Creek. The southwestern boundary is Ben White Boulevard (SH 71) and Loop 360. The NE boundary is Town Lake, and the SE boundary is formed by IH-35, Riverside Drive, Parker Lane, and Oltorf Street.

APPENDIX E
DATA COLLECTION METHODOLOGY AND OBSERVATIONS

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DATA COLLECTION MEASURES

To ensure that consistent and relevant information was gathered during observations on the condition of parks, we developed a comprehensive data-gathering questionnaire.

The data collection instrument was used for relative comparisons across parks on specific measures.

The design of the data collection instrument took into consideration the functions for which PARD servicing units are accountable. The functions were obtained by looking at information tracked by PARD's *Park Inspection Form* and *Parks Ground Success Strategy Performance Review* checklist. This information was then compared to park maintenance measures from the *Texas Quality Award's* winning City of Arlington Parks and Recreation Department. [The *Texas Quality Award* is a competitive award made by the Texas Quality Council.] Standard measures were chosen and then assigned a quality rating from zero to five. Two auditors conducted observations and ratings. Pictures were taken to support the auditors' ratings. The overall maximum quality rating varied based on the amenities a park contained. Ratings are standardized for comparison by reporting the proportion of the maximum possible rating received.

The following pages contain the collection instrument used during the observations and a table with the ratings given to each of the 20 parks that we visited.

SUMMARY OF DATA COLLECTION INSTRUMENT

Category	#	*Measures*
General Maintenance	*1*	No visible litter on park property.
	2	Paved surfaces (walks, pads, & lots) free of weeds, broken glass, and dirt.
	3	Trash receptacles less than 1/2 full; clean and neat.
	4	Structures/furniture painted and clean; free of chipped and faded paint.
	5	Grills clean & free of ashes.
	6	No broken edges, cracks, or trip hazards on picnic table pads, sidewalks, and trails.
	7	Hazards/work areas clean & marked for safety.
	8	Signage: proper placement & maintained.
	9	Drinking fountains: operational, draining properly, and free of visible damage.
	10	Parking lots and driveways free of potholes, striping and fire lanes easily seen.
	11	Surfaces at the park are free of graffiti.
Restrooms	*1*	Exterior/Interior free of chipped or faded paint.
	2	Walls void of vandalism/graffiti.
	3	Sufficient toilet paper in dispensers.
	4	No visible trash, cobwebs, water, or dirt on floor.
	5	Structure free of foul odors.
	6	Sinks, hand dryers, and toilets are clean and operational.
Courts	*1*	Basketball court in good condition.
	2	Tennis court in good condition.
	3	Volleyball court in good condition.
Athletic Fields	*1*	Backstop/fence in good condition. Any damaged/worn fence part targeted for repair.
	2	Appropriate play lines visible and fields properly marked.
	3	Bleachers seats clean & free of hazards.
	4	Trash receptacles at all spectator areas, clean and less than 1/2 full.
	5	Condition of field is flat, plates & mounds are level/flat, and free of weeds.
Playgrounds	*1*	Play equipment safe and functioning to specifications.
	2	All sand/gravel free of weeds, glass, and litter.
	3	Equipment clean and neatly painted.
	4	Sand/gravel level, loose and not compacted (depth of gravel measured).
Trails	*1*	All trail pathways have smooth level surfaces (no erosion/washed out areas).
	2	All trails are free of debris/unsafe materials.
	3	Trail pathways are free of low limbs/hazardous trees close to the trail.
Trees	*1*	Park area is free of tree/bushes debris.
	2	Trees are free of low dangerous limbs.
	3	Trees are free from dead wood.
Pools	*1*	Exterior around the pool well maintained.
	2	Equipment clean and neatly painted.

SOURCE: OCA data collection instrument for park observations.

SUMMARY OF OBSERVED PARK CONDITIONS

Parks Observed	Acres	Observed Conditions
Planning Area 1		
Ramsey Neighborhood Park	5.27	Transient sleeping in the bathroom shelter, large tree limbs down, dead newly planted trees, graffiti, tennis court in poor condition, low pea gravel in playground fall zones, some playground equipment doesn't appear to meet standards
Pease District Park	42.25	
Palm Neighborhood Park	2.40	
Planning Area 2		
Eilers Neighborhood Park	8.96	Lots of low limbs, surface of basketball court in poor condition, no volleyball net, safety hazards, graffiti, picnic table needs paint & repair, low pea gravel in playground fall zones & damage to some of the ADA surfacing material, damage to backstop netting
Westenfield Neighborhood Park	11.04	
Pease District Park	42.25	
Planning Area 3		
Bull Creek District Park	48.06	Lots of litter on the ground, graffiti, cement bridge in need of repair, restrooms dirty, women's restroom missing toilet seat, restrooms need to be painted, no volleyball nets
Planning Area 4		
Great Hills Neighborhood Park	59.36	More signage needed, low pea gravel in playground fall zones
Planning Area 9		
Northwest District Park	30.75	Picnic tables need to be painted, graffiti, low pea gravel in playground fall zones and damage to some of the ADA surfacing material, a piece of playground equipment broken, trees down in parks, many dead established trees, no volleyball court net, damage to backstop netting, tennis court has cracks and weeds
Brentwood Neighborhood Park	9.26	

SOURCE: OCA observations during July and August 2001. Park acreage from Austin Parks and Recreation Department Resource Inventory as of October 2001.

SUMMARY OF OBSERVED PARK CONDITIONS *(continued)*

Parks Observed	Acres	Observed Conditions
Planning Area 10		
Bartholomew District Park	57.21	Tennis courts are not playable, lots of litter, picnic tables need paint, water fountains not operational, erosion problems along creek-potential safety hazards, low pea gravel in playground fall zones, playground equipment does not appear to meet standards
Dottie Jordan Neighborhood Park	11.45	
Planning Area 11		
Givens District Park	35.75	Lots of bulky litter, graffiti, picnic tables need to be painted, restrooms dirty, toilets and hand dryers not operational, low pea gravel in playground fall zones, playground equipment needs paint, erosion problems along creek- potential safety hazards, unsafe picnic shelter, dead trees on ground
Metz Neighborhood Park	5.96	
Govalle Neighborhood Park	26.22	
Planning Area 13		
Franklin Neighborhood Park	5.30	Low pea gravel in playground fall zones and damage to some of the ADA surfacing material, dead established trees, no volleyball net, a water fountain not draining properly, no baseball field play lines, no trash can by ball field
Planning Area 14		
Dittmar Neighborhood Park	12.86	Chipped paint on playground equipment, low pea gravel in playground fall zones, dead trees in creek bed, unsafe item in playground area
Planning Area 16		
Battlebend Neighborhood Park	4.90	Graffiti, picnic tables and benches need paint, some water fountains not draining, chipped paint on playground equipment, fallen dead trees, low pea gravel in playground fall zones, chipped paint in restrooms, a faucet in the women's bathroom does not work
Garrison District Park	40.00	
Planning Area 17		
Zilker Neighborhood Park	4.57	Tennis court nets in poor condition, ball field did not have appropriate play lines, low pea gravel in playground fall zones
South Austin Neighborhood Park	11.73	

SOURCE: OCA observations during July and August 2001. Park acreage from Austin Parks and Recreation Department Resource Inventory as of October 2001.

DOTTIE JORDAN NP
Tennis Court has multiple cracks, makes the court unplayable.

EILER'S (DEEP EDDY) NP
Sand Volleyball court had only one standard and no net.

GIVENS DP
A lot of litter in a dry creek.

PALM NP
Tennis court is missing net and has weeds in the cracks.

PEASE DP
Dead tree.

PEASE DP
Damage to the backstop.

WESTENFIELD NP
Backstop netting is torn and hanging down.

GIVENS DP
Picnic Shelter's roof is sagging.

BARTHOLOMEW DP
Large dead tree is on the ground.

BARTHOLOMEW DP
Watershed erosion problems.

BRENTWOOD NP
Torn backstop netting.

GIVENS DP
Large dead tree on picnic table.

NORTHWEST DP
Low pea gravel. The pea gravel level should be even with the top of the synthetic surfacing.

NORTHWEST DP
Note that in the box drawn in the picture taken is a broken rung to the chain ladder.

BRENTWOOD NP
Dead tree in the park area.

EILERS (DEEP EDDY) NP
Park bench is missing boards and has chipped paint.

APPENDIX F
DETAILED INFORMATION
ON OPERATIONS DIVISION PRIORITIES

Priority of Work Orders Completed in FY 00 by Shop

	Priority				Miscoded		Total # of	
SHOP	1	2	3	4	5	6	WORK ORDERS	COST
Missing	12	1					13	$579
Aquatics Maintenance	275	73	63	1			412	$73,913
Ballfield Maintenance	29	47	32	8			116	$29,908
Corridor Mowing	15	13	26	31			85	$45,568
Emma Long Park		3					3	$1,094
Facility Maintenance	245	217	153	41	1		657	$234,715
Forestry - Tree Maintenance	787	58	229	128	1	1	1,204	$103,277
Graffiti Removal	102	1	1				104	$18,557
Irrigation/Plumbing	752	115	43	14			924	$156,932
North Mowing	15	32	16	7			70	$24,882
North Parks	51	190	153	23			417	$59,976
North Parks II	23	63	46	3	1		136	$24,907
Operations Mgmt	13						13	$98
Playscape Team	9	2		1			12	$6,372
Preventive Maintenance	102	24	215	101	1		443	$314,631
Priority Response	191	86	62	31	2		372	$82,590
Small Engine Shop	415	22	24	3			464	$43,277
South Parks	6	11	3				20	$7,968
Town Lake	17	10	4	1			32	$5,902
Trail Maintenance	6	1	7				14	$14,740
Tree Planting	18	2	6				26	$94,272
Walter Long Metro			1				1	$123
Zilker Park	17	5	14				36	$17,524
Zilker Park SE	2		1	2			5	$6,651
Total	**3,102**	**976**	**1,099**	**395**	**6**	**1**	**5,579**	**$1,368,456**

SOURCE: OCA's calculations from PARD data.

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APPENDIX G
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