

5

OPERATIONS & MAINTENANCE



SECTION CONTENTS:

- INTRODUCTION
- ANALYSIS SUMMARY
- RECOMMENDATIONS



INTRODUCTION

The Operations and Maintenance (O&M) Chapter provides an overview of operational staffing inputs resulting from the proposed master plan changes and each park/facility within. The analysis provides an overview of expectations for MPRB as park improvements are implemented to ensure appropriate staffing, equipment, and time resources are accounted for.

PURPOSE & GOAL

The Operations and Maintenance (O&M) Analysis is designed to support MPRB's stated maintenance goals and strategies. This analysis will assist MPRB in identifying potential deficiencies, identifying proper resources, and establishing a staffing structure that is ideal for the future system.

METHODOLOGY

The O&M methodology included in NSAMP utilizes the work that PROS Consulting completed for the South Service Area Master Plan. That effort focused on identifying unit costs, understanding how the current system is maintained, and realizing what is needed to maintain the current and future system at the desired state. A per acreage cost was calculated for 2013 and 2014 maintenance operations financial data. The calculations included a per acre cost for the entire SSA park system and also a per acre cost by SSA neighborhood park. This helped the consultant team understand how much time was spent on various maintenance activities and how many maintenance hours were available.

The consultant team analyzed and combined this data with model park costs defined for "typical" parks in Minneapolis along with national best practices that came from PROS Consulting's work experience and database.

The models reflected the required available hours to operate and maintain one park. Those costs were then distributed throughout the entire SSA system, applied to the existing state of SSA parks, and compared to the estimated O&M cost for the proposed Master Plan Designs. A full description of this approach can be found in Chapter 5 of the South Service Area Master Plan.

These costs were utilized for estimates of the North Service Area Master Plan Designs. The increase in O & M costs are an estimate and should be used as a framework to view the impact of the NSAMP on MPRB's overall maintenance obligations. The facility O & M estimates have not been adjusted for inflation or spatial differences between the South and North Service Areas.

ANALYSIS SUMMARY

MASTER PLAN CONCEPT ANALYSIS

The comprehensive public engagement plan undertaken through the master plan process has led to concept designs for parks within the NSA. Site master plans include a list of amenities that will be added and/or removed from existing sites. All amenities chosen are derived from the public engagement process and have been vetted through a series of public meetings and other engagement opportunities. The operations and maintenance implications for the master plan designs were examined with the following results.

COST IMPLICATIONS

Figure 5.1 (shown right), displays the cost implications of adding and deleting facilities to the NSA. Some facilities have lower costs for operations and maintenance, while some will increase costs (see "Total Per Unit Operations Cost" column for estimated operational costs by facility type). Overall, across all parks in the NSA, the schematic design concepts are estimated to increase operations and maintenance costs by **\$698,500 per year**. It is important to note that this is a net increase over the existing operational cost. This does not include capital costs or component replacement expenses. Chapter 4 provides park-specific operations and maintenance estimates based on facilities that were added or removed from each park.

ALL NORTH SERVICE AREA PARKS			NEIGHBORHOOD TOTAL		REGIONAL TOTAL	
	FACILITIES	Total Per Unit Operations Cost	△ Qty	△ Cost	△ Qty	△ Cost
AQUATICS	Waterpark / Natural Pool	no net change	0	\$ -	0	\$ -
	Wading Pool	\$ 15,000	-3	\$ (45,000)	0	\$ -
	Splash Pad	\$ 35,000	6	\$ 210,000	0	\$ -
	Beach Access	no net change	0	\$ -	0	\$ -
PLAY	Traditional Play Structure	\$ 7,500	2	\$ 15,000	0	\$ -
	Adventure/Climbing Play	\$ 7,500	6	\$ 45,000	0	\$ -
	Nature Play	\$ 7,500	3	\$ 22,500	1	\$ 22,500
	Outdoor Fitness	\$ 2,500	3	\$ 7,500	1	\$ 7,500
ATHLETICS	Premier Diamond	no net change	0	\$ -	0	\$ -
	Premier Field	\$ 25,000	2	\$ 50,000	0	\$ -
	Multi-use Diamond	\$ 20,000	-14	\$ (280,000)	-3	\$ (60,000)
	Sports Dome	\$ 80,000	1	\$ 80,000	0	\$ -
COURTS	Tennis Court	\$ 1,500	-1	\$ (1,500)	0	\$ -
	Pickleball Court	\$ 1,000	0	\$ -	4	\$ 4,000
	Full Court Basketball	\$ 1,500	6	\$ 9,000	0	\$ -
	Half Court Basketball	\$ 1,000	4	\$ 4,000	1	\$ 1,000
	Volleyball	\$ 1,500	0	\$ -	0	\$ -
	Sepak Tawkra	\$ 1,500	0	\$ -	4	\$ 6,000
WINTER	Gaga Pit	\$ 1,000	1	\$ 1,000	0	\$ -
	Designated Sledding Hill	\$ 20,000	1	\$ 20,000	0	\$ -
	Skating Rink	\$ 30,000	3	\$ 90,000	0	\$ -
	Hockey Rink	no net change	0	\$ -	0	\$ -
OTHER	Refrigerated Ice Rink	\$ 80,000	1	\$ 80,000	0	\$ -
	Broomball Rink	no net change	0	\$ -	0	\$ -
	All-Wheel Park	\$ 7,500	4	\$ 30,000	0	\$ -
	Bicycle Facility/Training Track	\$ 5,000	5	\$ 25,000	1	\$ 5,000
TOTAL	Group Shelter	\$ 4,000	17	\$ 68,000	3	\$ 12,000
	Plaza	\$ 10,000	5	\$ 50,000	0	\$ -
	Amphitheater	\$ 1,500	6	\$ 9,000	0	\$ -
	Dog Park		1	\$ -	0	\$ -
	Trail Additions	\$ 5,000	15	\$ 75,000	2	\$ 10,000
	Restroom/Storage Building	\$ 20,000	2	\$ 40,000	0	\$ -
	Kiosk/Signage	\$ 2,000	1	\$ 2,000	0	\$ -
	Public Art	\$ 1,000	5	\$ 5,000	1	\$ 1,000
	Urban Agriculture	\$ 15,000	8	\$ 120,000	1	\$ 15,000
	TOTAL			\$ 731,500		\$ 24,000

* It is important to note that this increase will happen gradually over time until full build out.

Figure 5.1 - Operations and Maintenance Cost Implications



RECOMMENDATIONS

The following recommendations will aid MPRB in more wholistically understanding its operations and maintenance responsibilities across the city, identifying deficiencies, and targeting resources more effectively and efficiently. It is recommended the Minneapolis Park and Recreation Board examine the following on a system-wide scale:

Conduct a time task analysis to determine productivity rate (i.e., available hours)

Utilize a work order management system to track, record, and report work

Analyze F/T vs P/T tasks to ensure “right task for right position”

TIME TASK ANALYSIS

A time task analysis is a comprehensive approach to tracking current work productivity. The analysis is based upon current available hours, hours required to complete a task, and actual hours performed. Most agencies conduct a time task analysis through an assessment of a work order management system. For agencies that do not have a work order system available, self-reported productivity hours are used; however, self-reported numbers are hard to verify but should provide an agency with a good basis in which to work

WORK ORDER MANAGEMENT

A work order management system can help an organization understand true costs and workforce productivity. Full time employees are typically paid for 2,080 hours; however, due to vacation, holidays, and sick leave, an employee’s available hours is far less than what they are

paid for. A work order management system with actual hours recorded for completing various tasks will help an organization conclude what their employees’ “productivity rate” is. That is, what is the percentage of paid hours that are actually available for work once vacation, holiday, sick, and meeting times are removed.

UTILIZING THE APPROPRIATE STAFF

Maintenance divisions, like many other parks and recreation divisions, utilize full-time, part-time, and seasonal staff to conduct work activities each year. By conducting a time task analysis and examining the outputs from a work order management system, a department can identify if the right person is completing the right tasks. This will also help with future hiring when a department identifies that number of seasonals it needs to complete specific tasks.