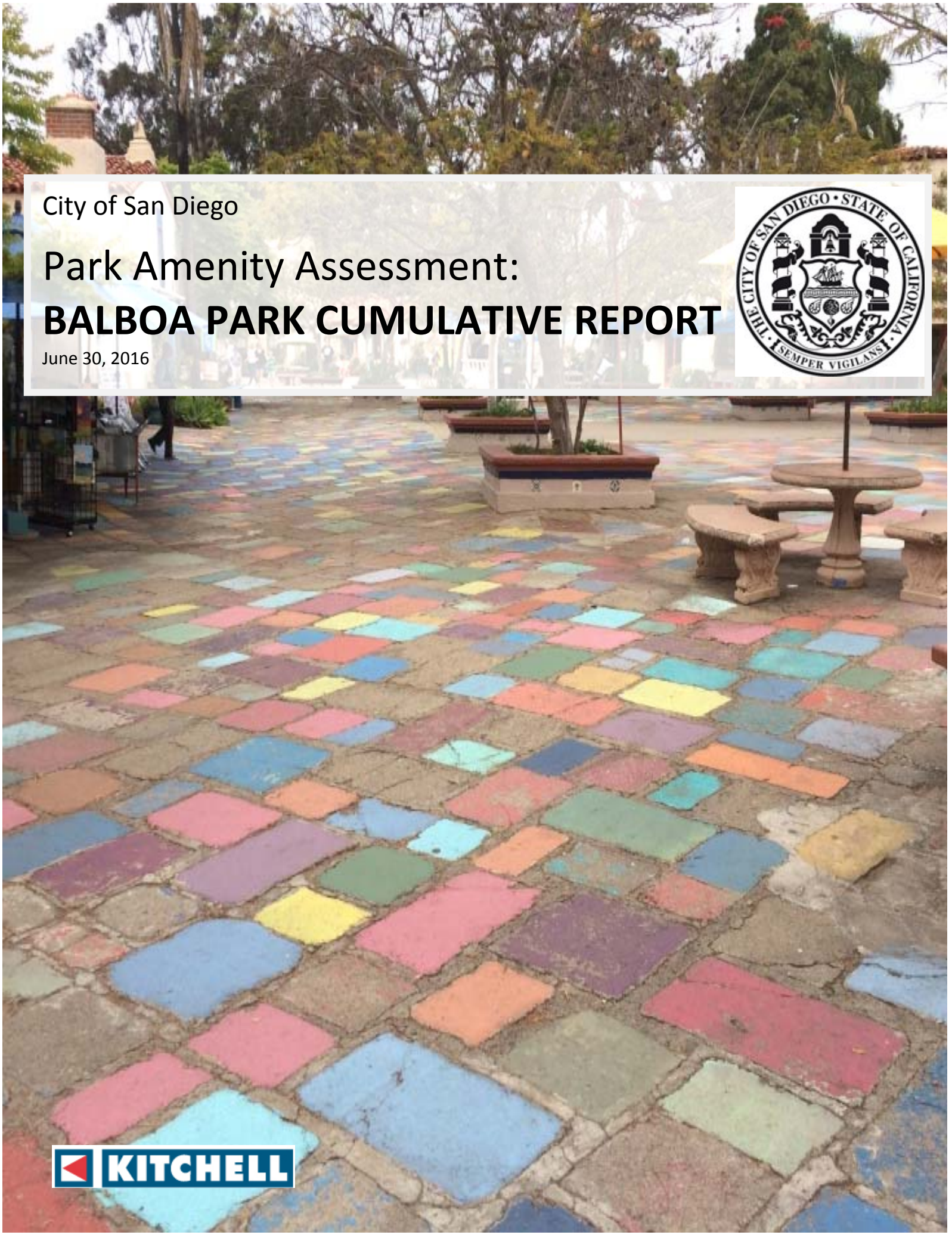

City of San Diego

Park Amenity Assessment:

BALBOA PARK CUMULATIVE REPORT

June 30, 2016

KITCHELL

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INTRODUCTION

In 2016, the City of San Diego Park and Recreation Department (City) selected Kitchell CEM to perform Park Amenity Assessments (PAA's) and abbreviated accessibility assessments for Balboa Park, located in central San Diego. This report is a comprehensive summary report on the developed systems of Balboa Park, assessed in Fiscal Year (FY) 2016.

The PAA's at the parks included the following assessments:

Central Mesa

- Detailed Visual Assessments. The assessment included major park facilities and systems including (as applicable) site parking lots, site roadways, pedestrian walkways, playgrounds, sports fields, play courts, landscaping, above-ground storm water items (e.g. concrete drainage ditches), and other miscellaneous items identified visually on-site. The assessment did not include buildings, comfort stations, structures, or land value estimations. The assessment was based upon the condition of the facilities "as-is"; no recommendations were made for additional site improvements or enhancements.
- Detailed Underground Utility Assessment. This assessment including the videoing of the underground storm drain system throughout the Central Mesa, as well as the sewer laterals in the Central Mesa. The assessment did not include the main sewer or water lines running throughout the Central Mesa.
- Abbreviated Accessibility Assessments. The abbreviated accessibility assessments were performed to determine the condition or existence of accessibility features, and whether major park areas were accessible (e.g. ramps provided, accessible parking stalls and pathways, etc.). The assessment did not include any buildings or major structures. This assessment was also based upon the condition of the facilities "as-is"; no recommendations were made for additional site improvements or enhancements, with the exception of items related to disabled accessibility.

The overall primary goal of this project was to identify the current park-related maintenance and capital backlogs, and also to forecast anticipated future capital renewals for site systems. Other work to achieve this goal included the research and review of available as-built drawings, general development plans and other available information from the City staff. The information contained within this report and the individual park amenity assessments will be used to assist City staff in planning for park maintenance and capital renewal, for both current backlogs (for FY-2016) and future park concerns (for the next 20 years).

The assessment of Balboa Park began in January 2016. The assessment comprised a total of approximately 18,126,467 gross square feet (416 acres). The assessment was divided into three distinct areas, the Central Mesa, the East Mesa and the West Mesa. The overall area (416 acres) represents the identified developed

areas of Balboa Park (including hardscape, landscape, and park amenities), and does not include the undeveloped canyon areas, the San Diego Zoo property, the Naval Hospital or the Balboa Golf Course.

East Mesa

During the course of the assessments and subsequent analysis, the team identified an estimated total of $11,740,206 in maintenance and capital backlog items. Of this amount, $343,513 was identified as maintenance backlog and $11,396,693 as capital backlog. The backlogs are based on each park system's overall condition, age, and stipulations for replacement. The total park replacement value (PRV) of the developed areas for Balboa Park is estimated at $257,287,408.

A condition index rating was determined by the City of San Diego and in turn was developed into a Park Condition Index (PCI) for established park areas only, excluding the systems described above. Overall, Balboa Park received a rating of 5, indicating that the facilities are in an overall "Good" condition. For each of the three park areas, the Central Mesa received a rating of "Good" (4), the East Mesa received a rating of "Good" (3), and the West Mesa received a rating of "Good" (8). The PCI formula and a summary table on condition findings by park area is shown below.

$$\text{PCI} = \frac{\text{Cost of Repairs for Assessed Systems}}{\text{Current Replacement Value of Assessed Systems}}$$

Park Area	Gross Square Footage (GSF)	Capital Backlog (FY-2016)	Maintenance Backlog (FY-2016)	Total Backlog (FY-2016)	Park Replacement Value (PRV) (FY-2016)	PCI
Central Mesa	8,069,701	$ 5,580,674	$ 174,282	$ 5,754,956	$ 143,487,360	4
East Mesa	6,391,081	$ 2,355,045	$ 96,802	$ 2,451,847	$ 70,854,717	3
West Mesa	3,665,685	$ 3,460,974	$ 72,429	$ 3,533,403	$ 42,945,331	8
Total	**18,126,467**	**$ 11,396,693**	**$ 343,513**	**$ 11,740,206**	**$ 257,287,408**	**5**

In addition to the current maintenance and capital backlogs shown in the table above, the assessment team reviewed future projected capital renewal forecasts for a 20-year period following FY-2016. The team identified an estimated total of $444,197,756 for park systems and elements that would either reach the end of their expected life cycles during this period, or would require significant maintenance (beyond the scope of normal City maintenance staff work).

Additional information regarding the assessments and details about the figures and findings are contained within this report, the report appendices, and the individual park amenity assessment reports for each of the three distinct park areas.

PARK AMENITY ASSESSMENTS

Park Amenity Assessments (PAA's) are conducted to determine deferred maintenance items for a given facility or grouping of facilities. In the PAA, the assessing team will identify any maintenance, repair, or capital replacement items that have not been reported or addressed through the City's routine work order processes, and to address any maintenance items that have been properly reported, but for some reason have not been resolved. The main objective of a PAA is to determine the overall condition of a facility or group of facilities.

West Mesa

Items identified through a PAA are generally categorized into the following:

(1) Backlog. Backlog consists of items related to regular maintenance, repair, or capital replacement work that was not performed when recommended or scheduled, possibly due to lack of funds or personnel to perform the maintenance. Backlog also includes items related to maintenance and repair that may have been previously unknown, but were also not addressed. These items were therefore deferred for a future period. These items should be addressed in the City's upcoming budget cycle, typically within a time period of 1 to 5 years depending on the priority and applicability to the mission of the facility. Deferred Maintenance items are typically included within the Facility Cost Index (FCI) for each facility.

(2) Projected Capital Renewal. These items consist of projected future needs for facility systems throughout the projected life cycle of the system. The projected needs include identification of costs associated with the systems as they reach the end of life (or in some cases, obsolescence), including regular scheduled maintenance, and replacement when required. Projected Capital Items are typically not included within the FCI for each facility.

The individual park amenity assessment reports provide descriptions and cost estimates for the maintenance, repair, and capital replacement backlogs for each park and major systems. The information provided in the reports will assist the City with the following:

East Mesa

- Identifying the condition of the overall parks, as well as major systems within the parks.
- Identifying which parks may have systems or elements that would be deemed unsafe, or can no longer support the mission of the park where located (or community, if the parks are part of a joint use program).
- Identifying requirements to bring the park systems up to current standards, especially with regards to accessibility.

- Determining the estimated costs to address the current maintenance and capital backlogs, as well as the most critical items to be addressed by park system.
- Deciding whether to continue repairing a park system, or provide replacement of the system.
- Preparing budget and funding approaches for the next 20 years of projected costs.
- Identifying opportunities for optimizing funding via economies of scale (e.g. grouping a series of maintenance / renewal items together to get better contract pricing)**.**

APPROACH

Central Mesa

To begin the park amenity assessments, Kitchell first met with the City to determine the full scope of items to be assessed at each park. The nature of the assessments was "visual observation", i.e. only visually observable items would be assessed, with no destructive testing or in-depth analysis. Additionally, an underground utility assessment was completed for the Central Mesa targeting the existing storm drain system and sewer laterals. The scope of the items to be assessed was grouped in categories organized by Uniformat II categories and classifications, according to the following:

- On-Site Roadways
- On-Site Parking Lots
- Pedestrian Walkways
- Playing Fields and Courts
- Site Development items, such as Furnishings, Fencing, Walls, Signage, and other miscellaneous items
- Landscaping
- Above-Ground Stormwater
- Underground utilities (Storm drain system and sewer laterals)

Other items specifically excluded from the assessment, either due to not being "visually observable", or requiring specialty assessment procedures are listed below:

- Buildings (included as part of the General Fund Assessment)
- Comfort Stations (included as part of the General Fund Assessment)
- Other Structures (included as part of the General Fund Assessment)
- Irrigation systems
- Land Value Estimation

In order to prepare for the park amenity assessments, Kitchell began with a review of available information provided by the City for each park. The available information consisted of Google Earth files showing the approximate site boundaries, aerial photos of the site, the General Development Plan (GDP) for the site, limited as-built drawings and storm drainage inlet maps, and playground photos.

Kitchell also prepared a site checklist in accordance with the scope items required by the City. The checklist identified potential system deficiencies to be checked by the field assessment teams, and was also organized according to Uniformat II categories and classifications. Kitchell provided this checklist to the

City for review; following the review, minor adjustments were made to the list and organization of the data collected. The checklist was approved for use for the Balboa Park assessments.

Prior to the start of the site assessments, Kitchell conducted a kick-off meeting with City staff. The purpose of the meeting was to discuss the following:

- Project goals, objectives, and scope.
- Assessment expectations, including systems included in the assessment, use of Kitchell-prepared checklists to identify deficiencies and maintenance items, and photography.

Central Mesa

The process used to assess the park was as follows:

- Review all available park data from the City for the areas to be assessed.
- Prepare site maps for each park area to calculate the total area related to each major park system, including roadways, parking lots, etc. for calculation of each park's Park Replacement Value (PRV). Maps were based on the latest Google Earth images for the parks.
- Visually assess and photograph the facilities to determine the overall physical condition of the existing systems, and prepare deficiency reports and cost estimates. Assessment also included taking site measurements where necessary to quantify observed deficiencies (e.g. square footage of broken concrete paving, etc.).

Based on site observations, the majority of deficiencies noted during the assessments related to deferred maintenance and repairs, some of which have sufficient deterioration which could lead to full replacement or renewal. The following guidelines were used to determine if a deficiency would be classified as a maintenance or capital backlog item:

- Review as to whether the identified deficiency relates to the structural integrity of a system. (For example, minor repairs to asphalt, such as slurry sealing, would fall under the maintenance category; further repairs such as full replacement or improvements required for pavement integrity would fall into the capital category.)
- Review of the quantity of the deficiency within a system, and associated cost. (For example, a small area pavement replacement may be considered a routine maintenance item; larger pavement replacement may go beyond budgeted maintenance funds, and require separate capital renewal funding.)

After the items were categorized into maintenance and capital backlog categories, the items were further prioritized according to the following categories:

- Priority #1: Critical. Items included in this category require immediate action to stop accelerated deterioration or correct a hazard (e.g. pavement trip hazards, etc.).

- Priority #2: Potentially Critical. Items included in this category were not deemed to require immediate action, but are due for action within a year to correct situations such as rapid deterioration (e.g. structural failure of pavements such as “alligator cracking” or potholes, etc.).
- Priority #3: Necessary. Items included in this category require appropriate attention to address predictable future deterioration or potential future higher costs if deferred further.
- Priority #4: Recommended. Items included in this category represent recommended improvements and maintenance for serviceability of existing site systems, and identified to prevent future damage.
- Priority #5: Other. Items included in this category represent improvements identified to bring accessibility items up to current codes. This priority does not include major renovations and/or redesign of identified accessible routes, or the construction of new accessible routes to park facilities (where no accessible route could be identified).

Kitchell’s estimating team reviewed each park checklist, with identified deficiencies, maintenance items, and site take-off quantities. The estimators assigned costs to each item using the latest R.S. Means Construction Cost Data, and included hard costs, City Cost Index (CCI) adjustments for San Diego, soft costs for design and implementation of repairs, and estimating contingencies. The cost estimates for FY 2016 for each park are included in the individual Park Amenity Assessment Reports.

The Facility Condition Index (FCI) Standard

As a part of the assessments, a Facility Condition Index (FCI) was required for each park analysis. The FCI is defined by the National Association of College and University Business Officers (NACUBO) as the ratio of the Cost of Repairs (Deferred Maintenance, or DM) divided by the Current Replacement Value (CRV) of a facility. This standard calculation quantitatively rates the physical condition of the facility or group of facilities, and is a generally accepted industry standard. The ratio is typically expressed as the following:

East Mesa

$$\text{FCI} = \frac{\text{Cost of Repairs (DM)}}{\text{Current Replacement Value (CRV)}}$$

Based upon the scope for the park assessments, a typical FCI could not be calculated for an entire park site, as it would include items not included in the assessment scope (such as buildings, major structures, and assessor's land values), which would normally be included in the full current replacement value. Instead, an abbreviated FCI value, Park Condition Index (PCI), was calculated for each park site. This PCI calculation utilizes the cost of both maintenance and capital backlog as well as the term Plant Replacement Value (PRV) in place of Current Replacement Value (CRV). This new PCI ratio is expressed as the following:

Central Mesa

$$PCI = \frac{\text{Cost of Maintenance Backlog + Cost of Capital Backlog}}{\text{Plant Replacement Value (PRV)}}$$

The PCI ranges for Good (PCI 20 or less), Fair (PCI 21-29) and Poor (PCI 30 or greater) are designated by the City of San Diego staff. (The PCI numbers are multiplied by 100 to provide whole values for City planning purposes). PCI values for each category are as follows:

- Good: PCI = 20 or less
- Fair: PCI = 21 to 29
- Poor: PCI = 30 or greater

Typically, costs for deficiencies identified during assessments are scheduled and budgeted for correction within a one to five year time frame, based on funding availability. For the purpose of this assessment, rather than spread out costs over a given period, all observed deficiency costs were grouped into FY 2016. This was done for two reasons. First, based upon site observations, the majority of deficiencies noted are related to deferred maintenance items, which in some cases had been deferred past the point of the life of the system. Second, all current costs should be included in order to increase the accuracy of the PCI, for a more accurate depiction of the physical condition of the facility's assessed systems.

Repairing or Renewing a Facility versus Replacing a Facility

In general, for buildings, the industry standard trends toward recommending replacement for a facility when the cost of identified repairs is between 50 to 70 percent of its replacement value (which translates to an FCI of 50% to 70%). This approach may be verified depending on the age of the building, the functionality, size, or location; a building falling within this range may not necessarily require replacement.

Unlike buildings, where major systems are heavily reliant upon each other and may require replacement of portions of other systems to ensure full functionality (e.g. replacement of roofing in addition to HVAC

equipment located on the roof), a majority of park systems can be addressed as individual, separate components. A higher PCI value (and thus higher cost of repairs) may not necessarily require the full replacement of the park, since the park PCI may be heavily driven by one particular system. For example, if the playgrounds were sufficiently obsolete and would require full replacement. The park PCI may be within the "Fair" to "Good" range without including the cost of replacing the playground, but may drop to the "Poor" range once the playground is added. Therefore, when evaluating whether the park should be repaired or replaced, the following should be considered:

- Review of the individual park systems to determine if the PCI is being driven by one or more categories that can be individually replaced, to maintain the mission of the park and the critical systems.
- Review of available funding and restrictions on the funding.
- Overall size, function, design, layout, and usage of both the park and its individual components.
- Availability of other park facilities within the local area which can support the public demand for park space while another is repaired or replaced.

East Mesa

Deficiency Cost Estimates

The cost estimates, the backlog of maintenance, and capital backlogs identified in the facility assessment reports were prepared by Kitchell's estimating department using data from real-time, field-verified construction estimates. The estimates include applicable direct cost and City Cost Index (CCI) adjustments for performing the work, and additional adjustments requested by the City to bring direct costs in line with the City's historical costs for work. Also included are soft costs the City typically applies to administer, design, manage, regulate, and execute the work performed on the facilities. The soft factor used for the FY-2016 assessment was set at 1.50 for the purpose of determining the maintenance and capital renewal deficiency cost estimates.

Park Replacement Value (PRV)

Central Mesa

As a part of the park analysis, Kitchell also prepared Park Replacement Values (PRV's) for each individual park's developed areas. The Park Replacement Value (PRV) is also known as the Current Replacement Value (CRV) in the PCI standard developed previously in this document. As noted previously, this value includes only the items included within the scope developed with the City, and excludes items such as structures, buildings, and land value estimations.

Based upon the observations at the park, Kitchell's estimating team developed per-square-foot costs for each of the major park systems, as included with Uniformat II categories and classifications. The per-square-foot costs developed were taken as an average across the three individual park areas assessed. For example, the development of a per-square-foot cost for site parking lots included costs for asphalt pavement, concrete pavement, curbs and gutters, and landscaping. Since the majority of parking lots within the assessment had asphalt pavement, the major portion of the per-square-foot cost includes installation of asphalt pavement sections to support vehicular traffic. Should future assessments determine that the majority of parking lots are concrete pavement, the cost will be adjusted accordingly.

In order to estimate the replacement value for the park developed areas, Kitchell prepared site maps of the park based upon the latest Google Earth images. The identified areas (parking lots, walkways, etc.) were compared against all available resources, including City as-built documentation, General Development Plans, and park boundary maps. Additionally, Kitchell reviewed each map to field verify the site areas identified, and make minor corrections based upon site observations, if applicable.

For Balboa Park, overall approximately 18,126,467 gross square feet (416 acres) were assessed. The Park Replacement Value (PRV) for the developed area is $257,287,408.

OTHER ASSESSMENTS

Abbreviated Accessibility Assessments

In addition to the condition assessment, Balboa Park received an abbreviated accessibility assessment. This assessment was performed by the condition assessment team and was designed to assist in identifying readily achievable accessibility needs within park. The estimated cost of readily achievable accessibility items is $138,510. Individual area accessibility deficiencies can be found in the park amenity assessment reports.

THE ASSESSMENT TEAM

Field assessment, data entry and report preparations began in January 2016 and were completed in June 2016. The assessment teams were assigned to complete the work and evaluate site systems (hardscape, landscape, etc.).

The assessment team was assigned as follows:

- Kitchell – Matt Johnson, Civil Engineer
- Kitchell – Shane Murphy, Project Engineer
- Kitchell – Anthony Lloyd, Project Engineer-Electrical
- Downstream Services, Inc. – Kim Carr, Project Manager
- Downstream Services, Inc. – Burton Smith, Technician

East Mesa

Additional team members from Kitchell included:

- Heather Brown, Project Manager
- Wendy Cohen, Regional Executive
- Tim Prechel, Estimator
- Jay Prechel, Estimator

The field assessment teams were also supported by the following City personnel:

- City of San Diego: Leigh Ann Sutton, P.E., Associate Engineer and Project Lead, who coordinated and guided the overall assessment effort from the City's side and provided leadership and insight to the City's project goals and objectives. Leigh Ann ensured the project team was provided resources needed by the project team.

- City of San Diego: Jim Winter, Project Officer, who coordinated available documentation and resources for the assessment teams (including as-builts, maps, and general park information), and provided extensive support for the teams during the assessment and subsequent analysis. Jim ensured the project team was provided resources needed included coordinating access to specific areas of the park and ensuring appropriate city personnel was available to assist in all inquiries that arose from the assessment.

- City of San Diego: Scott Lee, Assistant Engineer, who coordinated various aspects of the project and provided necessary support to the team during the assessment process.

CITY OF SAN DIEGO ASSESSMENT FINDINGS

BACKGROUND

The City oversees, manages and maintains numerous parks within the Greater San Diego area, with various sizes, facilities, and systems. As trustees and stewards of these properties, the City is responsible for the day-to-day operations and maintenance of the parks. Unfortunately, due to limited resources, the park facilities have accrued a backlog of maintenance and capital renewal items that should be addressed to ensure that the parks continue to fulfill their mission to the City, and that the City can continue to provide parks resources to meet the public's demands. With this assessment project, the City has begun the process of evaluating the current conditions of these valuable resources, and determining the items requiring corrective actions of maintenance, repairs, or replacement. The results and findings contained in this report, and in the individual facility reports, are intended to provide the City with the information about the current condition of the facilities and those components and systems where maintenance, repair, or replacement may have been deferred. In addition, a twenty (20) year forecast of system capital renewal schedule was prepared for each park area.

Central Mesa

The Facilities- Summary of Results and Findings

The area of Balboa Park assessed comprised a total of 18,126,467 gross square feet (416 acres). This area represents the identified developed areas of the park (including hardscape, landscape, and park amenities), and does not include buildings, structures, or open land areas beyond developed park areas. The team identified an estimated total of $11,740,206 in maintenance and capital backlog items. Of this amount, $343,513 was identified as maintenance backlog and $11,396,693 as capital backlog. The backlogs are based on each park system's overall condition, age, and specifications for replacement.

Maintenance & Capital Backlog by Park System

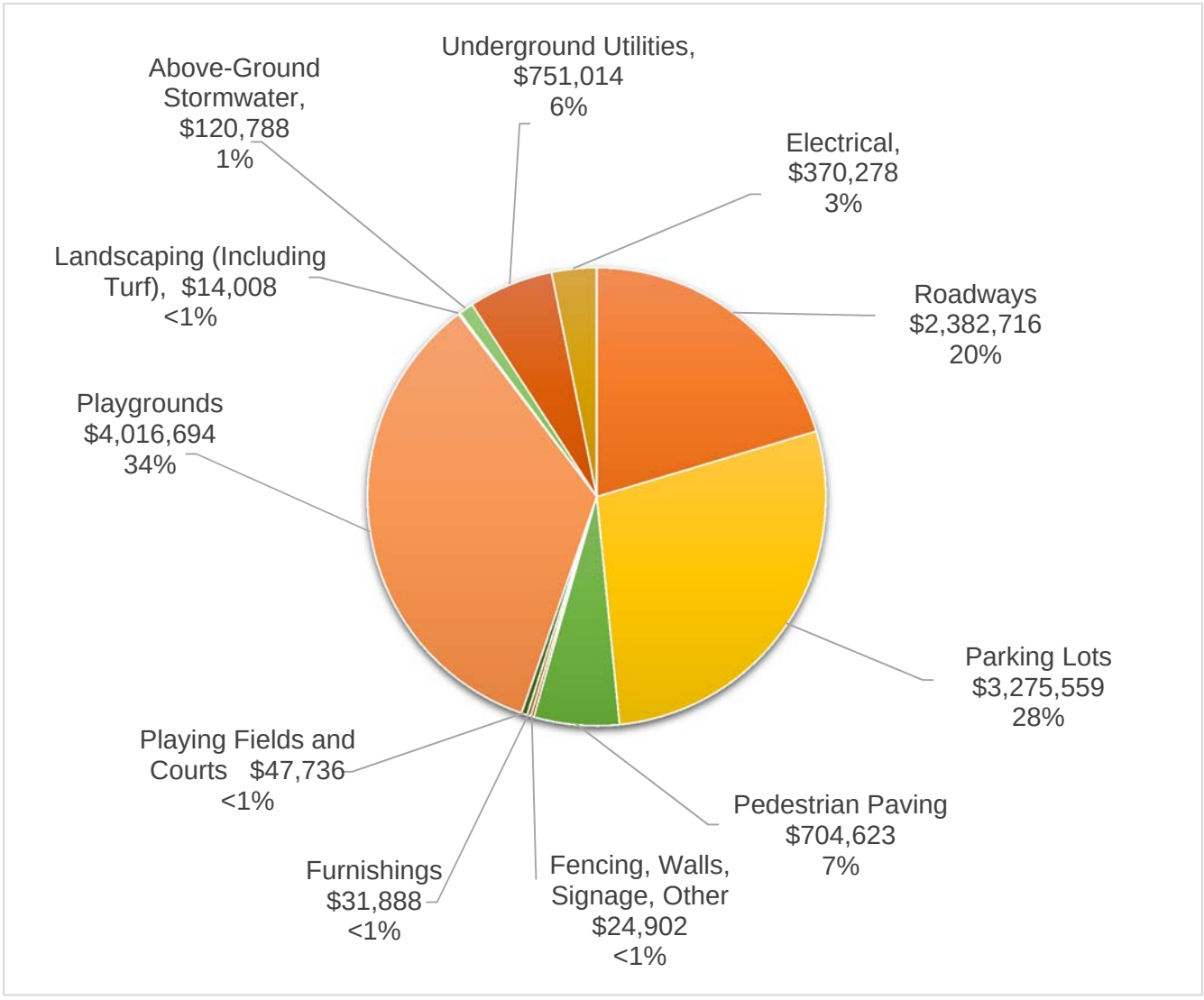
The following table and figure illustrate the maintenance and capital backlog totals for the assessed park area by **Park System**. The table and chart shows each major park system assessed. Of interest to note is that the highest backlog costs were for playgrounds, followed by parking lots. Overall, the majority of the playgrounds observed had exceeded their useful life, and/or required upgrades to meet current code requirements for accessibility.

Table 1. Total Backlog by Park Systems – Balboa Park

System	Total Maintenance & Capital Backlog
Roadways	$2,382,716
Parking Lots	$3,275,559
Pedestrian Paving	$704,623
Fencing, Walls, Signage, Other	$24,902
Furnishings	$31,888
Playing Fields And Courts	$47,736
Playgrounds	$4,016,694
Landscaping (Including Turf)	$14,008
Above-Ground Stormwater	$120,788
Underground Utilities	$751,014
Electrical	$370,278
Total	**$11,740,206**

Figure 1. Total Backlog by Park Systems – Balboa Park

Total Backlog by Park Systems – $ 11,740,206



Maintenance & Capital Backlog by Reliability Level

To effectively address and manage the total maintenance and capital backlogs, the estimated costs for maintenance and capital backlogs have been categorized into three system **Reliability Levels**. The three reliability levels that were analyzed for the assessments are described and defined below.

East Mesa

- **Level 1 Operations Impacts**
  Level 1 Operations Impacts represent systems that can lead to partial or full shut-downs of the facility if the systems are allowed to exceed the end of their useful life or are not properly maintained. This would include playgrounds, athletic fields, outdoor courts and pedestrian walkway areas.

- **Level 2 Deterioration**
  Level 2 Deterioration represents systems that will shorten the life of the asset and cause deterioration to other systems if allowed to exceed the end of their useful life or are not properly maintained. This would include parking lots, roadways, above-ground stormwater, underground utilities and the electrical system.

- **Level 3 Appearance**
  Level 3 Appearance represents systems that provide the appearance and quality of the facility. This would include systems such as landscaping, signage, fencing and park furnishings (picnic tables, benches, etc.).

The following tables and charts reveal the findings total maintenance and capital backlogs for Balboa Park. To achieve optimum service reliability for the park systems, it is important to first address the Level 1 Operations Impacts followed by Level 2 Deterioration to ensure reliability of the Park facilities.

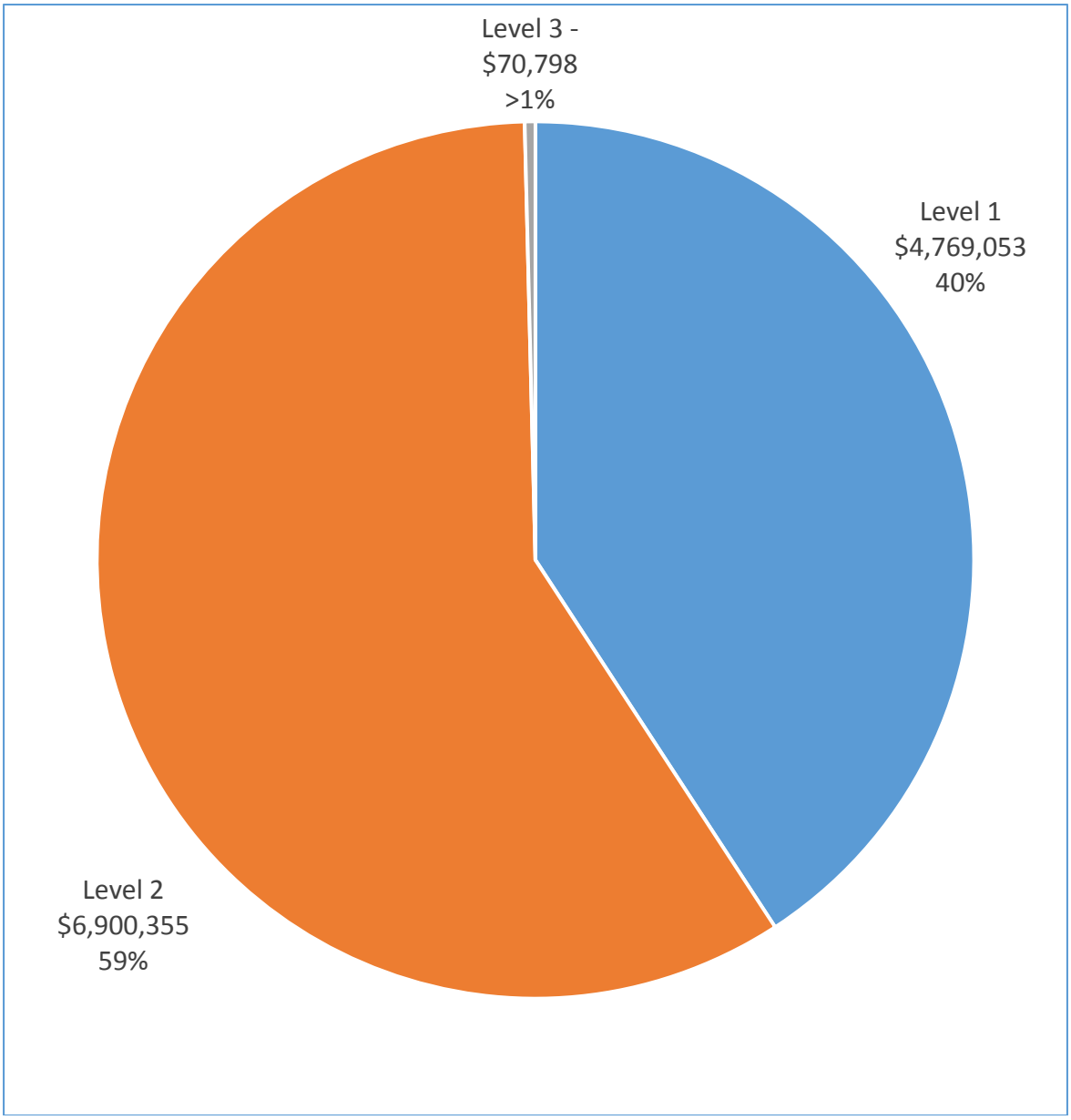
Table 2. Facility Maintenance & Capital Backlog by Reliability Level – Balboa Park

	Level 1 Operations Total	Level 2 Deterioration Total	Level 3 Appearance Total	Total Backlog
Central Mesa	$1,893,992	$3,839,097	$21,867	$5,754,956
East Mesa	$1,550,756	$ 885,364	$15,727	$2,451,847
West Mesa	$1,324,305	$2,175,894	$33,204	$3,533,403
Total	**$4,769,053**	**$6,900,355**	**$70,798**	**$11,740,206**

Figure 2. Facility Maintenance & Capital Backlog by Reliability Levels – Balboa Park

Total Maintenance & Capital Backlog by Reliability Levels:

$ 11,740,206



Additional Park Amenity Assessment Findings

Table 3. Facility Maintenance & Capital Backlog by Park Area – Balboa Park

Park Area	Total Capital Backlog	Total Maintenance Backlog	Total Backlog	Park Replacement Value	PCI
Central Mesa	$5,580,674	$174,282	$5,754,956	$143,487,360	4
East Mesa	$2,355,045	$96,802	$2,451,847	$70,854,717	3
West Mesa	$3,460,974	$72,429	$3,533,403	$42,945,331	8
Total	**$11,396,693**	**$343,513**	**$11,740,206**	**$257,287,408**	**5**

Of the FY-2016 maintenance and capital renewal costs, approximately 82% of the identified items fell into three categories: "Roadways" ($2,382,716, approximately 20% of the FY-2016 maintenance and capital backlog cost), "Parking Lots" ($3,275,559, approximately 28% of the FY-2016 maintenance and capital backlog cost) and "Site Development: Playgrounds" ($4,016,694, approximately 34% of the FY-2016 maintenance and capital backlog cost). The following table illustrates the FY-2016 costs for "Roadways", "Parking Lots" and "Site Development: Playgrounds" broken down by park area.

Table 4. Facility Maintenance & Capital Backlog by Highest Systems – Balboa Park

	Roadways	Parking Lots	Site Development: Playgrounds
Central Mesa	$908,410	$1,905,675	$1,404,128
East Mesa	$465,127	$344,643	$1,390,060
West Mesa	$1,009,179	$1,025,241	$1,222,506
Totals	**$2,382,716**	**$3,275,559**	**$4,016,694**

Playground equipment assessed generally was in fair condition. The City has established a useful life for playgrounds of 15 years. Despite the condition of the equipment, the City confirms that the playgrounds are safe. Based upon this useful life, the majority of the playgrounds are due for full replacement. Additionally, it is recommended the playgrounds be upgraded to meet current accessibility codes (including creating accessible paths to equipment, ramps down to play areas, etc.). The cost for FY-2016 playgrounds includes, as applicable, costs for replacing both playground equipment and surfacing, and also includes an additional 25% mark-up factor for accessibility upgrades.

The roadways and parking lots assessed were primarily asphalt concrete over aggregate base, with some small areas of concrete paving. Per site observations, the majority of the asphalt had visible surface deterioration, possibly due to a lack of preventative maintenance and regular repairs. In some areas, it appeared that the asphalt pavement had substantially deteriorated, showing evidence of structural failure (e.g. "alligator" cracking). This could be due in part to extended deferred maintenance, but also could be attributed to other factors such as subgrade deterioration, and/or that the pavement has been subjected

to loads higher than included for the original design. The cost for pavement repairs and replacements conservatively assume a structural section that may be larger than the existing, to account for potentially higher loads and to reduce future accelerated deterioration.

As a part of the Reliability Level categories, “Site Development: Playgrounds” have been assigned to Reliability Level 1: Operations Impacts, and “Roadways” and “Parking Lots” to Reliability Level 2: Deterioration. The City should begin developing an action plan to address conditions that could put the City at some liability or risk, and decide to either repair or replace the system elements that are beyond their useful life. As the playground areas are included in Reliability Level 1: Operations Impacts, and are not only crucial to the mission of the parks but may put the City at higher risk due to extended deterioration or potential failure, even though the City ensures the playgrounds are safe. As old play equipment is removed due to age, the play value of the park diminishes resulting in fewer park users thus reducing the park’s ability to achieve the City’s park mission. We recommend that the City focuses on the playground system first.

CAPITAL RENEWAL

In addition to identifying backlog of maintenance and capital backlogs for the systems and elements at Balboa Park, an additional goal of the project was to identify and forecast for a 20 year period (from 2017 to 2036) both the maintenance and capital backlog and future capital renewal for the individual park systems. This portion of the report focuses on both current FY-2016 maintenance and capital backlog, as well as projected future capital renewal which is based on the remaining useful life of park systems. Depending on the park system and expected useful life, a portion of on-site elements are expected to expire, or require significant maintenance, within the 20-year period selected. The 20-year plan includes maintenance and capital renewal items organized into the following categories, according to Uniformat II, and in accordance with the scope developed with the City:

- Roadways
- Parking Lots
- Pedestrian Paving
- Site Development: Fencing, Walls, Signage, Other
- Site Development: Furnishings
- Site Development: Playing Fields and Courts
- Site Development: Playgrounds
- Accessibility
- Landscaping (Including Turf)
- Above-Ground Stormwater
- Underground Utilities (Storm water System and Sewer Laterals)

East Mesa

The cost projections and determination of capital replacements for the systems were based on the following (in no particular order):

- Field determination by the assessment team as to the probable years of remaining life, following improvements recommended for FY 2016.
- Direct City requests for maintenance and/or capital renewal, independent of the projected years of remaining life (e.g. replacement of playgrounds at various sites).
- Known chronological age and projected remaining years of life for the system.

Capital renewal identified for the 20-year period should be considered as additional future needs to the FY-2016 maintenance and capital backlogs. These projections are based on the assessment team's observations as to the useful remaining life of the systems, as well as the age of the system (if known). Average useful life expectations and maintenance cycles were derived from a variety of sources, including the Building Owners and Managers Association (BOMA) International Standards, the California Department of Transportation (Caltrans) Maintenance Technical Advisory Guide (MTAG), and the 2011

Architectural Manual's Expected Useful Life Table prepared by the Washington State Department of Commerce, Office of Affordable Housing. Additionally, the assessment team enlisted the support of Kitchell's Facility Management (FM) Department, which used real-time data to verify expected useful life cycles for various park systems and elements.

West Mesa

Once maintenance cycles were established, yearly maintenance costs were derived using one of the following methods.

- For systems consisting of more than 90% of one particular material / construction method (e.g. asphalt paving for most parking lots), an actual hard repair cost was used (e.g. slurry sealing of asphalt pavement, etc.). These costs were prepared by Kitchell's estimators, drawing from RS Means Construction Cost Data, and included allowances for smaller sub-systems within the system (e.g. for parking lots, inclusion of minor costs for curbs, gutters, etc.).

- For systems consisting of multiple types of materials / construction costs (e.g. baseball field with multiple types of equipment and field surfacing), a yearly repair cost was estimated using a percentage of current replacement value costs. The percentage varied from system to system, and was adjusted based upon the yearly repairs anticipated for each system.

For systems with detailing beyond the scope of the visual site assessment (e.g. "Site Development: Fencing, Walls, Signage, Other" category, which included general site fencing, above-grade visible utilities, etc.), an estimated cost-per-square-foot was applied to the park's calculated developed area. The estimated cost was based upon observations made, and adjusted per sub-category (i.e., different costs-per-square-foot were used for site signage versus fencing and retaining walls).

The table below illustrates the average useful life expectations for the park systems used in the assessment. As each park system is made up of multiple elements, the age shown represents the highest occurring element within the system, based upon site observations of the park area assessed. For example, within parking lots, the overwhelming majority of the hardscape observed was asphalt paving, with only minor portions of concrete paving and curbs (if present). Therefore, the useful life expectation for parking lots was based on asphalt concrete rather than standard concrete.

Table 5. Park Amenity Assessment Park Systems: Average Useful Life

System Code	System	Sub System	Sub System Code	Category	Priority	Life
G20	Roadways	Paving and Surfacing, including minor site elements	Varies	Site	Level 2 Deterioration	25
G20	Parking Lots	Paving and Surfacing, including minor site elements	Varies	Site	Level 2 Deterioration	25
G20	Pedestrian Paving	Paving and Surfacing, including both walkways and stairs	Varies	Site	Level 1 Operations Impacts	50
G20	Site Development	Fences and Gates	G2041	Site	Level 3 Appearance	15
G20	Site Development	Signage	G2044	Site	Level 3 Appearance	10
G20	Site Development	Site Furnishings	G2045	Site	Level 3 Appearance	18
G20	Site Development	Playing Fields and Courts: Baseball, softball fields	G2047	Site	Level 1 Operations Impacts	20
G20	Site Development	Playing Fields and Courts: Basketball, tennis courts	G2047	Site	Level 1 Operations Impacts	20
G20	Site Development	Playing Fields and Courts: Volleyball courts	G2047	Site	Level 1 Operations Impacts	20
G20	Site Development	Playing Fields and Courts: Skateboard parks (concrete)	G2047	Site	Level 1 Operations Impacts	20
G20	Site Development	Playing Fields and Courts: Open play areas	G2047	Site	Level 1 Operations Impacts	10
G20	Site Development	Playing Fields and Courts: Other soft courts	G2047	Site	Level 1 Operations Impacts	10
G20	Site Development	Miscellaneous utility equipment (including observed at-grade utilities other than storm drainage items)	Varies	Site	Level 2 Deterioration	0**
G20	Site Development	Playgrounds: Equipment	G2049	Site	Level 1 Operations Impacts	15
G20	Site Development	Playgrounds: Surfacing	G2049	Site	Level 1 Operations Impacts	5
G20	Landscaping	Parking: Shrubs and Trees	G2055	Site	Level 3 Appearance	10
G20	Landscaping	Parking: Turf and Grass	G2055	Site	Level 3 Appearance	10
G30	Storm Sewer	At-grade system components	Varies	Site	Level 2 Deterioration	50
G30	Storm Sewer	Below-grade system components	Varies	Site	Level 2 Deterioration	50
D50	Electrical Systems	Electrical service & components	Varies	Site	Level 2 Deterioration	25

***Site Development Miscellaneous: Useful life years varied by system and sub-system.*

The goal of projecting a multi-year capital renewal plan is to provide the City a long-range forecast of potential future needs for each park system, based on the current condition and estimated useful life. This approach will allow for the City to estimate when park systems are due for significant maintenance as well as full replacement, and budget accordingly.

To identify and forecast the multi-year capital renewal projection for Balboa Park, assessed in FY-2016, the assessment team reviewed the following to meet the project goal:

- Identify what systems exist at a park.
- Identify which systems present are maintained by the Parks and Recreation Department, and which ones are maintained by separate associations / organizations.
- Estimating when the system was installed, or when the system last had significant maintenance.
- Forecasting how many years of useful life remain for each park system, and when the system would need either significant maintenance, or full replacement. Projections for maintenance and replacement were based upon the assumption that all deficiencies identified in FY-2016 were addressed and corrected.

West Mesa

Capital Renewal Schedule

The Capital Renewal Schedule provided is intended to give the City a snapshot of both the FY-2016 capital and maintenance backlogs, and the projected maintenance and capital renewal costs for the 20-year forecasting period (2017 through 2036). Should the FY-2016 maintenance and capital backlogs not be completed in 2016, the backlogs would then roll over into FY-2017, and increase in accordance with the inflation percentage used for the 20-year forecasting period. The Capital Renewal Schedule is provided in Appendix C.

The determination of the amount of project maintenance and capital renewal was based on BOMA, the California Department of Transportation (Caltrans) Maintenance Technical Advisory Guide (MTAG), the 2011 Architectural Manual's Expected Useful Life Table prepared by the Washington State Department of Commerce, Office of Affordable Housing, and Kitchell's FM department recommendations. The following table illustrates the maintenance schedules assumed for each park system and/or element. The cost associated with each repair item was based on the maintenance needs for the highest occurring element within the system (example: parking lot costs were based on asphalt pavement maintenance requirements), or on a percentage of the estimated replacement cost for the system or element.

Table 6. Park Amenity Assessment Park Systems: Maintenance Schedule (Estimated)

Sys Code	System	Sub System	Sub System Code	Category	Priority	Maintenance Schedule
G20	Roadways	Paving and Surfacing, including minor site elements	Varies	Site	Level 2 Deterioration	Provide repairs every 2 years for 20% of roadway areas and 50% replacement every 10 years.
G20	Parking Lots	Paving and Surfacing, including minor site elements	Varies	Site	Level 2 Deterioration	Provide repairs every 2 years for 20% of roadway areas and 50% replacement every 10 years.
G20	Pedestrian Paving	Paving and Surfacing, including both walkways and stairs	Varies	Site	Level 1 Operations Impacts	Provide repairs every 5 years for 5% of concrete areas.
G20	Site Development	Fences and Gates	G2041	Site	Level 3 Appearance	5% of replacement cost applied for repairs every 3 years.
G20	Site Development	Signage	G2044	Site	Level 3 Appearance	5% of replacement cost applied for repairs every 3 years.
G20	Site Development	Site Furnishings	G2045	Site	Level 3 Appearance	10% of replacement cost applied for repairs every 5 years.
G20	Site Development	Playing Fields and Courts: Baseball, softball fields	G2047	Site	Level 1 Operations Impacts	5% of replacement cost applied for repairs every year.
G20	Site Development	Playing Fields and Courts: Basketball, tennis courts	G2047	Site	Level 1 Operations Impacts	5% of replacement cost applied for repairs every year.
G20	Site Development	Playing Fields and Courts: Volleyball courts	G2047	Site	Level 1 Operations Impacts	5% of replacement cost applied for repairs every 2 years.
G20	Site Development	Playing Fields and Courts: Skateboard parks (concrete)	G2047	Site	Level 1 Operations Impacts	5% of replacement cost applied for repairs every 2 years.
G20	Site Development	Playing Fields and Courts: Open play areas	G2047	Site	Level 1 Operations Impacts	5% of replacement cost applied for repairs every year.
G20	Site Development	Playing Fields and Courts: Other soft courts	G2047	Site	Level 1 Operations Impacts	5% of replacement cost applied for repairs every 2 years.
G20	Site Development	Miscellaneous utility equipment (including observed at-grade utilities other than storm drainage items)	Varies	Site	Level 2 Deterioration	5% of replacement cost applied for repairs every 5 years.
G20	Site Development	Playgrounds: Equipment	G2049	Site	Level 1 Operations Impacts	5% of replacement cost applied for repairs every year.
G20	Site Development	Playgrounds: Surfacing	G2049	Site	Level 1 Operations Impacts	10% of replacement cost applied for repairs every year.
G20	Landscaping	Parking: Shrubs and Trees	G2055	Site	Level 3 Appearance	5% of replacement cost applied for repairs every 5 years.
G20	Landscaping	Parking: Turf and Grass	G2055	Site	Level 3 Appearance	8% of replacement cost applied for repairs every 5 years.
G30	Storm Sewer	At-grade system components	Varies	Site	Level 2 Deterioration	10% of replacement cost applied for repairs every 5 years.
D50	Electrical Systems	Electrical service & components	Varies	Site	Level 2 Deterioration	2% of replacement cost applied for repairs every 5 years.

CITY OF SAN DIEGO CONCLUSIONS & RECOMMENDATIONS

Conclusions

The park amenity assessment performed for Balboa Park in FY-2016 followed typical approaches and methods for park amenity assessments, with minor revisions made in the analyses to accommodate City requirements for long-term planning and data incorporation. Routine meetings were held on a regular basis to ensure that Kitchell was meeting scope requirements and City needs for assessments and analysis.

East Mesa

As noted in previous sections of this document, the assessment team reviewed and assessed Balboa Park, in accordance with the scope developed with the City. The assessment team covered a total of 18,126,467 gross square feet (416 acres) of developed park area, with a total estimated Park Replacement Value (PRV) of $257,287,408 for the developed areas. Maintenance and capital backlogs for Balboa Park totaled $11,740,206 for FY-2016. Using the PCI ratings developed for the parks, Balboa Park received a rating of 5, indicating that the facilities are in an overall "Good" condition.

Detailed below is the PCI formula developed for the parks assessments, and a summary of the park amenity assessment findings by park area in FY-2016.

$$PCI = \frac{\textit{Cost of Repairs for Assessed Systems}}{\textit{Current Replacement Value of Assessed Systems}}$$

Park Area	Gross Square Footage (GSF)	Capital Backlog (FY-2016)	Maintenance Backlog (FY-2016)	Total Backlog (FY-2016)	Park Replacement Value (PRV) (FY-2016)	PCI
Central Mesa	8,069,701	$ 5,580,674	$ 174,282	$ 5,754,956	$ 143,487,360	4
East Mesa	6,394,081	$ 2,355,045	$ 96,802	$ 2,451,847	$ 70,854,717	3
West Mesa	3,665,685	$ 3,460,974	$ 72,429	$ 3,533,403	$ 42,945,331	8
Total	**18,126,467**	**$ 11,396,693**	**$ 343,513**	**$ 11,740,206**	**$ 257,287,408**	**5**

While the findings in this report identify potential action items regarding maintenance and capital backlog, the results did not produce any highly abnormal conclusions. The majority of the maintenance and capital backlog items related to normal usage, daily wear and tear, accelerated deterioration from a lack of maintenance, and expected damage resulting from system interaction (e.g. tree roots causing damage to adjacent hardscapes). Additionally, in some instances, park systems were observed to have accelerated damage where systems were not being used for their original functions (e.g. pedestrian walkway damage where maintenance staff use the pathways for vehicular access).

Recommendations

The results in the park amenity assessments for Balboa Park reveal the need to develop action plans to address both existing maintenance and capital backlogs, and provide for long-term planning for future maintenance and capital renewal items. Significant funding should be designated for both FY-2016 backlogs and future improvements identified in the 20-year Multi-Year Renewal plan.

In order to fully address the maintenance and capital backlogs identified during the assessment, as well as provide for future funding, we recommend the following action plans be developed. The first two recommendations focus on the existing park backlogs, and their ability to fulfil their mission and to serve the public demands.

Recommendation #1: FY-2016 Action Plan by Reliability Level

The first priority of the City should be to address maintenance and capital backlog items identified for Balboa Park. The purpose of this plan would be to address backlog items identified in the park amenity assessments as "Critical" or "Potentially Critical", and to stop accelerated deterioration. The plan should first determine which of the park systems has the highest critical functions to the City based upon usage and accessibility. After this has been determined, the plan should provide a schedule for addressing backlog items by Reliability Level, beginning with Reliability Level 1 (Operations Impacts) and work through each level accordingly.

Recommendation #2: 20-Year Funding Plan by Reliability Level

Following the development of the FY-2016 action plan, the next step for maintenance of the parks should be to develop a plan to address future maintenance and capital renewal items for Balboa Park, based upon the existing site systems. As with the FY-2016 Action Plan, the plan should first determine which of the parks has the highest critical functions to the City based upon usage and accessibility. The plan should address not only schedules for the maintenance, but also perform a review of internal City staffing available to perform various maintenance work recommended, as well as develop an on-call list of vendors and companies that can be hired to perform additional work to support the City's efforts. This plan will be critical to ensure that the park can continue to meet the needs of the public, by providing long-range planning.

West Mesa

In addition to addressing the mission of the park, another critical component to ensure that the City continues to meet the public demand is additional long-term planning to meet diverse changing and growing needs of the increasing population. The recommendation presented below focuses on future planning for Balboa Park.

Recommendation #3: Park Utilization Plan

One component of future planning for Balboa Park is to ensure that the park continues to meet the needs of the public they serve. A Balboa Park System Master Plan would review existing park facilities, the condition of those facilities, facility usage and long-term maintenance and capital renewal costs to determine where park efficiencies can be increased.

In conclusion, the results, findings and recommendations presented by this comprehensive report and the individual park amenity assessments by park area provide source information to assist the City with future planning and budgeting.

APPENDIX

Below is a list of Appendices that support and are applicable to the report results and findings of the Park Amenity Assessment (PAA) project. The Appendix is intended to provide detailed information to assist in referencing the summary information and exhibits found in the text of this document.

Appendix A

List of Park Areas Assessed and Standard PCI

Appendix B

List of Park Areas that received the Abbreviated Accessibility Assessment

Appendix C

Capital Renewal Schedule – Balboa Park

Appendix D

Glossary of Terms

Appendix E

Map of Assessment Areas

Appendix F

Park Amenity Assessments

- Balboa Park – Central Mesa
- Balboa Park – East Mesa
- Balboa Park – West Mesa

APPENDIX A – LIST OF PARK AREAS ASSESSED AND STANDARD PARK CONDITION INDEX (PCI)

Appendix A - List of Park Areas Assessed and Standard PCI

Facility No.	Description	Address	District	Actual Assessed SF	Department	Asset Type	Year Built	Total Capital Backlog	Total Maintenance Backlog	Total Replacement Backlog	Plant Replacement Value	Park PCI
PCI = 5												
	Central Mesa	1549 El Prado	3	8,069,701	Parks and Recreation	Regional	1915	$ 5,580,674	$ 174,282	$ 5,754,956	$ 143,487,360	4
	East Mesa	1549 El Prado	3	6,391,081	Parks and Recreation	Regional	1915	$ 2,355,045	$ 96,802	$ 2,451,847	$ 70,854,717	3
	West Mesa	1549 El Prado	3	3,665,685	Parks and Recreation	Regional	1915	$ 3,460,974	$ 72,429	$ 3,533,403	$ 42,945,331	8
	TOTAL			**18,126,467**				**$ 11,396,693**	**$ 343,513**	**$ 11,740,206**	**$ 257,287,408**	**5**

APPENDIX B – LIST OF PARK AREAS THAT RECEIVED THE ABBREVIATED ACCESSIBILITY ASSESSMENT

Appendix B - List of Park Areas that Received the Abbreviated Accessibility Assessment

Facility No.	Description	Address	District	Actual Assessed SF	Department	Asset Type	Year Built	Year Assessed	Accessibility Survey	Total Accessibility Needs	Level 1 Operations Impacts	Total Replacement Backlog	Plant Replacement Value	Park PCI
PCI = 5														
	Central Mesa	1549 El Prado	3	8,069,701	Parks and Recreation	Regional	1915	2016	Yes	$101,259	$1,833,489	$5,754,956	$143,487,360	4
	East Mesa	1549 El Prado	3	6,391,081	Parks and Recreation	Regional	1915	2016	Yes	$28,208	$1,534,970	$2,451,847	$70,854,717	3
	West Mesa	1549 El Prado	3	3,665,685	Parks and Recreation	Regional	1915	2016	Yes	$9,043	$1,324,305	$3,533,403	$42,945,331	8
	TOTAL			**18,126,467**						**$138,510**	**$4,692,764**	**$11,740,206**	**$257,287,408**	**5**

APPENDIX C – CAPITAL RENEWAL SCHEDULE – BALBOA PARK

Appendix C - Capital Renewal Schedule - Balboa Park

System	2016 ($)	2017 ($)	2018 ($)	2019 ($)	2020 ($)	2021 ($)	2022 ($)	2023 ($)	2024 ($)	2025 ($)	2026 ($)	2027 ($)	2028 ($)	2029 ($)	2030 ($)	2031 ($)	2032 ($)	2033 ($)	2034 ($)	2035 ($)	2036 ($)
SITE IMPROVEMENTS	$ 10,498,126	$ 935,879	$ 5,603,779	$ 2,223,832	$ 5,600,609	$ 7,004,475	$ 9,471,013	$ 1,493,869	$ 8,620,782	$ 2,655,371	$ 93,349,223	$ 1,257,745	$ 12,053,744	$ 1,334,340	$ 10,293,666	$ 13,791,971	$ 10,920,551	$ 2,007,638	$ 16,661,022	$ 1,593,272	$ 236,427,679
Roadways	$ 2,377,338	$ -	$ 1,940,661	$ -	$ 2,058,847	$ -	$ 2,184,231	$ -	$ 2,317,251	$ -	$ 30,256,872	$ -	$ 2,608,085	$ -	$ 2,766,919	$ -	$ 2,935,424	$ -	$ 3,114,191	$ -	$ 40,662,706
Parking Lots	$ 3,218,716	$ -	$ 2,696,596	$ -	$ 2,860,818	$ -	$ 3,035,042	$ -	$ 3,219,876	$ -	$ 52,553,324	$ -	$ 3,623,998	$ -	$ 3,844,699	$ 937,790	$ 4,078,843	$ -	$ 4,327,244	$ -	$ 70,627,271
Pedestrian Paving	$ 628,334	$ -	$ -	$ -	$ -	$ 1,477,128	$ -	$ -	$ -	$ -	$ 1,712,397	$ -	$ -	$ -	$ -	$ 1,985,136	$ -	$ -	$ -	$ -	$ 2,301,317
Site Development: Fencing, Walls, Signage, Other	$ 24,902	$ -	$ -	$ 1,230,957	$ -	$ 74,946	$ 1,345,098	$ -	$ -	$ 1,469,827	$ 455,461	$ -	$ 1,606,117	$ -	$ -	$ 1,855,770	$ -	$ -	$ 1,917,790	$ -	$ 41,525,020
Site Development: Furnishings	$ 31,888	$ -	$ -	$ -	$ -	$ 215,018	$ -	$ -	$ -	$ -	$ 249,265	$ -	$ -	$ -	$ -	$ 288,967	$ -	$ -	$ 3,157,619	$ -	$ 334,992
Site Development: Playing Fields and Courts	$ 47,736	$ 621,358	$ 2,258,557	$ 659,199	$ 2,396,103	$ 699,344	$ 2,542,026	$ 741,934	$ 2,696,834	$ 787,118	$ 2,861,073	$ 835,054	$ 3,035,311	$ 885,908	$ 3,220,163	$ 939,860	$ 3,416,269	$ 997,098	$ 3,624,322	$ 1,057,821	$ 36,713,852
Site Development: Playgrounds	$ 4,016,694	$ 314,521	$ 648,626	$ 333,676	$ 343,688	$ 2,472,207	$ 364,616	$ 751,935	$ 386,821	$ 398,426	$ 2,865,966	$ 422,691	$ 1,180,233	$ 448,432	$ 461,885	$ 5,008,145	$ 490,015	$ 1,010,540	$ 519,856	$ 535,451	$ 3,851,617
Accessibility	$ 138,510	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Landscaping	$ 14,008	$ -	$ -	$ -	$ -	$ 2,065,832	$ -	$ -	$ -	$ -	$ 2,394,865	$ -	$ -	$ -	$ -	$ 2,776,303	$ -	$ -	$ -	$ -	$ 40,410,904
CIVIL UTILITIES	$ 871,802	$ -	$ -	$ -	$ -	$ 130,253	$ -	$ -	$ -	$ -	$ 150,999	$ -	$ -	$ -	$ -	$ 175,049	$ -	$ -	$ -	$ -	$ 202,929
Above-Ground Stormwater	$ 120,788	$ -	$ -	$ -	$ -	$ 130,253	$ -	$ -	$ -	$ -	$ 150,999	$ -	$ -	$ -	$ -	$ 175,049	$ -	$ -	$ -	$ -	$ 202,929
Underground Utilities	$ 751,014	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ELECTRICAL	$ 370,278	$ -	$ -	$ -	$ -	$ 40,832	$ -	$ -	$ -	$ -	$ 47,335	$ -	$ -	$ -	$ -	$ 86,284	$ -	$ -	$ -	$ -	$ 63,615
TOTALS	**$ 11,740,206**	**$ 935,879**	**$ 5,603,779**	**$ 2,223,832**	**$ 5,600,609**	**$ 7,175,560**	**$ 9,471,013**	**$ 1,493,869**	**$ 8,620,782**	**$ 2,655,371**	**$ 93,547,557**	**$ 1,257,745**	**$ 12,053,744**	**$ 1,334,340**	**$ 10,293,666**	**$ 14,053,304**	**$ 10,920,551**	**$ 2,007,638**	**$ 16,661,022**	**$ 1,593,272**	**$ 236,694,223**

APPENDIX D – GLOSSARY OF TERMS

APPENDIX D – GLOSSARY OF TERMS

Abbreviated Accessibility: This term is used when referencing needs associated with repair, replacement, or modification of a site system to achieve selected accessibility barrier removal.

ADA: Americans with Disability Act

BOMA: Building Owners and Managers Association

Backlog: Term used to refer to deficiencies for facility components, equipment or whole system that needs to be resolved.

Budgeting: A process and method using and estimate of incoming and expenditure is adjusted to account for operational realities in order to provide for the cost of maintaining facilities. Traditional budgeting issues may include anticipated needs, organizational growth, the acquisition of new assets, operations and maintenance, deferred maintenance and insurance.

Building: An enclosed and roofed structure that can be traversed without exiting to the exterior.

Capital Renewal: Projected or future replacements (excluding suitability and energy audit work) that include the replacement of park systems or elements that have or will reach the end of their life cycle in the future.

Capital / Capital Planning: Process of planning expenditures on assets whose cash flows are expected to extend beyond one year. The planning takes into consideration the funding available, the firm's priorities and the anticipated return on investment. Capital planning considers a broad range of financial considerations (such as the cost of capital, organizational risk, and return on investment…), over an extended timeline so as to more effectively predict and manage the fiscal requirements of a real estate portfolio.

Calculated Next Renewal: The year a system or element would be expected to expire, based solely on the date it was installed and the expected service life of the system.

Condition: Condition referred to the state of physical fitness or readiness of a facility, system or systemic element for its intended use.

Cost Model: Parametric equations used to quantify the condition of building systems and estimate the cost necessary to sustain a facility over a given set of reporting periods. These estimated costs can be presented over a timeline to represent a capital renewal schedule.

Current Replacement Value (CRV): CRV is a standard industry cost estimate of materials, supplies and labor requires to replace facility at existing size and functional capability. Please note that the terms Park Replacement Value and Current Replacement Value have the same meaning in the context of determining Facility Condition Index.

Deferred Maintenance or Maintenance Backlog: Is condition work (excluding suitability and energy audit needs) deferred on a planned or unplanned basis to a future budget cycle or postponed until finds are available.

Deficiency: A deficiency described a condition in which there exists the need to repair a park system or component that is damaged, missing, inadequate or insufficient for on intended purpose.

Element: Major components that compromise park systems.

Facility: A facility refers to site(s), building(s), or building addition(s) or combinations thereof that provide a particular service or support of an educational purpose.

Facility Condition Index (FCI): FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's backlog requirements to the Park Replacement Value of the facilities – the higher the FCI, the poorer the condition of the facility. After an FCI is established for all facilities within a portfolio, a facility's condition can be ranked relative to

other facilities, The FCI may also represent the condition of a portfolio based on the cumulative FCI of the portfolio's facilities.

Gross Square Feet (GSF): The size of a park within the defined property boundary in square feet.

Hard or Direct Costs: Direct costs incurred in relation to as specific construction project. Hard costs may include labor, materials, equipment, etc.

Inflation: The trend of increasing prices from one year to the next, representing the rate at which the real value of an investment is eroded and the loss in spending power over time.

Interest: The charge for the privilege of borrowing money, typically expressed as an annual percentage rate and commonly calculated using simple or compound interest calculations.

Life Cycle: The period of time that a system or element can be expected to adequately serve its intended function.

Maintenance: Work necessary to realize the originally anticipated life of a fixed asset, including buildings, fixed equipment and infrastructure. Maintenance is preventative, whereas repairs are curative.

NACUBO: Refers to the National Association of College and University Business Officers (NACUBO). NACUBO published their version and method for calculating the Facility Condition Index (FCI) in 1991 which is widely recognized and a means of measuring facility condition.

Next Renewal: The assessor adjusted expected useful life of a system or element as a result of on-site inspection.

Nominal Value: A value expressed in monetary terms for a specific year or years, without adjusting for inflation – also known as face value or par value.

Operations: Activities related to normal performance of the functions for which a building Is used (e.g., utilities, janitorial services waste treatment).

O&M: Operations and Maintenance

Park Amenity Assessment (PAA): The process of performing a physical evaluation of the condition of a facility and its systems.

Park Condition Index (PCI): Revised Facility Condition Index (FCI); the PCI includes developed areas of parks included with the assessments. Costs for the PCI include site roadways, parking lots, playing fields and courts, playgrounds, above-ground storm drainage structures, landscaping, and other miscellaneous items identified within the developed park areas.

Park Replacement Value (PRV): Cost to design and construct a notional facility to current standards to replace an existing facility at the same location.

Present Value (PV): The current worth of a future sum of money or stream of cash flows given a specified rate of return. Future cash flows are discounted at a client specified discount rate.

Reliability Level: Reliability levels are used to determine and categorize the importance and priority of park systems.

Repairs: Work to restore damages or worn-out facilities to normal operating condition. Repairs are curative, whereas maintenance is preventative.

Replacements: An exchange of one fixed asset for another that has the same capacity to perform the same function. In contrast to repair, replacement generally involves a complete identifiable item of reinvestment (e.g., a major building component or subsystem).

Return on Investment (ROI): ROI is a financial indicator used to evaluate the performance of an investment as a means to compare benefit.

Rough Order of Magnitude (ROM): ROM cost estimated are the most basic of cost estimate classifications.

RS Means: An independent third party provider of building industry construction cost data.

Site: A facility's grounds and its utilities, roadways, landscaping, fencing and other typical land improvements needed to support the facility.

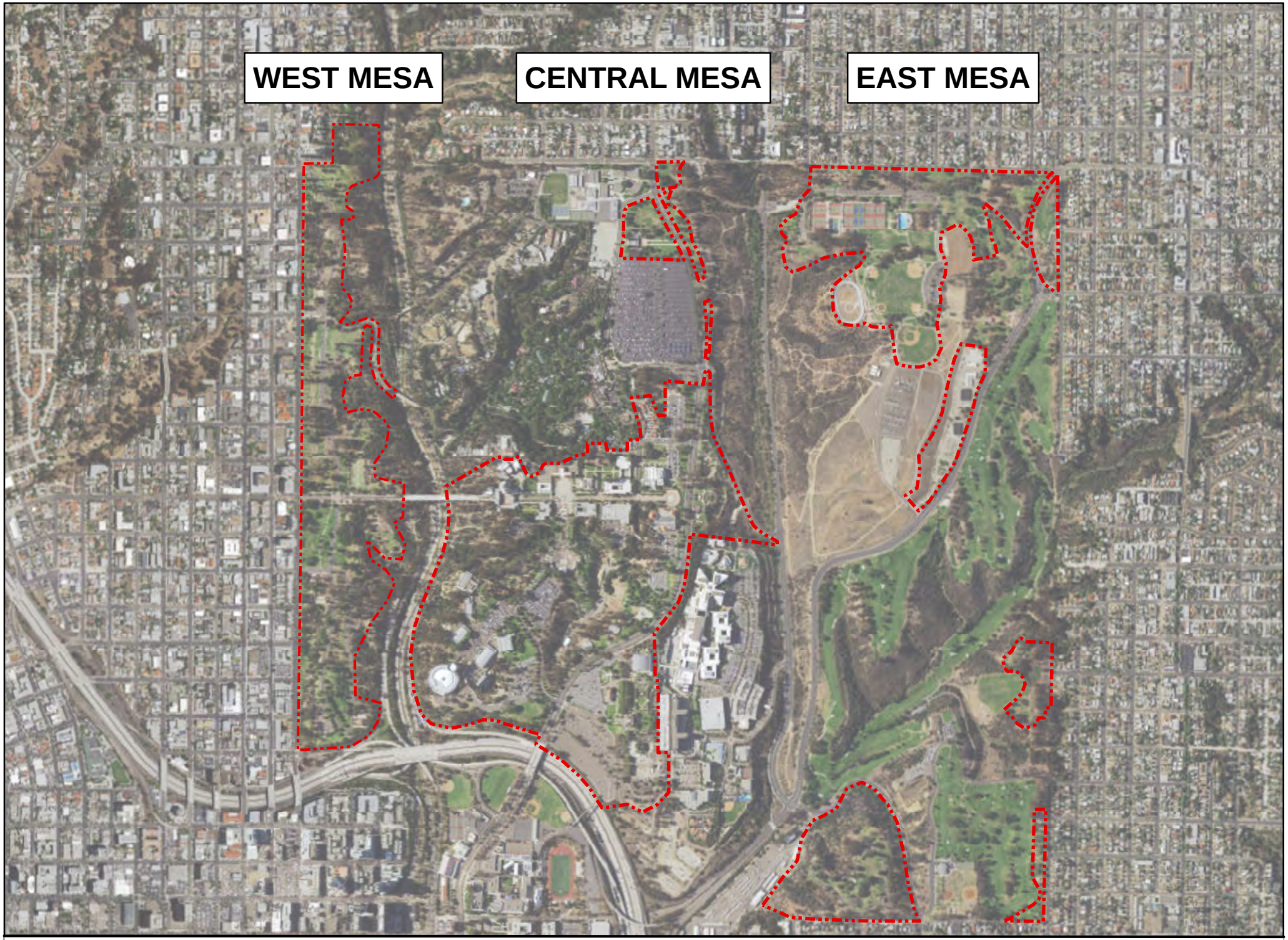
Soft Costs: Indirect costs incurred in addition to the direct construction cost. Soft costs may include professional services, financing, taxes, etc.

System: System refers to building and related site work elements as described by ASTM Uniformat II, Classification for Building Elements (E1557-97), and a format for classifying major facility elements common to most buildings. Elements usually perform a given function, regardless of the design specification, construction method or materials used. See also, "Uniformat II".

Uniformat II: Uniformat II (commonly referred to simply as Uniformat), is ATSM Uniformat II, Classification for Building Elements (E1557-97) – A methodology for classifying major facility components common to most buildings.

Year Built: The year that a park was originally built, based on substantial completion.

APPENDIX E – MAP OF ASSESSMENT AREAS



0 500 1,000 2,000 Feet

Assessment Areas

BALBOA PARK