

A photograph of a park with a playground, trees, and a gazebo. The playground features green slides and a wooden structure. A large tree is on the left, and a gazebo with a white canopy is in the center. The sky is overcast.

# Parks and Recreation Master Plan Park and Grounds Maintenance Assessment

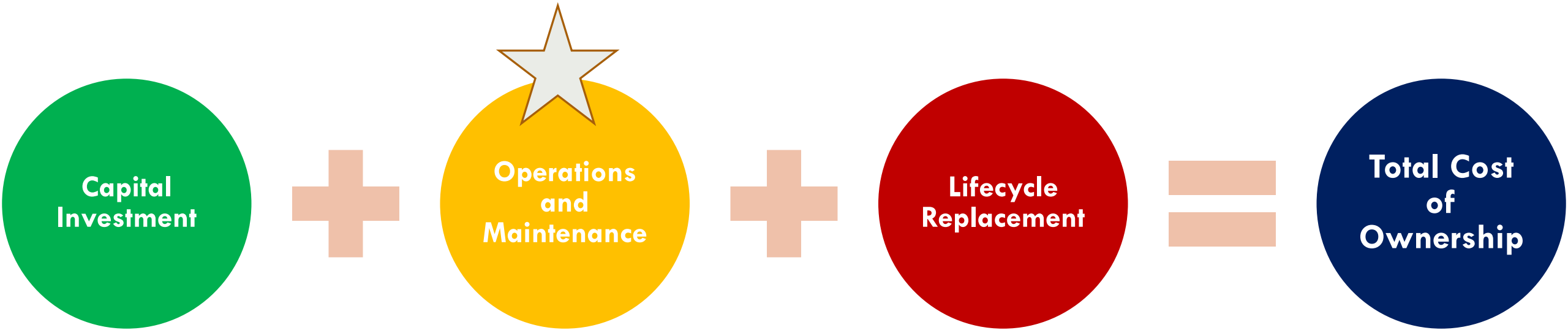
October 2021



# Agenda

- Denton by the Numbers
- Denton Parks by the Numbers
- Lines of Service
- Maintenance Standard Review
- Staffing Analysis
- Operational Funding Analysis
- Other Recommendations

# Total Cost of Ownership



# Denton By The Numbers

- 140,000 = Current Population of Denton
- 97 = Cost of Living index – 3 % less than United States as a whole
- 97.95 = Number of square miles of Denton
- 1,452 = Number of people per square mile in Denton

# Denton Parks By The Numbers

- 1,095 = Acres of Existing Developed Park Land
- 2,840 = Acres of Existing Natural Area Park Land
- 63 = Miles of Existing Trail
- \$627.6 MM = Value of Existing Parks and Trails System  
(does not include facilities and pools)
- \$9.14MM = Annual Parks/Trails Maintenance Budget
- \$227K = Annual Clear Creek Preserve Maintenance Budget
- 61.19 = Parks Maintenance Full-time Employee Equivalents



# Lines of Service

# Lines of Service – Grounds and Trades

Parks and Grounds Maintenance Lines of Service
Athletic Field Maintenance
Citizen Inquiries
Contract Management
Custodial Services/Cleaning
Department and other Special Event Support
Dog Park Maintenance
Education and Outreach
Equipment Maintenance (park maintenance equipment - mowers, etc)
Facility Grounds Maintenance
Flag/Flag Pole Maintenance and Installation
Furniture, Fixtures Maintenance and Repair
Highwater Call out
Homeless Encampment Cleanup
Illegal Dumping Cleanup
Integrated Pest Management
Lake Management
Maintenance Yard Management
Mountain Bike Trail
Natural Resource/Open Space
On Call - Off duty call out
Park Construction - New
Park Facility Repair and Maintenance (restrooms, shelters, etc)
Park Permit/Special Event Facilitation
Pathway and Trail Maintenance
Playground Maintenance and Installation
Preventative Facility Maintenance
Restroom Custodial Services
Right of Way and Median Maintenance - General (mow blow go)
Right of Way and Median Maintenance - Specialized - landscape beautification - trees, flowers, shrubs
Snow and Ice Removal
Trash Removal
Tree Maintenance (Basic)
Turf Management
Vandalism - Cleanup and Repair
Volunteer Management

Trades Lines of Service
Amenity installation and repairs
Aquatic Maintenance (see below)
Bridge maintenance
Concrete Maintenance and installation
Construction Projects
Contract Management
Dock maintenance
Door and key management
Electrical System Maintenance and Installation
Fence maintenance and installation
High Water call out
Irrigation System Maintenance and Installation
Landscape Maintenance
Lift station maintenance
Painting
Park lighting
Plumbing maintenance
Pond pump/ aeration maintenance and installation
Roofing
Sign maintenance and fabrication
Special Event Support

# Lines of Service - MRT

<b>Response Team Lines of Service</b>
City wide mowing response
City Wide pesticide application
IPM program
Management of mowing contracts
Tree maintenance and inventory (see below)
Wildflower Program

<b>Cemetery Lines of Service</b>
Cemetery Facilities Maintenance
Cemetery Forestry
Customer Service
Equipment Maintenance/Repair
Funeral Service
Grave Service Management
Irrigation System Maintenance/Management
Permanent Records Management
Restroom Custodial Services
Sidewalks/Trails/Road Maintenance
Special Event Facilitation
Turf/Grounds Maintenance
Volunteer Management

<b>Urban Forestry Maintenance Lines of Service</b>
Citizen Inquiries
Contract Management
Education and Outreach
Irrigation Systems
Storm Clean-Up
Traffic Safety Management
Trail Clearing
Tree Inspections and Protection
Tree Inventory Management
Tree Planting
Tree Pruning and Maintenance
Tree Removal
Volunteer Management



# Lines of Service – Athletic Fields

Athletic Maintenance Lines of Service
Drainage Systems
Hard Surface Maintenance (includes Parking lots, plazas and sidewalks)
Horticulture Maintenance
Infield Maintenance
Irrigation Systems
Lighting Security/Area
Misc
Mowing
Outdoor Court Maintenance
Playground Maintenance (Note: All Playgrounds are Level One)
Restrooms in Parks
Shade/Shelters
Sign Maintenance
Site Amenity/Structure Maintenance
Storm Cleanup ( <a href="#">Wind, Snow, Emergency Events</a> )
Tools & Equipment
Tree Maintenance
Turf Maintenance
Vandalism/ Graffiti Removal/Transient Clean Up
Waste Management

Athletic Maintenance (Cultural Practices) Lines of Service
Apply wetting agents to assist in uniform soil moisture
ASTM Impact Attenuation Testing
Complete site edging /String Trim
Core Aeration
Fertilization
Hand water as needed
Lining the fields
Mechanical control of weeds in turf
Overseed and spot-treatments to improve grass cover
Paint Lines in Turf
Recycle-dressing on sand based fields
Remove leaves and organic debris from turf
Remove or blow grass clippings if visible
Top dressing
Trim fence lines once per month during growing season

# Maintenance Standards Review

- **Does have routine parks and grounds maintenance plans with task, frequency and season of year for each of the four core areas of service in place but...**
- **A formalized maintenance management plan with task/frequency standards needs to be developed.**



# Staffing Levels

# Staffing Levels – Parks

- **Best practice ratio of staff per general park acres maintained at a best practice for parks maintained at a Level 2 standard is 1 FTE for every 12 - 15 acres**
- **1,095 developed acres of park land at Level 2**

# Staffing Levels – Parks (not including Clear Creek)

- **60.19 = FTE for Parks Maintenance**
- **\$87K = Average FTE Cost – (Full Compensation Package)**
- **14.2 = Contract Services FTE Count (\$1.9M/\$87K)**
- **74.39 = TOTAL FTE Count**
- **14.72 Acres per FTE (in-line with best practice)**



# Funding Analysis

# Funding – General Parks

- **Annual Parks Maintenance Operation Budget = \$9.14MM**
- **Total Developed Acres/Miles Maintained = 1,095 + 63 miles of trail**
- **NRPA Upper Quartile Cost Per Acre = \$7,500**
- **Best Practice Cost per Acre**
  - **Level 2 Maintenance Standard = \$7,500**
- **Best Practice Cost per Mile of Trail = \$15,000 per mile**

# Funding – General Parks

- **Current Cost per Acre = \$8,343 (includes 63 Miles of Trails)**
- **Recommendation =**
  - **\$8.212M for Existing Parks**
  - **\$945K for Existing Trails**
- **Recommended Budget – \$9.15M (what you have now)**



# Funding – Natural Areas

- **Annual Natural Area Maintenance Budget = \$227K**
- **Total Natural Area Acres Maintained = 2,840**
- **Best Practice Cost per Acre**
  - **Level 3 Maintenance Standard = \$200 (at a bare minimum)**

# Funding – Natural Areas

- **Current Cost per Acre = \$80**
- **Recommendation =**
  - **\$568K for Natural Areas**
- **Underfunded by: \$340K**



# Other Recommendations

# Other Key Recommendations

- **Performance Measure Development**
- **Lifecycle Replacement Schedule Development (i.e. current playground schedule)**
- **Conduct Task Time Analysis**
- **Implement a GIS Based Asset Management Work Order System**
- **Track Cost of Service**
- **Separate Trail Maintenance Budget from Parks Maintenance Budget**
- **Update Work Plans Based Task Frequency Standards as provided.**
- **Emerging Management/Maintenance Issues/Functions:**
  - **Playground System**
  - **Trail System**
  - **Natural Areas**

**QUESTIONS?**