WASHINGTON STATE MAJOR LEAGUE BASEBALL
STADIUM PUBLIC FACILITIES DISTRICT

SAFECO FIELD LONG-TERM CAPITAL NEEDS ASSESSMENT

B&D VENUES | POPULOUS in association with Thornton Tomasetti me engineers THE BIGELOW COMPANIES DIVERSIFIED SYSTEMS

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SECTIONS

EXHIBITS

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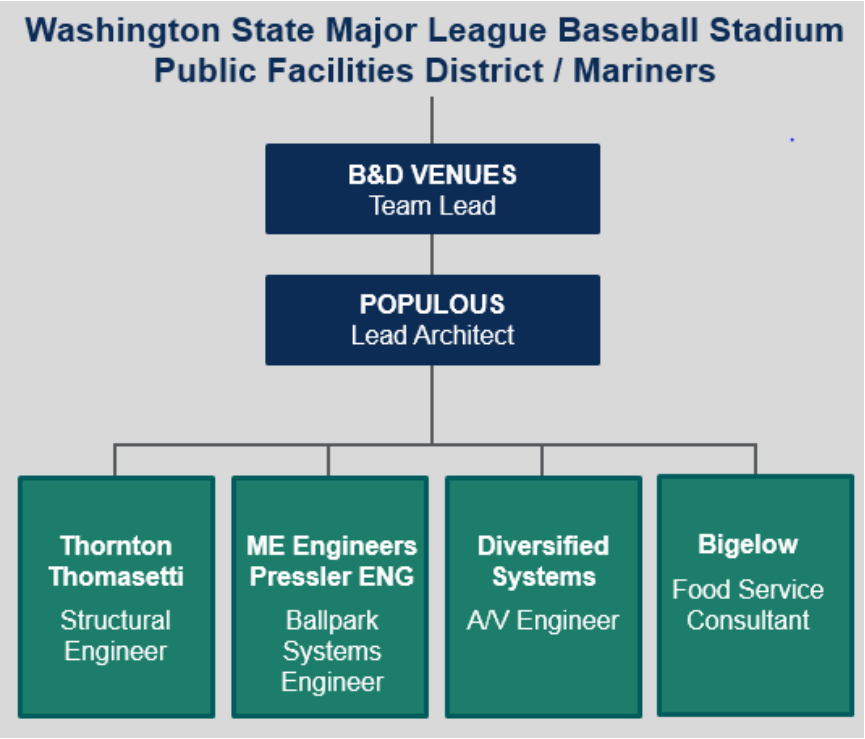
1.0

Preface

1.0 – PREFACE

In 2015, B&D VENUES, a Brailsford & Dunlavey, Inc. ("B&D") Practice Group, was engaged by the Washington State Major League Baseball Stadium Public Facilities District ("PFD") and Seattle Mariners L.L.L.P. ("Mariners") to investigate the extent, cost, and timing of potential capital improvements that could reasonably be anticipated for Safeco Field ("facility" or "ballpark") through the Fiscal Year 2036 (the "Planning Assignment"). The primary objective of this assignment was to identify the cost of necessary capital improvements required to maintain Safeco Field in a first-class manner through this timeframe.

B&D and Populous directed an interdisciplinary team of experts that included Thornton Tomasetti, Inc.; M-E Engineers, Inc.; Diversified Systems, Inc.; and The Bigelow Companies, Inc. (collectively the "Consulting Team"). Overviews of each Consulting Team member are provided below while an organizational chart depicting team structure is provided to the right.



- **B&D VENUES** is a practice group dedicated to serving major public agencies, educational institutions, professional sports organizations, and non-profit clients. This specialized group's expertise encompasses ballparks, stadiums, arenas, convention centers, conference centers, performing arts centers, and other sports and assembly facilities.

- **POPULOUS** is a global design practice specializing in creating environments that draw people and communities together for unforgettable experiences.

- **Thornton Tomasetti, Inc.** provides engineering design, investigation, and analysis services to clients worldwide on projects of every size and level of complexity.

- **Diversified Systems** was formed in 1993 as a full service systems and media technology integration company addressing the technical needs of the Broadcast, Audio/Visual, IT and RF

market segments. Diversified Systems offers turnkey solutions, including engineering design, documentation, project management, equipment procurement, custom fabrication, system integration, commissioning, training, and after-installation support.

- **ME-Engineers, Inc.** is a global mechanical and electrical engineering design firm, founded in 1981, whose portfolio includes some of the most recognized buildings in the world. ME's services are primarily delivered through architects in the development of plans for new facilities, and by working directly for facility owners in the form of enhancements, renovations, and energy retrofits.

- **THE BIGELOW COMPANIES, INC.** is a consulting firm specializing in food and merchandise services at public assembly facilities, since 1988. The corporation has two major divisions; foodservice design and foodservice management consulting. While each division operates independently, both services complement one another.

The Consulting Team completed a scope of work that included an on-site facility assessment of Safeco Field; development of a baseline improvements matrix; creation of an online survey; identification of potential necessary and upgrade improvements with anticipated capital improvement costs; and an economic benefits analysis that quantifies the economic and fiscal value of annual operations.

The findings of this report constitute the professional opinions of the Consulting Team based on the assumptions and conditions detailed throughout. The Consulting Team has developed recommendations using both primary and secondary sources that are deemed reliable, but were not always fully quantifiable or are subject to additional verification. The facility assessment included inspections of primary building systems, but did not include detailed testing or inspections. The assessment was intended to determine the overall condition of the facility and provide a basis from which necessary improvement costs could reasonably be anticipated through 2036. Due to variations in national and global economic conditions, the PFD's and Mariner's actual expenditures and capital investment required may vary from projections, and those variations may be material.

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2.0

Introduction

2.0 – INTRODUCTION

On July 15, 1999, Safeco Field opened for play, with the Seattle Mariners hosting the San Diego Padres. Christened by many as "The House that Griffey Built," Safeco Field has been recognized by players and fans alike as one of the best major league ballparks in the country. Since its opening, the ballpark has been operated and maintained in a first class manner by the Seattle Mariners under a 20-year lease with the Washington State Major League Baseball Stadium Public Facilities District ("PFD"), the public entity that owns Safeco Field.

The 47,000-seat facility is located approximately one mile to the south of downtown Seattle and is bordered by the streets of 1st Avenue South, Edgar Martinez Drive South, South Royal Brougham Way, and 3rd Avenue South. The site consists of approximately 20 acres and is located immediately south of the Pioneer Square neighborhood.

Safeco Field is owned by the PFD, a municipal corporation created by the Washington State Legislature and King County Council. Safeco Field is operated by the Mariners with oversight from the PFD. The cost to build Safeco Field was $517 million. The Mariners contributed $145 million, including $100 million in cost overruns. The facility was financed through King County general obligation bonds issued in 1997 through the funding mechanisms listed below:

- Half percent (.5%) sales tax on food and beverage in King County;
- Five percent (5%) admissions tax on events at the ballpark;
- Two percent (2%) sales tax on rental cars in King County;
- A 0.017 percent (.017%) credit of existing state sales tax generated in King County; and
- Proceeds from sales of baseball-themed lottery games and vehicle license plates.

As of 2015, all tax streams imposed to fund the construction of the ballpark have been retired, except for the 5% admissions tax, which continues to be utilized to fund ballpark repair and capital improvements. In addition, a ten percent (10%) parking tax was imposed by the PFD beginning in October 2011 and is used for ballpark repair and capital improvements.

The existing 20-year Lease between the PFD and Mariners is effective through December 31, 2018. The agreement contains a base rent payment of $700,000 per year, which is adjusted to account for inflation. For 2016, the base rent was just above $1 million. In addition, the Mariners are solely responsible for all operating expenses, routine and preventative maintenance, and capital repairs and replacement, with PFD participation in defined circumstances (see below). In return for these obligations, the Mariners retain all ballpark-related revenues. Under terms of the agreement, profit sharing with the PFD occurs if the Mariners' cumulative net loss from 1996 to 1999 of $200 million is paid down through the team's annual net operating income. As of October 31, 2015, the cumulative net loss had been reduced to $19 million.

Under the Lease, the Mariners are responsible for ensuring the ballpark is "operated, maintained, equipped, and periodically renewed in a manner consistent with the Applicable Standard." The Applicable Standard is defined as maintaining and operating the ballpark in a "first class manner, taking into account the age of the Ballpark and any special needs or

limitations resulting from the Ballpark's design and construction." As such, the Mariners are generally responsible for all capital investment associated with achieving this standard over the term of the lease. The only exception is for repairs resulting from improper design or installation during construction, unanticipated events causing failure or improvements not contemplated during construction and approved by the PFD. These investments are deemed "unanticipated capital costs" and the PFD is required to reimburse the Mariners for these capital expenditures to the extent that funds are available. The range of potential capital investments for which the Mariners are responsible, unless falling within the "unanticipated" exception, is listed below and contained in the agreement as part of Section 7.1:

a. replacement or major repair of any Ballpark system or components, including the HVAC, electrical, plumbing and mechanical systems;
b. significant (i.e., more than isolated piecework or patching) replacement of carpeting that wears out as a result of ordinary wear and tear with carpeting of similar quality;
c. replacement or major repair of cracked or disintegrated concrete, broken pipes or leaking roof or sections thereof;
d. replacement or major repair of scoreboard, exterior message board and field lighting systems or components;
e. replacement or major repair of security and emergency systems, broadcast media equipment, closed circuit television, telephone systems; and power distribution equipment;
f. widespread (i.e., more than isolated) replacement of windows and other glass;
g. replacement of a seat standard or the concrete into which the seat is affixed or significant (i.e., more than isolated) replacement of seat components and hardware that wear out;
h. general re-application of protective materials in the Leased Premises (including finishes to public concourses, club/suite concourses, and the structure and exterior of the Leased Premises), such as paint or weatherproofing;
i. changes or improvements required by television networks having contracts with the Club or the American League;
j. resodding of a significant portion of the playing field;
k. replacement or major repair of plumbing, electrical, fixtures and trim (including, but not limited to, toilets, lavatories and drinking fountains);
l. replacement or major repair of capitalized equipment (including, but not limited to, escalators and elevators, field maintenance equipment such as lawn mowers and fertilizing and seeding machines, and food and beverage service equipment such as ice makers, grills and freezers);
m. changes or improvements required of a majority of American League open-air or retractable-roof baseball parks by the American League or the Office of the Commissioner of Baseball;
n. changes or improvements required or recommended by any insurance carrier to enable the Club to obtain insurance coverage at commercially reasonable rates, provided that in lieu of effectuating such change or improvements, the Club may agree, in its discretion, to pay the increased insurance premiums; or
o. Changes or improvements required by any laws, ordinances, orders, rules, regulations or requirements of any governmental authority.

Since the objective of this long-term capital needs assessment is to quantify the cost of necessary capital improvements over the next 20 years, the Consulting Team utilized these categories and descriptions to identify which necessary improvements constitutes “major maintenance and capital improvements” as opposed to routine operations and maintenance.

3.0

Executive Summary

3.0 – EXECUTIVE SUMMARY

BACKGROUND

The primary objective of this Planning Study is to identify the cost of capital improvements necessary to maintain Safeco Field in a first-class manner through 2036. To accomplish this, the Consulting Team completed a systematic and thorough evaluation of Safeco Field by conducting four critical tasks:

- ✓ Developing an improvements-to-date or "baseline" matrix that quantifies previous levels of capital investment through 2015;
- ✓ Conducting a three-day facility assessment that included visual inspections of key building systems;
- ✓ Developing an online survey to examine patron attitudes; and
- ✓ Identifying over 400 capital investments necessary over the next 20 years across 26 key building systems or areas.

Additionally, the Consulting Team sought to identify and examine potential "upgrade improvements" designed to enhance and maintain the spectator experience and ensure the economic life of the facility. They Consulting Team also quantified the economic and fiscal benefits of Safeco Field. A summary of the Team's key findings is outlined below. Various detailed analyses are included in the technical sections and exhibits that follow.

BASELINE IMPROVEMENTS ANALYSIS

The baseline improvements analysis examines historical levels of capital investment at Safeco Field. The Consulting Team classified over 600 investments into one of 26 sub-categories, which were then aggregated into the seven major categories as shown in Figure 3.1. Safeco Field has received approximately $89 million in capital investment since its opening in 1999, equating to an average annual investment of $5.9 million. This figure includes over $24 million of capital investment from third parties, which generally resulted from contractual obligations to the Mariners. When previous investments are adjusted for the time value of money, the cumulative investment level rises to $103 million, or $6.4 million annually (2015 Dollars). Average levels of historical capital investment by the seven major categories are examined below.

#	Major Category	Average	Average Composition	Maximum
1	Architectural	$1,308,577	20%	$4,814,708
2	Retractable Roof	$397,258	6%	$2,050,000
3	Garage	$79,307	1%	$294,419
4	Spectator Requirements	$1,132,903	18%	$3,534,907
5	Building Systems	$620,495	10%	$2,234,644
6	Technology	$1,467,831	23%	$9,679,933
7	Infrastructure	$1,435,418	22%	$13,936,410
Annual Average (2015 Dollars)		$6,441,789		

FIGURE 3.1: Baseline Matrix Average Investment by Category

As shown in Figure 3.1, nearly two-thirds of capital investment was concentrated in three categories (architectural, technology, and infrastructure). The "maximum" column, which shows the greatest level of investment by major category in any year, demonstrates how technology and infrastructure investments can be costly. The greatest

level of investment in these two categories is more than double that of the greatest level in any of the other five categories.

FACILITY ASSESSMENT

The facility assessment was conducted to gain an understanding of existing conditions at Safeco Field. The conditions observed over a three-day walk-through served as the primary basis for identifying the investments reflected in the necessary improvements matrix.

In the Consulting Team's professional opinion, Safeco Field is generally in excellent condition when compared to ballparks of similar age. The Consulting Team found that the Mariners maintain the facility in a first-class manner by employing a series of effective maintenance programs. However, as a direct result of 16 years of use and hosting over 40 million patrons, a number of original spaces and systems will need replacement over the next seven years to maintain its current condition. General themes from the assessment are described below, with detailed findings contained in Section 5.0, Facility Assessment.

- **Architectural:** Safeco Field has a significant amount of aesthetic and architectural character that contributes to the overall experience and feel of the facility. Further, the structure is generally in excellent condition. However, food service interiors, administrative offices, restrooms, and press areas are outdated and will need near-term investment. Other significant investments include the continuation of the existing painting program to maintain the integrity of the structural steel and a new signage and graphics package.

- **Retractable Roof:** The retractable roof system is very complex and generally in good working order. However, many of the system's electrical and other non-structural components are nearing the point where their long-term reliability may be compromised since manufacturers will likely cease supporting the components. The Consulting Team anticipates fewer, yet more expensive, investments will be needed in items such as the logic controller, motor drives, power cables, and the fixed membrane.

- **Garage:** The garage is in sound structural condition. Relatively minor investments are anticipated over the next 20 years with a frequency and cost similar to investments made to date.

- **Spectator Requirements:** Spectator requirements include food service, premium spaces, and the seating bowl. Seats are in good to fair condition, but are supported by anchors that are showing signs of degradation, necessitating the future replacement of all seating hardware. Similarly, much of the food service equipment is original and well past its expected service life of 10 to 15 years. The facility would also benefit from additional and better-distributed points of sale. Lastly, premium spaces contain a significant amount of original furniture, fixtures, and equipment (FF&E) and finishes. A comprehensive update will eventually be necessary for these spaces to maintain their utility and revenue generating capacity.

- **Building Systems:** Major building systems include the playing field, vertical transportation, and mechanical, electrical, and plumbing (MEP) systems. Portions of the playing field and related

subsurface components are original, placing them well past their recommended service lives of six to ten years. MEP systems are generally in good working order, though replacement of items such as cooling towers, the building automation system, and lighting controls at various points will be needed. Vertical transportation systems are also in good condition, but also will eventually need modernization to maintain reliability.

- **Technology:** The technology category includes systems that provide or support sound reinforcement, video displays, security, point of sale systems, and baseball operations. Due to the consistently evolving nature of technology, investments are rarely utilized, or most importantly, supported by manufacturers for longer than 10 years. As such, major technology investments will be needed multiple times over the 20-year plan.

- **Infrastructure**: The infrastructure category includes equipment necessary to support investment in the various systems and equipment in the technology category. The broadcast cabling infrastructure is original and needs a significant overhaul. The distributed television systems, including both the televisions and cable infrastructure, are dated and will eventually need to be replaced for implementation of emerging technologies.

PATRON SURVEY

The Consulting Team conducted an Internet-based survey to understand patron attitudes with regard to the physical configuration of Safeco Field and the surrounding neighborhood. The survey was administered by the Mariners through a third party, open for two weeks, and distributed via e-mail to season-ticketholders and those who purchase single game tickets. The survey was completed by nearly 4,000 individuals.

Survey responses were overwhelmingly positive with regard to factors and conditions inside the ballpark. Respondents clearly hold the food and beverage operation in high regard, though additional points of sale would improve the experience. Similarly, respondent attitudes with regard to merchandising operations, toilet rooms, seat accessibility, and the overall family friendliness of the facility were all very positive.

Respondent attitudes were not as positive regarding the experience before and after games outside of Safeco Field. Only 50% of respondents who drive indicated they were satisfied with parking availability. For respondents who did not cite distance as the reason why they did not attend additional games, 77% cited traffic. In addition, one-third of respondents consider the neighborhood adjacent to Safeco Field as unsafe before and after games. This perception almost certainly contributes to the reason why just half (52%) of respondents choose to patronize establishments in any neighborhood near the facility before and after games.

NECESSARY IMPROVEMENTS ANALYSIS

The necessary improvements analysis quantifies the estimated capital investment needed to maintain the ballpark in a first-class manner through 2036. The necessary improvements matrix contains over 400 capital investments to achieve this goal. These investments were identified as a result of the facility assessment, subject matter expert interviews, a select

amount of information from previously completed analyses (annual and every-three-years), and the Consulting Team's professional expertise. All improvements contained in the matrix include the estimated timeframe for possible implementation, estimated cost in 2015 dollars, and recommended service life.

The Consulting Team estimates that Safeco Field will need approximately $190 million (in 2015 Dollars) in capital investment through the year 2036. Over the duration of the plan, the average annual capital investment needed is approximately $9.5 million. This figure represents a 48% increase over the $6.4 million previously invested on an average annual basis, as shown in Figure 3.1. The composition of investments by major category in the baseline and necessary improvements matrices is shown in Figure 3.2 below.

#	Major Category	Baseline Average	Projected Average	Before	After	Diff.
1	Architectural	$1,308,577	$2,209,375	20%	23%	3%
2	Retractable Roof	$397,258	$928,250	6%	10%	4%
3	Garage	$79,307	$41,000	1%	0%	1%
4	Spectator Requirements	$1,132,903	$1,754,245	18%	18%	1%
5	Building Systems	$620,495	$911,075	10%	10%	0%
6	Technology	$1,467,831	$2,820,675	23%	30%	7%
7	Infrastructure	$1,435,418	$856,500	22%	9%	13%
Annual Average (2015 Dollars)		$6,441,789	$9,521,120			

FIGURE 3.2: Baseline and Necessary Improvement Matrix Comparison

The composition of investments across major categories remains mostly consistent over time, with two primary exceptions. First, the retractable roof contains many original components (non-structural) that will need replacement. Second, technology and infrastructure categories comprise 45% of the average annual baseline investment and 39% of the necessary improvements investment. One $12.5 million distributed antenna system improvement made in 2013 heavily skewed previous infrastructure investment. While the average investment needed in the next 20 years is greater, expenditures across major categories are consistent with historical levels, lending credence to the integrity of the projections.

The Consulting Team applied an annual escalation factor of three percent (3%) and a 15% contingency expense to needed capital investment. As a result, **the estimated overall capital investment needed to maintain the facility in a first-class manner through 2036 is $297 million**. The table below provides a year-by-year accounting of the estimated investments. The total is comprised of $190 million in investment, approximately $68 million in escalation, and $39 million in contingency for unforeseen conditions or unanticipated investments. Six of the 10 most expensive investment years are in the first half of the plan. Further, five of the first seven investment needs would rank no lower than second in the baseline matrix in terms of greatest annual investment, illustrating the sharp increase in necessary investment.

FY	Investment	Escalation	Contingency	Total	Rank
FY 2017	$4,126,290	$251,291	$656,637	$5,034,218	19
Fy 2018	$7,628,985	$707,413	$1,250,460	$9,586,858	16
FY 2019	$22,912,398	$2,875,708	$3,868,216	$29,656,322	2
FY 2020	$16,071,167	$2,559,720	$2,794,633	$21,425,521	4
FY 2021	$11,742,457	$2,278,651	$2,103,166	$16,124,274	7
FY 2022	$12,776,061	$2,936,883	$2,356,942	$18,069,885	5
FY 2023	$11,003,258	$2,935,340	$2,090,790	$16,029,387	8
FY 2024	$7,670,920	$2,337,891	$1,501,322	$11,510,132	13
FY 2025	$7,660,052	$2,634,417	$1,544,170	$11,838,639	12
FY 2026	$14,962,466	$5,749,086	$3,106,733	$23,818,285	3
FY 2027	$10,963,446	$4,667,806	$2,344,688	$17,975,940	6
FY 2028	$6,467,621	$3,030,298	$1,424,688	$10,922,607	14
FY 2029	$20,332,504	$10,422,233	$4,613,210	$35,367,947	1
FY 2030	$8,026,093	$4,478,298	$1,875,659	$14,380,050	10
FY 2031	$4,078,016	$2,466,002	$981,603	$7,525,621	17
FY 2032	$7,899,115	$5,156,918	$1,958,405	$15,014,438	9
FY 2033	$1,685,649	$1,184,056	$430,456	$3,300,161	20
FY 2034	$6,487,681	$4,888,507	$1,706,428	$13,082,617	11
FY 2035	$3,254,815	$2,623,743	$881,784	$6,760,341	18
FY 2036	$4,673,400	$4,020,501	$1,304,085	$9,997,985	15
[1] Totals	$190,000,000	$68,000,000	$39,000,000	$297,000,000	

[1] Totals are rounded to nearest million dollar figure

FIGURE 3.3: Adjusted Investment Needed Through 2036

UPGRADE IMPROVEMENTS

In contrast to necessary improvements, which protect the building from physical obsolescence, upgrade improvements protect the facility from market obsolescence. Although noteworthy additions such as the All-Star Club, the "'Pen," and Edgar's have been made to enhance the spectator experience, the Consulting Team considers additional upgrade improvements as desirable to maintain Safeco Field's competitive position in the economic marketplace. Upgrade concepts were developed with input from the Mariners and PFD with one of four primary drivers in mind:

1. Maintaining or improving upon the patron experience;
2. Expanding or maintaining revenue streams;
3. Attracting new demographic groups to the facility; and
4. Maintaining Safeco Field's competitive position within the market.

A more detailed explanation of seven potential upgrade improvements are detailed in Section 8.0, Upgrade Improvements. Design concepts are included as Exhibit D to this document. The capital cost of these Upgrade Improvements would be *in addition to* the cost of the Necessary Improvements.

BENEFITS ANALYSIS

The purpose of the benefits analysis is to understand and then quantify the economic and fiscal benefits generated by Safeco Field. The analysis answers the question: "What are the economic and tax revenue implications associated with Safeco Field?" The Consulting Team conducted separate analyses to measure the economic benefits to King County and the State of Washington. Fiscal benefits were quantified for the PFD, city and county, and state.

Impacts are measured in terms of economic output, employment, and earnings, which are further divided into direct and indirect impacts. The direct impacts represent the economic activity created by the Mariners and ballpark operations. The indirect impacts represent the value of additional economic demands for goods and services that the team and ballpark place on supplying industries in the county and state economies. The sum of the direct and indirect impacts includes all transactions attributable to the project and, as such, represents the total economic impact.

Based on assumptions detailed in Section 9.0, Economic and Fiscal Benefits Analysis, annual operations of Safeco Field generates $119 million in economic activity, supports $100 million in wages, and 2,200 associated jobs in the county. At the state level, Safeco Field supports $180 million in economic activity, $128 million in wages, and 3,300 associated jobs. These annual totals are not additive; state totals are inclusive of county economic activity, wages, and employment

Recurring Benefit	King County	State of Washington
Annual Total Benefits		
Estimated Output	$118,900,000	$179,700,000
Estimated Wages	$99,800,000	$128,100,000
Estimated Employment	2,200	3,300

FIGURE 3.4: Recurring Economic Benefits

In addition to the annual economic benefits, Safeco Field generates significant tax revenues for the PFD, city, county, and state. The PFD is recipient of a 10% parking tax on cars parked in the garage and 5% admissions tax. The state collects two taxes and local jurisdictions collect five taxes applicable to the analysis. All taxes applicable to the analysis are listed in Section 9.0.

Fiscal benefits to the PFD in 2015 measured an estimated $4.3 million. The state of Washington benefited from $7.2 million in estimated fiscal benefits, largely due to state sales tax. The county and city benefited from an estimated $2.4 million in tax revenues. Measured on a 20-year net present value basis, Safeco Field is projected to generate $81 million in tax revenues to the PFD, $140 million to the state, and $46 million to local jurisdictions. Total fiscal benefits are estimated at approximately $267 million through 2036.

Jurisdiction / Entity		2015
Washington State MLBS PFD Tax Revenue		$ 4,260,000
20-Year Net Present Value	$81,400,000	
State of Washington Tax Revenue		$ 7,190,000
20-Year Net Present Value	$139,700,000	
King County and City of Seattle Tax Revenue		$ 2,400,000
20-Year Net Present Value	$46,300,000	
Annual Benefit		$ 13,850,000

[1] NPV calculations rely on 4% discount rate and 3% growth

FIGURE 3.5: Recurring Fiscal Benefits (Year 2015 Shown)

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4.0

Baseline Improvements Analysis

4.0 - BASELINE IMPROVEMENTS ANALYSIS

OBJECTIVES

The baseline improvements analysis examines historical levels of capital investment at Safeco Field. The analysis includes a review of capital investments from FY 2000 to 2015 through three lenses: (1) previous annual investment, (2) previous annual investment adjusted to 2015 dollars, and (3) cumulative investment by major building category. While the corresponding baseline matrix is a key part of the analysis, the Consulting Team does not utilize it as a forecasting tool. Instead, its primary purpose is to provide the context and supporting rationale for the team's projections contained in Section 7.0, Necessary Improvements Analysis. The baseline matrix serves as a tool for confirming the veracity of projections developed by the Consulting Team.

METHODOLOGY

The PFD and Mariners provided the Consulting Team with records of capital improvements made at Safeco Field through FY 2015. The Consulting Team systematically classified over 600 investments into one of 26 sub-categories, which combine to form seven major categories that are explained briefly on the following page. This method allows for analyzing the underlying factors contributing to investment spikes and then normalizing investment levels to 2015 dollars. All investments were classified according to their assumed utility described in the capital improvements log. For instance, 2001 investments in the Hit-It-Here Café finishes are classified as architectural interiors since the investment's utility was aesthetic appeal.

	Major Category		Sub-Category
I.	Architectural	1	Architectural Interiors
		2	Architectural Exteriors
		3	Painting
		4	Building Envelope
		5	Structural
		6	Signage and Graphics
		7	Team Facilities
		8	Operational Equipment
		9	FF&E
		10	Code and Regulatory
II.	Retractable Roof	11	Retractable Roof
III.	Garage	12	Garage
IV.	Spectator Requirements	13	Food Service
		14	Seating Bowl
		15	Premium Areas
V.	Major Building Systems	16	Mechanical
		17	Electrical
		18	Plumbing
		19	Playing Field
		20	Vertical Transportation
VI.	Technology	21	Facility Sound Reinforcement
		22	Video Displays / Production
		23	Security
		24	Point of Sale Systems
		25	Baseball Operations
VII.	Infrastructure	26	Technology Infrastructure

FIGURE 4.1: List of Major and Sub-Categories

- ✓ **Architectural:** The architectural category is the broadest major category (with ten subcategories). It includes three sub-categories (operational equipment, FF&E, and code and regulatory) that do not justify a major category or fit elsewhere. An explanation of the code and regulatory and building envelope sub-categories is provided below:
  - **Code and Regulatory:** Investments in this sub-category include those required by changes in code or regulation. These changes may affect any space in the building, but most often entail reconfigurations of interiors, justifying placement under the architectural heading.
  - **Building Envelope:** Investments in this group includes expansion joints, waterproofing, and membrane roofs, all of which protect the building from the elements.
- ✓ **Retractable Roof:** The retractable roof heading includes all systems, components, and supporting infrastructure needed to operate and maintain the retractable roof.
- ✓ **Garage:** The garage is the least complex of the major categories and has historically received the lowest frequency and level of investment.
- ✓ **Spectator Requirements:** This category includes required systems and equipment that spectators "touch and feel." Investments in premium spaces, food service equipment, and the seating bowl are included.
- ✓ **Major Building Systems:** Mechanical, electrical, and plumbing systems are included, as well as the playing field and vertical transportation systems.
- ✓ **Technology:** The technology category includes systems and equipment for sound, video boards, security, and points of sale. The baseball operations sub-category includes systems and equipment required for front office scouting and analysis.
- ✓ **Infrastructure:** The infrastructure category supports items found under the technology heading and includes investments in cabling, power supplies, and data equipment.

Each sub-category was populated with previous investments on an annual basis, as seen in the example entry in Figure 4.2. In 2001, advertising signage received $75,000 in investment. These totals are included under the signage and graphics sub-category and subsequently accrue to the major architectural category. All investments for each sub-category for the facility's first 16 years were populated in the same manner.

Item #	Baseline Improvement Category / Item	Actuals		
		2000	2001	2002
	Signage and Graphics	*$0*	*$215,000*	*$20,000*
1	Advertising signage		$75,000	
2	Wayfinding signage		$125,000	$20,000
3	Advertising inventory / skybridge		$15,000	

FIGURE 4.2: Example Baseline Matrix Entry

ANNUAL INVESTMENT

Figure 4.3 below examines annual capital investment through 2015. Over the building's first 16 years, $89 million was invested, equating to an average annual investment of $5.9 million. The greatest amount of annual capital investment was $20.6 million in 2011, while the lowest level was $2.2 million in 2006. Key factors that influence the investment levels include:

- ✓ Expenditures in 2001 were comprised of investments in architectural exteriors and third-party contributions of high-definition cable and food service equipment. From 2002 to 2006, no year received more than $4 million in investment. This "valley" is typical of new facilities as original design issues are usually rectified within the first three years. Since systems and equipment were new, little capital investment was needed.

- ✓ Fiscal years 2011 and 2013 received a combined $33 million in investment, $26 million of which was attributable to technology and infrastructure. Investments included a distributed antenna system, LED ribbon boards, and a large video display board. These periodic major investments and subsequent investment spikes in technology will continue due to such equipment's lifecycles (7 to 10 years).

- ✓ Third-party investments comprised nearly $25 million of the $89 million total. These investments included the distributed antenna system mentioned above ($12.5 million), Wi-Fi system ($5 million), miscellaneous technology investments ($2.5 million), and Centerplate food service equipment contributions ($4.8 million).

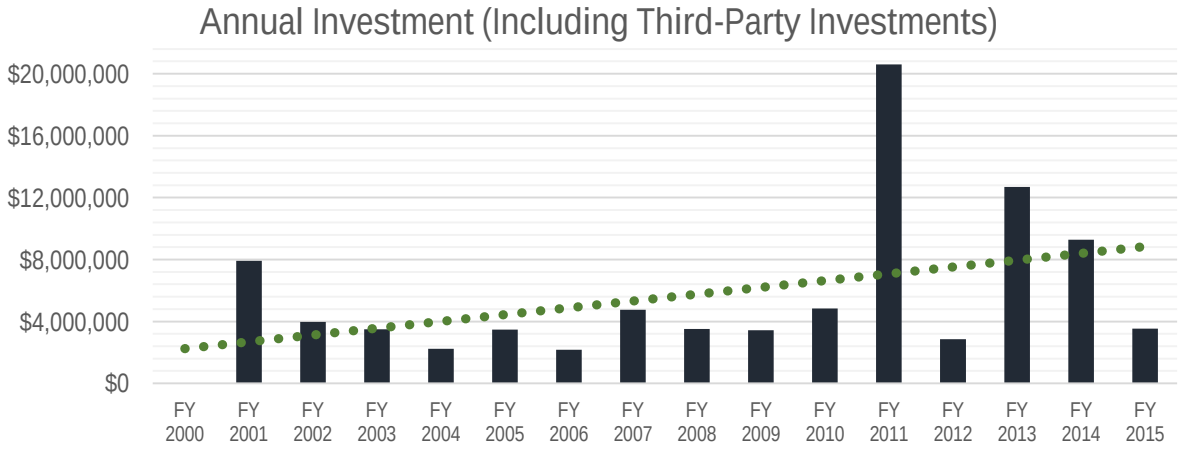


FIGURE 4.3: Annual Investment from FY 2000 to 2015

FY	Investment	FY	Investment
2001	$ 7,911,750	2009	$ 3,440,639
2002	$ 3,964,000	2010	$ 4,834,650
2003	$ 3,488,100	2011	$ 20,608,573
2004	$ 2,244,400	2012	$ 2,858,300
2005	$ 3,478,200	2013	$ 12,687,000
2006	$ 2,167,700	2014	$ 9,279,700
2007	$ 4,749,500	2015	$ 3,532,595
2008	$ 3,519,100	2016*	$ 5,332,227
Investment to Date			$ 88,764,207

*Denotes Planned Investment; not included in total

CUMULATIVE INVESTMENT

Safeco Field has received $89 million in capital investment through FY 2015. This figure is in addition to the $85 million in repairs and maintenance costs incurred by the Mariners over the same timeframe. The comparative maintenance and capital investment graph is shown in Figure 4.4. Although repairs and maintenance costs are quite predictable, the capital investment bars are more variable between years due to the major investments described previously.

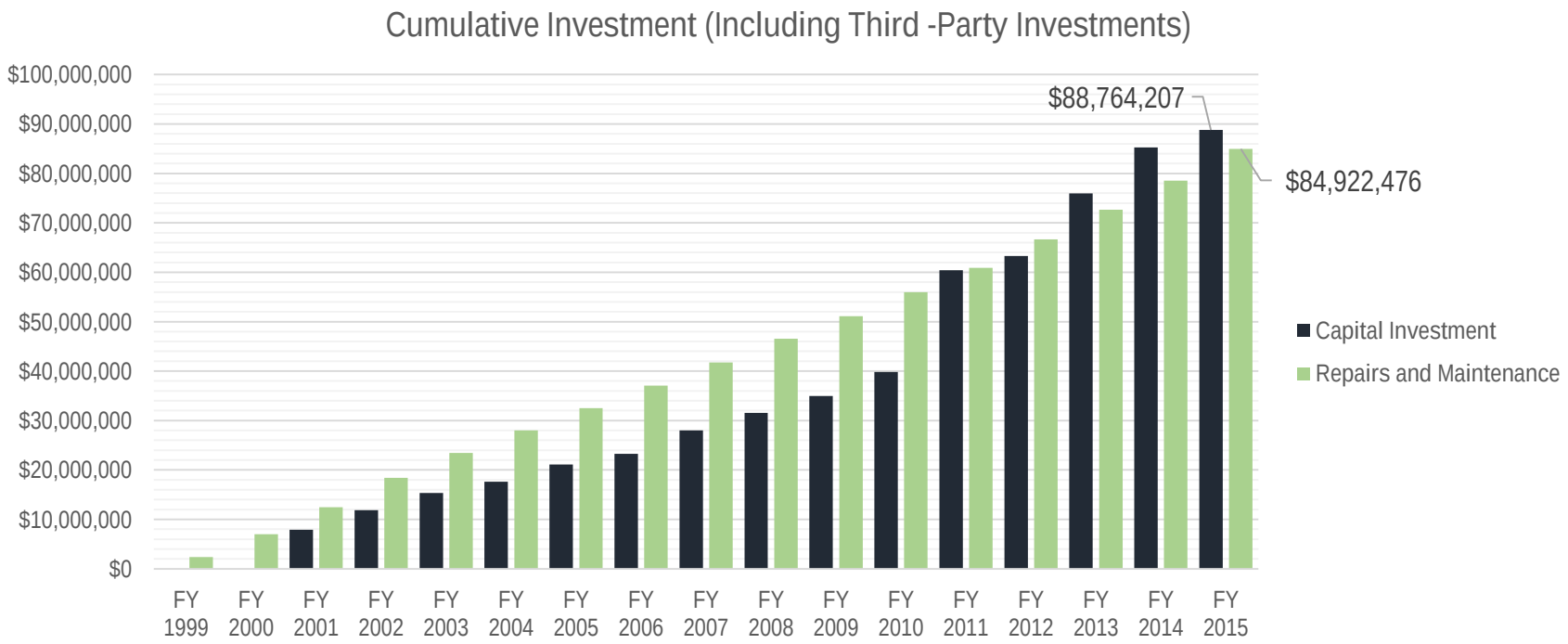


FIGURE 4.4: Cumulative Investment and Maintenance Comparison

INVESTMENT COMPOSITION

Figure 4.5 shows the extent to which annual capital investments were concentrated in one of the 26 sub-categories. Cells with green shading indicate that the sub-category comprised a large percentage of that year's total budget, while those without shading did not receive investment. For instance, a large steel painting project made up 52% ($1.5 million) of 2012's total investment of $2.9 million. The analysis has a number of limitations, but is useful in identifying sub-categories that at the time required less funding historically, thus needing future investment in the necessary improvements matrix. Key findings from this analysis are provided on the following page.

Category	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1 Interior	5%	41%	1%	2%	1%	4%	1%	2%	6%	0%	N/A	1%	N/A	0%	5%	4%
2 Exterior	31%	N/A	N/A	4%	N/A	3%	N/A	N/A	N/A	N/A	0%	N/A	N/A	0%	11%	1%
3 Building Envelope	1%	1%	3%	N/A	3%	1%	N/A	1%	N/A	N/A	0%	7%	N/A	N/A	N/A	N/A
4 Painting	N/A	0%	0%	2%	1%	5%	2%	N/A	31%	N/A	N/A	52%	N/A	N/A	N/A	N/A
5 Signage and Graphics	3%	1%	N/A	1%	N/A	2%	6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 Structural	0%	N/A	9%	16%	22%	6%	36%	N/A	1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7 Player Facilities	N/A	N/A	N/A	N/A	0%	1%	1%	1%	0%	1%	0%	4%	N/A	0%	2%	2%
8 Operational Equipment	1%	6%	0%	N/A	3%	3%	3%	4%	5%	2%	N/A	N/A	3%	0%	5%	2%
9 FF&E	3%	2%	1%	1%	1%	8%	0%	3%	1%	0%	1%	N/A	0%	1%	1%	2%
10 Code and Regulatory	N/A	N/A	1%	N/A	0%	N/A	N/A	0%	3%	1%	N/A	N/A	N/A	2%	6%	N/A
11 Roof Specific	2%	N/A	3%	7%	N/A	1%	2%	15%	11%	1%	1%	N/A	10%	22%	27%	30%
12 Garage	0%	N/A	N/A	N/A	7%	1%	1%	2%	2%	1%	1%	7%	1%	1%	1%	N/A
13 Food Service	23%	15%	11%	18%	15%	18%	8%	11%	12%	9%	11%	0%	6%	N/A	0%	5%
14 Seating Bowl	5%	9%	1%	3%	1%	1%	1%	N/A	10%	0%	N/A	N/A	N/A	0%	4%	0%
15 Premium Spaces	4%	13%	3%	36%	22%	23%	2%	17%	2%	2%	0%	1%	0%	0%	5%	4%
16 Mechanical	N/A	1%	10%	0%	1%	1%	1%	5%	N/A	19%	1%	1%	0%	2%	N/A	5%
17 Electrical	2%	N/A	4%	0%	1%	N/A	N/A	N/A	N/A	13%	0%	11%	N/A	1%	N/A	1%
18 Plumbing	N/A	5%	2%	N/A	1%	1%	18%	2%	1%	6%	N/A	2%	0%	2%	3%	3%
19 Playing Field	0%	1%	1%	5%	1%	0%	1%	6%	N/A	2%	2%	2%	6%	1%	11%	0%
20 Vertical Transportation	N/A	1%	0%	1%	2%	N/A	0%	1%	N/A	N/A	0%	1%	1%	0%	9%	4%
21 Facility Sound Reinforcement	0%	N/A	N/A	N/A	2%	2%	N/A	7%	N/A	6%	N/A	0%	N/A	N/A	N/A	1%
22 Video Displays / Production	1%	2%	50%	4%	14%	10%	10%	4%	10%	34%	15%	4%	71%	N/A	1%	3%
23 Security	N/A	1%	N/A	1%	1%	2%	1%	4%	1%	1%	0%	1%	0%	0%	3%	3%
24 POS Systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1%	2%	N/A	3%	N/A	0%	1%	0%	18%
25 Baseball Operations	N/A	0%	N/A	N/A	N/A	N/A	N/A	0%	N/A	0%	1%	1%	1%	10%	2%	N/A
26 Infrastructure	19%	0%	N/A	N/A	0%	7%	6%	14%	2%	0%	61%	5%	0%	56%	4%	11%
Investment Amount	*$7,911,750*	*$3,964,000*	*$3,488,100*	*$2,244,400*	*$3,478,200*	*$2,167,700*	*$4,749,500*	*$3,519,100*	*$3,440,639*	*$4,834,650*	*$20,608,573*	*$2,858,300*	*$12,687,000*	*$9,279,700*	*$3,532,595*	*$5,332,227*

FIGURE 4.5: Investment Composition by Sub-Category

- ✓ Limited capital investment in painting was made in recent years. The Consulting Team anticipates that painting will comprise a greater percentage of the budget in years ahead as the retractable roof and other spaces yet to be painted will eventually need it. As discussed in Section 5.0, Facility Assessment, the Mariners and PFD have employed a strong proactive painting program to date to maintain aesthetic appeal and protect the steel from corrosion, but it is likely this program will need to be augmented as the facility ages.

- ✓ The structural category has received limited investment in recent years. The Consulting Team expects this trend to continue as the facility assessment revealed that the building is in sound structural condition.

- ✓ The retractable roof has received a greater percentage of annual investment in recent years. This is due to the phased bogie wheel replacement slated to continue through 2020.

- ✓ The cells with the dark green shading are a result of investments in video displays and infrastructure. As mentioned above, these capital investment spikes will continue due to this technology's service life of seven to ten years.

- ✓ Premium spaces, which includes the Diamond Club, Terrace Club, and suites, have received limited investment since 2008. Modernization of these areas will likely be needed in the first half of the 20-year plan to maintain their appeal.

- ✓ Signage and graphics have received little capital investment in the past five years. As detailed in the facility assessment, systematic replacement of all signage and graphics will eventually be needed due to their deteriorating condition seen in some areas of the ballpark.

ADJUSTED INVESTMENT

Inflating historical capital investments to 2015 dollars allows the investments to be compared and contrasted by major category with the investments projected by the Consulting Team over the next 20 years. When the $89 million in capital investments are adjusted to 2015 dollars, the cumulative capital investment received by Safeco Field since it opened is $103 million. Once adjusted, the average annual investments increase from the unadjusted figure of $5.9 million to $6.4 million, as seen in Figure 4.6. The annual investments are comprised heavily of architectural, technology, and infrastructure improvements.

#	Major Category	Average	Average Composition	Maximum
1	Architectural	$1,308,577	20%	$4,814,708
2	Retractable Roof	$397,258	6%	$2,050,000
3	Garage	$79,307	1%	$294,419
4	Spectator Requirements	$1,132,903	18%	$3,534,907
5	Building Systems	$620,495	10%	$2,234,644
6	Technology	$1,467,831	23%	$9,679,933
7	Infrastructure	$1,435,418	22%	$13,936,410
Annual Average (2015 Dollars)		$6,441,789		

FIGURE 4.6: Baseline Matrix Average Investment by Category

The “maximum” column, which shows the greatest level of investment by major category in any year, demonstrates how technology and infrastructure investments can be very costly. The greatest level of investment in these two categories is more than double that of the greatest level in any of the other five categories.

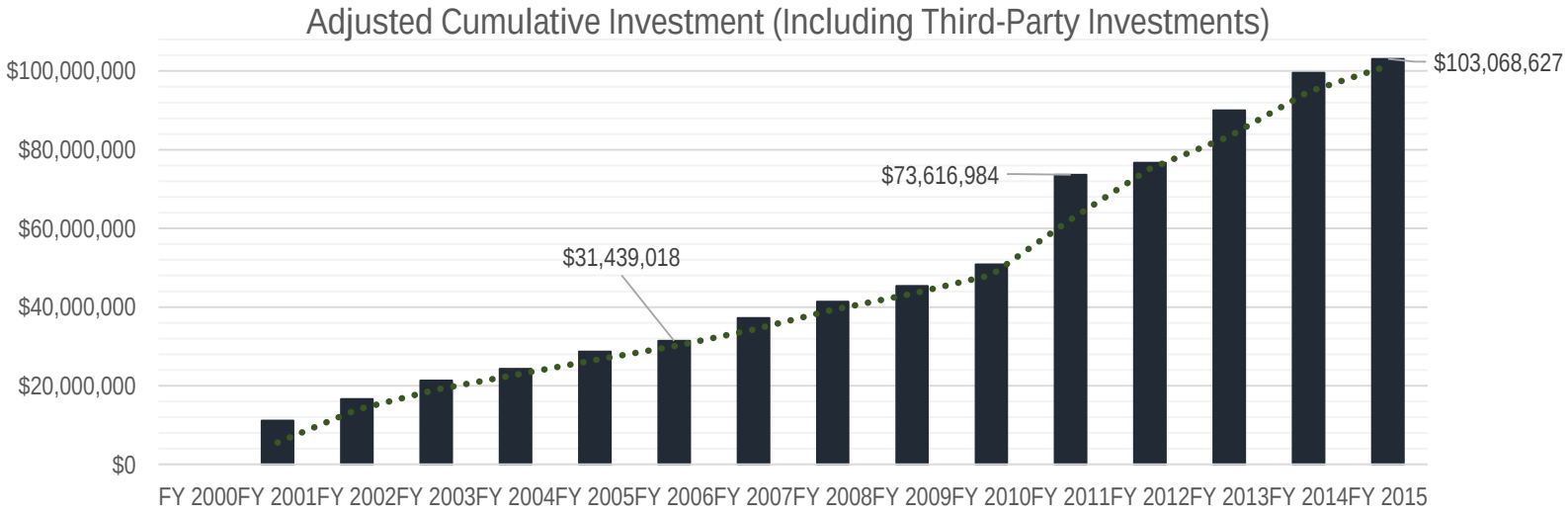


FIGURE 4.7: Adjusted Cumulative Investment from FY 2000 to 2015 (2015 dollars)

5.0

Facility Assessment

5.0 – FACILITY ASSESSMENT

OBJECTIVES

The facility assessment has two primary purposes: provide a global understanding of existing conditions at Safeco Field and inform the development of the 20-year necessary improvements matrix. The assessment is comprised of a series of observations and recommendations with regard to various spaces or pieces of equipment throughout the ballpark. Key findings from the assessment are provided at the beginning of this section.

METHODOLOGY

The Consulting Team conducted the assessment over a three-day period in September 2015. The assessment began with building subject matte expert interviews that were focused on discussion of the functionality of various building systems. After the interviews, the Consulting Team conducted the facility assessment. The assessment examined improvements that have been made to date; the working conditions of the ballpark's physical plant; how specific areas of the ballpark are functioning; and the potential short- and long-term needs. While visual inspections of primary building systems were conducted, the Team did not conduct detailed testing, building audits, or inspections. The assessment is intended to determine the overall condition of the facility and provide a basis upon which to identify necessary and upgrade improvements that could reasonably be anticipated through 2036.

Assessment findings are conveyed in numerous observations and recommendations. Each observation and recommendation is classified into one of the 26 sub-categories according to a one-, two-, or three-letter designation. For instance, architectural interiors are designated "AI", while exteriors are "AE". Each major category and its sub-category (ies) and designations are contained in Figure 5.1.

	Major Category		Sub-Category	Designation
I.	Architectural	1	Architectural Interiors	AI
		2	Architectural Exteriors	AE
		3	Painting	PA
		4	Building Envelope	BE
		5	Structural	S
		6	Signage and Graphics	SG
		7	Team Facilities	TF
		8	Operational Equipment	OE
		9	FF&E	FFE
		10	Code and Regulatory	CR
II.	Retractable Roof	11	Retractable Roof	RR
III.	Garage	12	Garage	G
IV.	Spectator Requirements	13	Food Service	FS
		14	Seating Bowl	SB
		15	Premium Areas	PR
V.	Major Building Systems	16	Mechanical	M
		17	Electrical	E
		18	Plumbing	P
		19	Playing Field	PF
		20	Vertical Transportation	V
VI.	Technology	21	Facility Sound Reinforcement	T
		22	Video Displays / Production	T
		23	Security	T
		24	Point of Sale Systems	T
		25	Baseball Operations	T
VII.	Infrastructure	26	Technology Infrastructure	IN

FIGURE 5.1: Major and Sub-Category Designations

The consulting Team developed a mnemonic system for each observation and recommendation. This system allows the reader to correlate the observation and recommendation with the baseline and necessary improvement matrices. For instance, the first AI entry with a necessary improvement recommendation is designated 1.0 and the next entry is listed as AI 2.0. If an observation contains a designation other than zero to the right of the decimal point (1.1, 1.2 etc.), then the improvement should be completed in conjunction with the .0 entry.

This assessment is not traditional in that it does not focus on reporting granular conditions. In this particular assessment, observations are included only if the condition will eventually need major investment or if it is useful in providing a global understanding of conditions. For each observation, the corresponding recommendation is deemed either a "necessary" or an "upgrade" improvement. Observations without an "action" are not included for the purpose of brevity. A necessary improvement is an investment needed to maintain the physical life of the facility in a first-class manner. An upgrade improvement is optional, and typically focused on improving the fan experience as fan expectations and competing venues change over time. These investments are further discussed in Sections 7.0 and 8.0, Necessary Improvements Analysis and Upgrade Improvements Analysis. Where appropriate, detail is provided for rectifying or remediating the conditions.

ASSESSMENT KEY FINDINGS

Since Safeco Field opened in 1999, the Mariners have drawn over 40 million spectators to the facility. During the assessment it became clear that although the Mariners have maintained the facility very well through a series of maintenance programs, some areas of the ballpark and some equipment items have simply worn out from repeated used. A summary of the Consulting Team's key findings from the walk-through are provided below, with supporting photo documentation on the following pages. All timeframes assigned to improvements that are recommended are approximated.

Architectural

Key findings for the 10 sub-categories found under the architectural heading are listed below.

- Many of the interior finishes and FF&E throughout the ballpark are original, contributing to a dated aesthetic image in some areas. Administrative offices and press areas, in particular, appear dated and will need to be modernized in the near future. Other spaces eventually needing investment include the team store, toilet rooms, locker rooms, and food service interiors.

- The exterior steel paint is generally in good condition and many areas have been repainted as part of an ongoing painting program. However, more areas will eventually need to be addressed due to minor fading and rusting. The ongoing repainting of the steel should continue, and even augmented, to ensure the unattended steel is protected from corrosion as the building ages accordingly.

- The majority of expansion joints are original, though many were refurbished from 2006 to 2010. The life expectancy for these joints is the 20- to 25-year range, which places them near the end

of their service life. As such, a phased replacement will be needed in the first half of the 20-year plan.

- Membrane roofs throughout the facility are original. Typical membrane roofs have a 20- to 25-year life expectancy and will need to be replaced during the first half of the plan.

- Existing programs for repainting, patching, and repairing damaged joints have left the stadium structure in excellent condition. Most importantly, the steel members of the main structure appear to be in very good condition. Although the structure is sound, specific attention should be paid to deck edge corrosion, cracked concrete, and pre-cast stadia slabs.

- Signage throughout the facility is mostly original and is in need of replacement. In some cases, letters and characters are faded and / or missing entirely. The Consulting Team recommends a phased replacement and modernization program for all signage and graphics within the first five years of the plan.

- Some of the furniture and finishes in the team facilities are original and will eventually need replacement due to age and loss of functionality. The most significant cost expenditures will be allocated to the home clubhouse, followed by the visitors' clubhouse.

Retractable Roof System

The retractable roof system is complex and will need a limited number of large investments over the course of the 20-year plan. Key findings are provided below:

- The phased replacement of the bogie wheels will continue through 2020 as part of a plan that began in 2013.
- The programmable logic controller, motor drives, and power cables are all essential pieces of equipment. Each will need investments in excess of $1 million over the course of the 20- year plan.
- The retractable roof membrane is original and will need replacement near the mid-point of the plan. Replacement of the roof membrane is estimated at almost $8 million in 2015 cost.

Garage

The Consulting Team's inspection of the garage revealed no glaring deficiencies or cost liabilities. Minor improvements, such as restriping and replacement of the wheel stops, will be needed on an ongoing basis.

Spectator Requirements

The spectator requirement category encompasses food service, seating bowl, and premium spaces. Key findings for these areas are listed below.

- Fixed seats in the bowl are mostly original and have zinc-coated anchors. The existing anchors are presently viable, but are showing signs of rust and deterioration. These anchors and other hardware will eventually need to be replaced as the seats are approaching the end of their recommended service life of 20 years.

- Much of the food service equipment is original and nearing, or exceeding, the end of its recommended service life. Some of the original equipment includes large walk-in refrigeration units, stoves, ovens, fryers, icemakers, and the draft beer system. A comprehensive modernization program will be needed to efficiently address these deficiencies, generating large food service cost outlays in the first half of the plan.

- The three primary premium spaces and adjacent lounges in the facility (Diamond Club, Terrace Club, and suite level) have original finishes and aesthetic appeal similar to many interiors found elsewhere in the building. Without modernization, the economic return on these spaces will diminish.

Major Building Systems

Major building systems include the playing field, vertical transportation, and MEP sub-categories. Key findings for these areas are listed below.

- Portions of the playing field system (including the turf, irrigation, sub-surface drainage, aeration, and heating components) are original as some field replacements have occurred over the lease term. However, a replacement of the entire system will most likely be needed within the first five years of the 20-year plan. For frame of reference, the typical service life of a playing surface is six to ten years, depending on the number of outside events.

- Mechanical and plumbing systems are well maintained and in good working order. However, replacement of the cooling towers, the building automation system, heat pumps, and boilers will be needed within the next 10 years.

- The current lighting control system (Microlite) is becoming obsolete. Replacement of the current lighting control system will be needed within the first five years of the 20-year plan. Implementation of LED technology should be considered when the lighting system is updated. It is recommended that the new system be compatible with the existing building automation system for ease of use and maintenance.

- Vertical transportation systems are presently in good working order, but will need modernization near the mid-point of the plan to maintain reliability. A continuation of the escalator step replacement program is recommended, though a full step replacement will eventually be needed as well.

Technology

The technology category includes sound reinforcement, video displays, security, point of sale systems, and baseball operations. Key findings from these areas are listed below.

- ✓ Sound reinforcement systems are well cared for but the technology is dated. Portions of the audio coverage in the main concourse is inconsistent regardless of programming. Replacement of the entire system will be needed within the first five years of the plan.

- ✓ The left field out-of-town display was installed in 2010 and the LED fascia displays were installed in 2011. The main video display was installed in 2013. Reasonable life expectancy for these technologies is 10 years; replacement of each is programmed accordingly in the necessary improvements matrix.

- ✓ Investment in security system technology will be needed. A phased replacement of existing security cameras is under way and will need to be continued during the term of the plan.

Technology Infrastructure

Technology infrastructure is needed to support existing technology equipment and future evolutions. Key findings are listed below.

- ✓ The distributed television systems, including both the televisions and cable infrastructure, are dated but operable and sufficient for current intended uses. However, evolutions in technology (4K broadcasting, interactive wayfinding signage, advertising, food and beverage displays) will necessitate a change to data- based IP delivery and associated systems.

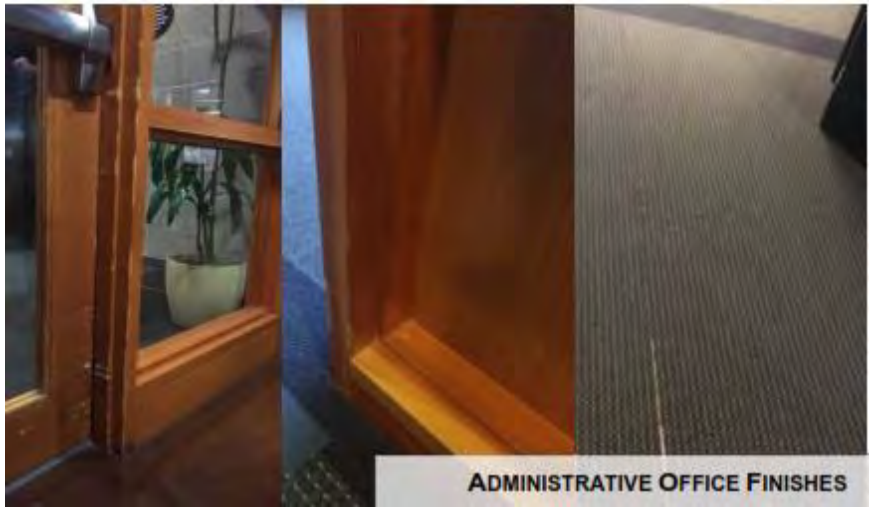
- ✓ The broadcast cabling infrastructure is original and will need a major overhaul. Coaxial video cabling, in particular, is obsolete and its presence is obstructive to implementing new technologies. Coaxial video cabling will need to be replaced with fiber optic cabling. Triaxial camera cabling should be reduced and supplemented with new SMPTE camera cabling to all broadcast enclosures. The Consulting Team recommends completion of this work in the near term of the plan.

AI 1.0: ADMINISTRATIVE OFFICE FINISHES & INTERIORS

Club-level administrative offices have primarily original finishes and interiors that are of basic quality. The carpet is worn in a number of areas and damage is evident on the wood doors and millwork, as seen in the photo to the right.

RECOMMENDATION: NECESSARY IMPROVEMENT

Modernize administrative office finishes and interiors with those of similar quality within the first five years of the plan.



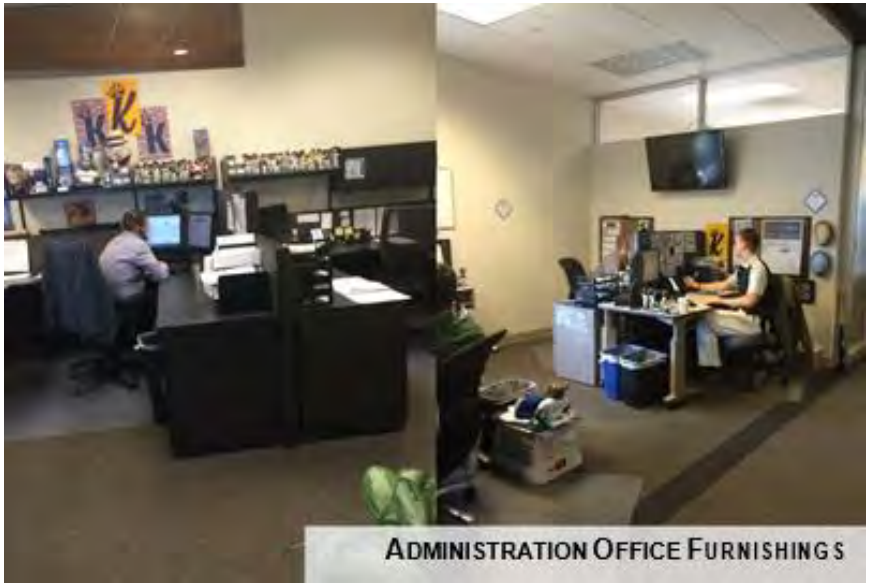
ADMINISTRATIVE OFFICE FINISHES

AI 1.1: ADMINISTRATIVE OFFICE FF&E

Suite-level administrative offices appear to have primarily original FF&E. Upon inspection by the Consulting Team, it was evident that some of the furniture has been replaced, leading to different types and quality of furniture throughout the offices. This disparity is displayed in the photo to the right.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a replacement of FF&E in conjunction with the update of finishes throughout the administrative suite.



ADMINISTRATION OFFICE FURNISHINGS

AI 2.0: PRESS-LEVEL FINISHES

The press level appears to contain mostly original finishes similar to those found in the administrative offices. The carpet has been replaced in recent years, but is showing signs of wear and tear. The press box suite was observed to be in good condition, however.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a comprehensive modernization of the press area to provide a more suitable and comfortable working environment.

RECOMMENDATION: NECESSARY IMPROVEMENT

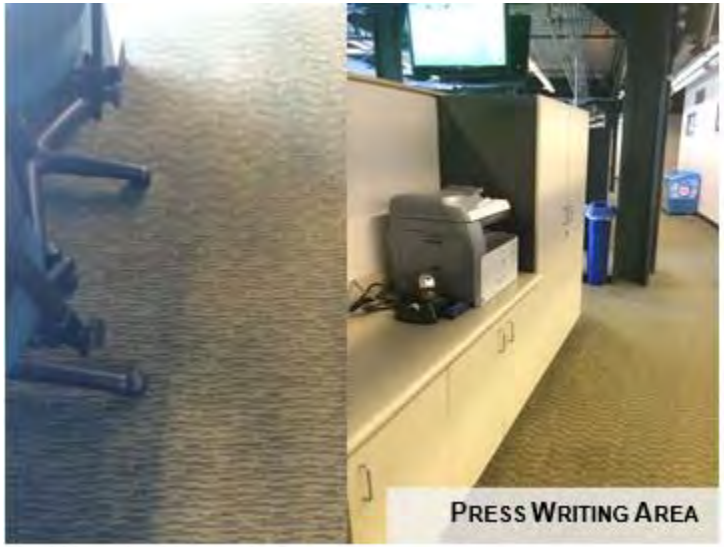
The Consulting Team recommends examining the feasibility of converting the area into an additional club. This space could potentially serve as a supplemental offering to the Diamond Club, which is currently constrained by a lack of event space.

AI 2.1: BROADCAST AREA FINISHES

The club-level broadcast area appears to have primarily original finishes and interiors that are similar to the press level and administrative office areas.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program an overall modernization of the broadcast area finishes with basic décor. If conversion of the space to a patron club is under consideration, delay the modernization and identify a suite relocation option for the working press.



PRESS WRITING AREA

BROADCAST PRESS AREA

AI 3.0: CONCESSION STAND WALLS

Walls in some concession stand locations exhibit peeling, including those located in the “Pen”, which opened in 2011. The walls are not smooth, making them difficult to clean properly.

RECOMMENDATION: NECESSARY IMPROVEMENT

All preparation areas need smooth, cleanable surfaces. Fiberglass reinforced panels (FRP) should be installed throughout the foodservice locations.

AI 4.0: TOILET ROOMS

Toilet rooms throughout the general admission concourses are well kept but the basic finishes are fading and stained. Tile grout at the base of the walls is missing entirely in some spots. A number of fixtures have been replaced on an as-needed basis, but those that are original are showing signs of age.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a phased modernization of all toilet rooms approximately five years into the 20-year plan.

WALLS/ FRP PANELS

TOILET ROOM FIXTURES

TILE GROUT

AI 5.0: CONCESSION ACOUSTIC TILES

Many of the lay-in acoustic tiles in the foodservice areas are original and appear worn.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace the ceiling tiles and grid where required. These ceilings should be addressed within the first five years of the plan.)

ACOUSTIC TILE

AI 6.0: AUXILIARY LOCKER ROOM FINISHES

The field level auxiliary locker room is very basic with limited finishes. The flooring in the common areas and toilet rooms are noticeably worn.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a replacement of all finishes and furniture throughout the auxiliary locker rooms with similar basic quality items.

AUXILIARY LOCKER ROOMS

AI 7.0: UMPIRE LOCKER ROOMS

The umpire locker rooms are in good condition but are noticeably dated. The carpet is worn and doors are damaged because of repetitive use.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a replacement of all finishes and wood doors throughout the umpire locker rooms.

UMPIRE LOCKER ROOMS

AI 8.0: TEAM STORE FINISHES AND FF&E

The team store contains mostly original finishes that have become worn, particularly the polished concrete flooring. There are areas where the stained concrete has cracked, though no spalling was observed. Furthermore, furnishings appear to be mostly original, as shown by the stainless steel cash wrap in the photo to the right.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a replacement of all finishes and furnishings for the team store within the first 10 years of the 20-year plan.

RECOMMENDATION: UPGRADE IMPROVEMENT

Consider expanding the team store by a modest amount of square footage to offer greater visibility from the left field entrance.

TEAM STORE FINISHES & FURNISHINGS

AI 9.0: HIT-IT-HERE CAFÉ FINISHES

Hit-it-Here Café finishes are in slightly better condition than those found in similar spaces. This is likely due to the significant investment made in the space in 2001 and its limited utilization by patrons. However, the Consulting Team noticed damaged finishes on the backsplash, wood paneling, and flooring.

RECOMMENDATION: NECESSARY IMPROVEMENT

Implement a modernization of finishes with those of similar quality within the first 10 years of the 20-year plan.

HIT- IT HERE CAFE FINISHES

AI 9.1: HIT-IT-HERE CAFÉ FF&E

Hit-it-Here Café furnishings are basic and appear to be in good condition.

RECOMMENDATION: NECESSARY IMPROVEMENT

In conjunction with AI 9.0, modernize the FF&E throughout the Hit-it-Here Café with items of similar quality.

HIT- IT HERE CAFÉ FURNITURE & SEATING

AI 10.0: ELLIS PAVILION

The Ellis Pavilion is well maintained and reserved for meetings, conferences, and small gatherings. The space recently received incremental upgrades to its finishes and furniture.

RECOMMENDATION: NECESSARY IMPROVEMENT

Implement a programmed modernization of the club finishes and replace the limited amount of furnishings.

RECOMMENDATION: UPGRADE IMPROVEMENT

Consider re-purposing the space into a street-facing brewpub and restaurant. While the space is effective for meetings, it likely does not represent the highest and best us e of this valuable event-level space.

ELLIS PAVILION

AE 1.0: PERIMETER SIDEWALKS

The slab-on-grade concrete has cracked and spalling is prevalent in many locations throughout the site perimeter. This condition, shown in the photo to the right, is also a magnet for collecting and pooling water.

RECOMMENDATION: NECESSARY IMPROVEMENT

The loose concrete should be removed and the cracking should be cleared of loose material and filled. Spalled areas should be replaced using a polymer concrete product.

PERIMETER SIDEWALKS SPALLS

AE 2.0: PERIMETER GATE HARDWARE

Perimeter gate hardware is original and dated from an aesthetic standpoint. Hinges and cane bolts are showing signs of rust that are starting to inhibit functionality.

RECOMMENDATION: NECESSARY IMPROVEMENT

Remove the surface rust, verify the hardware's functionality, and lubricate the hinges. Verify that the cane bolt receivers are present in the slab and that the bolt is operational. Replace any hardware items that no longer function properly.

PERIMETER GATE HARDWARE

AE 3.0: EXTERIOR CONCRETE WALLS

Exterior concrete walls have surface cracking. These cracks appear to be aesthetic in nature. The photos to the right show cracks after recent rain and highlight the likelihood of water intrusion.

RECOMMENDATION: NECESSARY IMPROVEMENT

Monitor cracking and remove any loose material. Fill the cracks that are wider than 1/8" to protect from water intrusion.

AE 4.0: KIDS' ZONE

The current kids' zone is located in center field. The equipment is in fair condition due to incremental improvements made in 2008 and 2009.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace the equipment in the first half of the plan in accordance with its recommended service life of 10 years.

RECOMMENDATION: UPGRADE IMPROVEMENT

Consider relocating the area to the 300-level of the ballpark. Redevelop the space with additional food and beverage options that could serve as an extension to the very popular "'Pen."

PERIMETER CONCRETE WALLS

KID'S ZONE

PA 1.0 & 1.1: PAINTING PROGRAMS

The Mariners have implemented a preventative facility-wide painting program to ensure the steel is protected from corrosion and aesthetic appeal is maintained. Continuation and expansion of the existing plan will be needed to protect previously unaddressed areas. As part of future programs, the retractable roof will need to be addressed as well.

RECOMMENDATION: NECESSARY IMPROVEMENT

Continue and expand the phased painting program over the duration of the plan. Cost estimates for the painting program are provided based on the report completed by WJE in 2011, titled Safeco Field Limited Condition Assessment and Planning Study.

PA 2.0: PERIMETER FENCING

Perimeter security fencing is original and the finish paint is chipped in many areas. The remaining finish is faded and beginning to delaminate.

RECOMMENDATION: NECESSARY IMPROVEMENT

Develop and implement a phased program to repaint the fencing on an as-needed basis. The finish should be properly prepared and all rust and loose material removed. Fill any voids, prime and paint any raw steel with a finish coat to match the exterior.

FADED STRUCTURAL STEEL

RUSTED PERIMETER FENCING

BE 1.0 & 1.1: ROOF MEMBRANES

The Consulting Team was unable to observe the condition of the fixed roof membranes. According to facilities staff, the original membranes are in good condition. However, the recommended service life for these membranes is in the range of 20 to 25 years and it is possible this duration is shorter in Seattle due to annual precipitation totals.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a phased replacement of the roof membranes within the first half of the plan based on best practices and their recommended service lives.

BE 2.0 & 2.1: TWO-STAGE DRAIN

Upper seating edge conditions exhibit signs of excessive seeping of water. This may be a result of drainage issues at the two-tier drains in the upper concourse.

RECOMMENDATION: NECESSARY IMPROVEMENT

Implement a program that methodically verifies that the drains are functioning properly. This would include the removal of concrete around the drains and repair or replacing clogged or malfunctioning drains. Once completed, replace the concrete.

EXAMPLE ROOF MEMBRANE

UPPER SEATING BOWL SEEPAGE

BE 3.0: BLAZING BAGEL LEAKS

The Blazing Bagel shop beneath the southeast pedestrian ramp is shown in the photo to the right. A metal gutter facsimile has been hung from the bottom of the steel beam to collect dripping water. Corrosion of the steel and white efflorescent staining is noted in the area.

RECOMMENDATION: NECESSARY IMPROVEMENT

First, locate and fix the means of water ingress, and then grind or blast remove the rust and efflorescence. Once completed, clean the area, prime surface with rust inhibitive epoxy, and paint to match the existing scheme.

LEAK ABOVE BLAZING BAGELS

BE 4.0: EXPANSION JOINTS

Seating bowl expansion joint covers appear to be in good condition, even though the joints themselves were not visible. Some joint covers appear to be configured in a way that would allow water intrusion.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a phased replacement or refurbishment of all expansion joint assemblies. Correct any cover configurations That allow water seepage.

EXPANSION JOINT ASSEMBLIES

S 1.0: BENT STEEL PLATE

At numerous locations in the ballpark, the Consulting Team observed corrosion of the steel plates that are welded to beams at the edge-of-slab. The flange of the support beam has also started to rust in many locations, similar to the picture to the right.

RECOMMENDATION: NECESSARY IMPROVEMENT

Remove the rust, clean the area, prime with rust-inhibitive epoxy primer, and paint to match the existing scheme.

BENT STEEL PLATE

S 2.0: DECK EDGE CORROSION

A small gap between the concrete slab and the steel edge plate has formed, possibly due to initial shrinkage of concrete. In addition to collecting moisture and dirt, moss is growing in the gap and rust is present. The condition appeared to be a common occurrence at the slab-on-metal deck edges based on the original design. In some areas, the rusting was severe enough that the steel surface was delaminated.

RECOMMENDATION: NECESSARY IMPROVEMENT

The joint between the concrete and steel plate should be routed and cleaned. Remove the rust, clean the area, prime with rust-inhibitive epoxy primer, and paint to match the existing scheme. The joint between the edge of concrete and steel plate should be sealed with caulking material. As a proactive measure, route and caulk all slab edges, even those not exhibiting rust. This will prevent water infiltration, which degrades the condition over time.

DECK EDGE

S 3.0: CRACKED CONCRETE

Water is penetrating into joints around the column bracing due to cracked concrete, which causes the steel to rust.

RECOMMENDATION: NECESSARY IMPROVEMENT

Remove all loose concrete and patch with proper repair mortar. Prior to patching the concrete, inspect the steel for rust damage. Remove the rust from the steel, clean the area, prime with rust inhibitive epoxy primer, and paint to match the existing scheme. Seal the joint between edge of concrete and steel with caulking material.

CRACKED CONCRETE AROUND COLUMNS

S 4.0: OVERHEAD CONCRETE SPALLS

Previous overhead spall repairs were reported at the underside of the upper bowl precast seating units. Based upon limited visual observations from the concourses below, no new spalls or cracked concrete were noted at the underside of the precast seating or the cast-in-place roof runways.

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RECOMMENDATION: NECESSARY IMPROVEMENT

Continuing regular inspections of the underside of the precast upper bowl and the roof runway slabs, and mitigate falling concrete hazards by removing and repairing loose/unsound concrete.

SG 1.0: WAYFINDING SIGNAGE AND GRAPHICS

Wayfinding signage throughout the facility is original and dated. An example of this condition is provided in the photo to the right.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a replacement of all wayfinding signage throughout the facility within the first five years of the plan.

SG 2.0: INTERIOR BRANDING AND SIGNAGE

Much of the interior branding and concession signage is original and, aside from providing a very dated aesthetic appeal, is approaching the end of its recommended service life of 15 to 20 years.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a modernization of the interior branding and signage shortly after the wayfinding signage and graphics.

WAYFINDING SIGNAGE AND GRAPHICS

INTERIOR AND CONCESSION GRAPHICS

SG 2.1: EXTERIOR SIGNAGE

Exterior signage is original and showing wear. As such, it will need to be updated to reflect a more contemporary feel and look.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a modernization of the exterior branding and signage in conjunction with an update to the interior and concession graphics i improvements.

EXTERIOR SIGNAGE

TF 1.0: BATTING CAGE & FINISHES

The field-level batting cage appears to contain mostly original finishes. The athletic flooring and synthetic turf, in particular, will need replacement due to degradation from frequent use.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a replacement of flooring, turf, and the backstop netting system approximately five years into the plan.

BATTING CAGES, FINISHES AND EQUIPMENT

TF 2.0: HYDROTHERAPY EQUIPMENT

The Mariners have been replacing hydrotherapy equipment on an as-needed basis, with the most recent upgrades occurring in 2015. The equipment is in fair condition for its age, but has a recommended service life of five years.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a recurring schedule of hydrotherapy equipment replacements every five years, starting in 2019.

HYDROTHERAPY EQUIPMENT

TF 3.0 & 3.1: HOME CLUBHOUSE MODERNIZATION

Home clubhouse spaces are generally well maintained and in good repair. The lockers and furniture are in adequate condition. Finishes in support spaces (video coaching, laundry rooms, food service) generally exhibit the greatest signs of wear. Although the clubhouse is in adequate condition, the space should be consistently updated to provide a look and feel similar to home Clubhouses elsewhere in MLB.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a complete modernization of the furnishings and finishes in the home clubhouse areas between five and 10 years into the plan.

HOME CLUBHOUSE FF&E

HOME CLUBHOUSE FINISHES

TF 4.0 & 4.1: VISITORS' CLUBHOUSE

The visitors' clubhouse lockers and much of the basic furniture appear to be original. The lockers, in particular, are dated and damaged because of use. The flooring and other finishes appear to be original. The carpet is worn as are other finishes.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a complete modernization of the furnishings and finishes in the visitors' clubhouse areas after the home clubhouse is modernized. The Consulting Team recommends a replacement of the furniture with basic décor and finishes with similar to those applied originally.

VISITORS' CLUBHOUSE FURNITURE

VISITORS' CLUBHOUSE LOCKERS

RR 1.0: RETRACTABLE ROOF BOGIE WHEELS

The retractable roof bogies are wheeled carts that support the weight of the roof and carry the machinery to move the roof.

RECOMMENDATION: NECESSARY IMPROVEMENT

A program is underway to rehabilitate the bogies and modernize axles and wheel bearings. Three phases of a planned eight-phase project have been completed, with the final phase expected to conclude in 2020.

RR 2.0: NORTH RAIL CLIPS

The panel 1 to 3 north rail clip was observed to be migrating to the west. The clips that affix the retractable roof-running rail to the concrete slab of the runways are rubber-nosed Cantrex clips where the rubber is drying out and underperforming.

RECOMMENDATION: NECESSARY IMPROVEMENT

Continue the replacement program started in 2016 for all remaining rail clips.

BOGIE WHEELS

NORTH RAIL

RR 3.0: PROGRAMMABLE LOGIC CONTROLLER

The programmable logic controller (“PLC) is the “brains” of the retractable roof system. The system relies on primarily original hardware and software that were installed in 1999. The current suppliers who support the equipment will likely cease doing so at some point during the 20-year plan.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace the controller with contemporary equipment between the fifth and 10th years of the plan.

RR 4.0: MOTOR DRIVES

The motor drives interpret commands from the PLC and control the flow of electricity to the motors. The drives contain hardware (breakers, relays, motor starters, etc.) that degrade over time. Like the controller, sourcing replacement parts becomes increasingly difficult as manufacturers gradually phase out support. The Mariners have stockpiled replacement parts for the system to the degree practical; however, a full replacement will be needed within the first half of the plan.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace the motor drives within the first 10 years of the plan.

RR 4.0: POWER CABLES

Cables that power the retractable roof roll up on cable reels that are on each roof panel, one on each end of panels 1 and 3, and two on each end of panel 2, for a total of eight cables. Over time, the insulation can break down, resulting in a short circuit. Megger testing can detect when the insulation begins to break down. Once it is demonstrated that the insulation is degrading, the condition accelerates. Note that recent testing has not yet shown any degradation in the insulation.

RECOMMENDATION: NECESSARY IMPROVEMENT

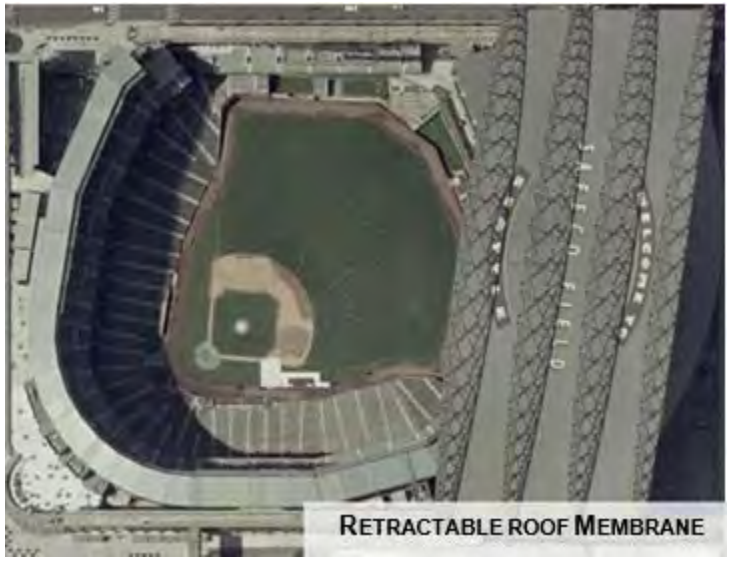
The cables should be replaced at the time of the motor drive replacement to minimize downtime and labor. While the motor drives will need replacement, the quality of the cable insulation is still quite high so it is possible to defer cable replacement.

RR 5.0: ROOF MEMBRANE

The retractable roof membrane is original. The membrane seals the roof and ensures water does not gather or settle in areas. The presence of the membrane ensures that leaks and subsequent maintenance issues are minimized.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a phased replacement of the roof membrane between years eight and ten of the plan.



RETRACTABLE ROOF MEMBRANE

G 1.0: PARKING GARAGE STRIPING

The parking garage striping is beginning to fade in several areas and will need a re-striping in the first half of the plan.

RECOMMENDATION: NECESSARY IMPROVEMENT

Re-stripe the parking garage within five years, depending on funding availability.

G 2.0: PARKING GARAGE WHEEL STOPS

The parking garage wheel stops are beginning to crack in some areas and will need repair or replacement approximately halfway through the 20-year plan.

RECOMMENDATION: NECESSARY IMPROVEMENT

Repair or replace the wheel stops, depending on their condition.

G 3.0: POST-TENSIONED CABLE GROUT POCKETS

Post-tensioned cable-end grout pockets occur at the end of beams and edge of the deck slab. The photo at the right is representative of a beam end condition. The Consulting Team observed several previously repaired grout pockets and others that showed evidence of spider web-like cracking.

RECOMMENDATION: NECESSARY IMPROVEMENT

Continue regular inspections of the grout pockets and, as necessary, remove the unsound concrete that shows evidence of severe cracking or spalling. Repair cable anchorages if necessary and patch grout pockets.

PARKING GARAGE STRIPING

GROUT POCKETS

G 4.0: PARKING GARAGE RENEWAL & REPLACEMENT

The parking garage has historically needed approximately $75,000 annually in capital investments. These investments have included expansion joint repair, signage, and cameras. The garage will likely need similar investments moving forward, most of which are not identifiable at the time of this assessment.

RECOMMENDATION: NECESSARY IMPROVEMENT

Develop a renewal and replacement fund to ensure the garage is maintained consistent with the applicable standard.

FOODSERVICE

Overview

Safeco Field opened in 1999 and much of the foodservice equipment is original. All the equipment is owned by the Mariners and operated by Safeco Field's concessionaire, Centerplate. Overall, the team and operator provide an excellent level of service and wide variety of offerings. However, much of the equipment has outlived its recommended service life. Original equipment includes stoves, ovens, fryers, icemakers, refrigeration, draft beer systems, and menu boards. Two additional factors influencing the need for equipment replacement are shown below.

- The federally mandated elimination of refrigerant (R-22), which cannot be used for new foodservice equipment manufactured after 2017. Existing equipment will be allowed to remain in service, but costs will continue to rise.

- New refrigeration equipment must be capable of holding product at 41 degrees F and older equipment can only hold at slightly warmer temperatures, which is not recommended by code.

Recommendations and observations for equipment exchanges are not provided since the Consulting Team has programmed over 200 such changes for multiple pieces of equipment. Rather, observations outlined herein are focused on changes necessitated by operations and technology evolutions, among other. All necessary foodservice equipment changes are outlined in Exhibit C.

Point of Sale Analysis

An examination of permanent concession points of sale (POS or points) per seat in each seating bowl provides an understanding of how offerings are serving patrons and capitalizing on revenue opportunities. The recommended point of sale ratio for modern ballparks is one permanent POS per 150 seats. Based on experience with similar projects, the Consulting Team utilizes benchmarks of 100 seats per permanent point in premium areas, 125 per permanent point in the 100 level, and 175 per permanent point in the 300 level. Based on these metrics, Safeco Field would benefit from an estimated 75 additional points of sale. As such, adding permanent points of sale with cooking capabilities should be reviewed to enhance additional revenue and better serve patrons.

	100-Level	[2] 200-level	300-Level
Safeco Field POS			
[1] Permanent	135	39	77
Portable	53	2	13
Total Point of Sale	188	41	90
Seat Count	24,330	4,578	14,813
Permanent Ratio	180	112	165
Recommended Ratio	125	100	175
[1] Suggested Permanent POS	195	46	85
[1] Surplus / Shortage (Permanents)	(60)	(7)	(8)

Source: Centerplate
[1] Surplus or shortage is calculated as permanent POS less suggested permanent POS count
[2] Point of sale calculations do not include in-seat service or premium POS

FIGURE 5.2: Concession Point of Sale Analysis

Safeco Field has a comparable number of PAS to peer ballparks. Only Target Field, the newest facility in Figure 5.3, has a permanent ratio that nearly achieves the recommended 1:150 ratio. Peer ballparks have an average of 333 total POS, 232 of which are permanent and the remainder are portable. In contrast, Safeco Field has 331 POS, 263 of which are permanent and 68 are portable.

Vented hoods allow for cooking and preparation of fresh foods. Based on experience with similar projects, an estimated 50% of all permanent concession stands should be vented while new build standards are now approaching 75%. Safeco's current percentage of vented cooking stands is only 37# in the permanent stands, indicating a need in future renovations of foodservice locations to add more cooking capabilities.

Venue	Seat Count	Points of Sale	Permanent	Portable	Permanent Ratio (per seat)
Busch Stadium	46,861	317	242	75	193.6
Yankee Stadium	52,325	444	272	172	192.4
Comerica Park	41,782	334	-	-	-
Petco Park	42,445	298	228	70	186.2
Target Field	39,504	370	260	110	151.9
PNC Park	38,496	279	204	75	188.7
Kauffman Stadium	37,903	281	-	-	-
Nationals Park	41,888	-	190	-	220.5
AT&T Park	41,503	337	225	112	184.5
Average	**42,523**	**333**	**232**	**102**	**183.6**
[1] Safeco Field	***47,400***	***331***	***263***	***68***	***180.2***

Source: Internet research, primary research, venue websites
[1] Point of sale calculations do not include in-seat service

FIGURE 5.3: Peer Facility Concession Benchmarking

FS 1.0: CONCESSION WALLS / FRP PANELS

Centerplate and the Mariners have been proactive in receiving, holding, preparing, and serving food in a safe and sanitary manner. As part of the routine cleaning, floor sinks need to be thoroughly cleaned, though some are rusted and may need to be replaced. As previously mentioned, peeling surfaces were found on walls in the "'Pen," which should not occur around foodservice preparation areas.

RECOMMENDATION: NECESSARY IMPROVEMENT

Fiberglass reinforced panels (FRP) should be installed to provide smooth, cleanable surfaces. Refer to AI 3.0.

FS 2.0: BLAST CHILLERS

King County does not allow raw food preparation at portable carts so Centerplate uses concession stand 105 to cook, chill, and hold foods that are then transported to the portables for serving. Centerplate has converted a standard walk-in cooler in the stand to a blast chiller (rapid cooling) to prevent bacteria growth in these prepared foods. Centerplate also has a smaller reach-in blast chiller in the main kitchen.

RECOMMENDATION: NECESSARY IMPROVEMENT

Add a blast chiller in the suite kitchen, as well as the new upper deck portable commissary that is being recommended.

FS 3.0: PORTABLE REPLACEMENTS

There are 13 food portables and up to 30 beer portables, depending on need. The portables are four years old and are in generally good to excellent shape. The health department is requesting upgrades to the portable hand sinks, which would be accomplished as portables are replaced after their recommended service life of six years. The condiment carts are also portable, and although recently purchased they are starting to show some damage due to constant moving and dents from normal use.

RECOMMENDATION: NECESSARY IMPROVEMENT

Integrate health department-approved hand sinks in all replacement portables.

DENTED CONDIMENT STAND

BLAST CHILLER

FS 4.0: MENU BOARDS

Nearly all menu boards are original and static. Consideration should be given to replacing these with industry-standard LED boards that are easier to read, offer opportunities to more easily add and subtract from the menu, and promote more sales through active pictures of the foods offered. The large photo to the right shows menu boards located in the "'Pen," which demonstrates the contrast between the static and LED menu boards.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace static menu boards throughout the facility in accordance with an overhaul of the signage and graphic package. Refer to SG 2.0.

RECOMMENDATION: UPGRADE IMPROVEMENT

Consider implementation of LED menu boards throughout the facility within the first 10 years of the plan.

DIGITAL MENU BOARDS

MENU BOARDS

MENU BOARD WITH PICTURES

THEMED MENU BOARD

NON-DIGITAL MENU BOARD

FS 5.0: KITCHEN SPACE AND DISHWASHING

The facility has two primary kitchens. The first is the main kitchen, which handles preparation for the Diamond Club, bulk processing, and concessions. The suite kitchen serves the suites, All-Star Club, and catering operations. A third kitchen is located in the Hit-it-Here Café and primarily serves those patronizing the space.

Current dishwashing space and equipment in the two kitchens is insufficient and often inundates the kitchen with excessive heat and moisture when in operation. Due to the heat and steam build up in the kitchens and Hit-it-Here pantry, Centerplate has to prop doors open leading to the club and suite levels, which allows the customers to see into this back-of-house space.

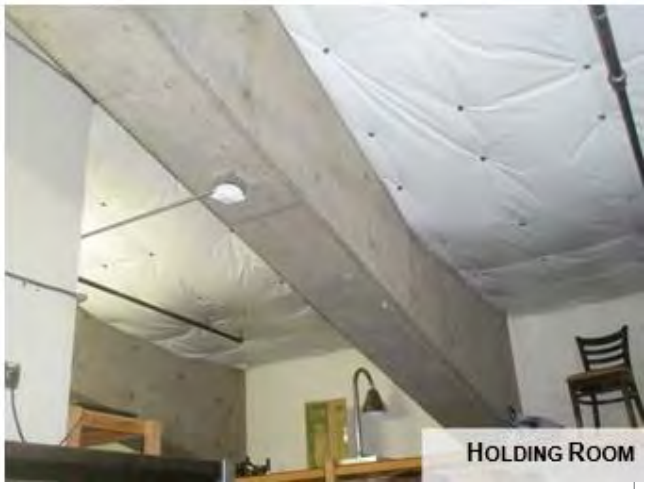
RECOMMENDATION: NECESSARY IMPROVEMENT

Additional dishwashing space should be considered for kitchens. Air conditioning should be considered as well, refer to necessary improvement M 5.0.

RECOMMENDATION: UPGRADE IMPROVEMENT

The Diamond Club is Safeco Field's most exclusive club. Patrons are provided a pre-game buffet and in-seat service throughout the game. There is a small short-order kitchen for in- seat service, but the buffet is cooked in the main kitchen. The main kitchen is located in the opposite corner of the stadium, requiring that food be transported down a freight elevator and around the service corridor to be held in hot boxes. The holding room is in a former storeroom that has exposed ceilings and walls, no running water, and wood shelving that is not conducive to proper preparation. Consider development of an event-level kitchen to better serve Diamond Club patrons.

UNDERSIZED DISHWASHER



HOLDING ROOM

FS 6.0 CABINETRY

The concession stands have millwork back counters that are deteriorating, which is typically due to extensive use and moisture.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace the millwork cabinets with stainless steel cabinetry and tables that are more durable and cleanable.

CABINETS

FS 7.0: INDUCTION WARMERS

The suites may need additional power to convert from the present Stern chafing dishes to the electric induction warmers and heat lamps that are now standard in the industry and present a more professional appearance. Stern and other open flames are illegal in some jurisdictions based on local building codes.

RECOMMENDATION: NECESSARY IMPROVEMENT

Convert all chafers to induction industry-standard induction warmers.

CHAFERS IN SUITES

FS 8.0: CENTRAL CO^2 SYSTEM

The facility does not have a central CO2 system. In its place are individual 20- and 50-pound CO2 canisters that have to be distributed to all sales locations, secured in place, and replaced after use. This system is very labor intensive, the product is more expensive, and, most importantly, the transport and storage of these pressurized tanks can be extremely dangerous due to the hazards of transporting pressurized tanks. While most tanks were secured by a loose hanging chain, some were observed some without any security chain.

CO^2 CANISTERS

RECOMMENDATION: UPGRADE IMPROVEMENT

Review the feasibility of installing six to eight permanent large CO2 tanks secured in a central location. Gas should be piped throughout the stadium to all sales locations to help mitigate this challenge.

FS 9.0: HIT-IT-HERE CAFÉ

The Hit-it-Here Cafe is not properly designed for flow of patrons and staff in a typical restaurant setting. It does not provide an ideal layout for food service as the location of the hot line interferes with the flow of patrons.

TRAFFIC FLOW

RECOMMENDATION: NECESSARY IMPROVEMENT

Extend the service pick-up counter by 6” on the restaurant side and create a slot for serving trays to be set inside. Install a half-height partition wall to keep customers on one side and wait staff on the other. Refer to AI 9.0 and 9.1.

FS 10.0: CASH ROOM EQUIPMENT

Foodservice offices, cash counting, and vault rooms are well appointed and sufficient in size.

RECOMMENDATION: NECESSARY IMPROVEMENT

The cash room equipment, specifically currency counters, needs to be replaced due to age and reoccurring repair costs.

FS 11.0: COOKING HOODS

The ventilation hoods in all of the cooking locations utilize a Gaylord water wash system for cleaning the vapors and smoke from the exhaust. This technology is becoming obsolete, parts are not available and the water wash nozzles are no longer rated to be used in an exhaust hood.

RECOMMENDATION: NECESSARY IMPROVEMENT

Review the feasibility of replacing all ventilation hoods with new ultraviolet ray hoods to reduce smoke and odors.

SB 1.0 & 1.1: LOWER BOWL FIXED SEATING

Seating in the lower bowl is in good repair for its age, especially in consideration of its high usage. The recommended service life of these seats is 20 years, though this timeframe can be extended by an additional five years due to protection from the elements provided by the retractable roof.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace all seat backs and seat bottoms where needed. Implement a phased replacement of the zinc-coated steel anchors with stainless steel anchor bolts.

LOWER BOWL FIXED SEATING

SB 2.0 & 2.1: CLUB-LEVEL FIXED SEATING

Seating on the club level is also in good repair for its age, likely due to the 300-level awning located directly above and comparatively limited utilization by patrons. Similar to the lower-bowl seats, the service life for these seats can likely be extended for an additional five years.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace all seat backs and padded seat bottoms within the first half of the 20-year plan, but after addressing the lower seating bowl. Implement a phased replacement of the zinc-coated steel anchors with stainless steel anchor bolts.

CLUB-LEVEL SEATING AND ANCHORS

SB 3.0 & 3.1: UPPER BOWL FIXED SEATING

Similar to the club level and lower bowl, seating in the upper bowl is in good repair for its age. However, the Consulting Team did observe that railing anchors are beginning to show signs of age and rusting is present on anchors and baseplates.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace all seat backs and plastic seat bottoms in the upper bowl. Implement a phased replacement of the zinc-coated steel anchors with stainless steel anchor bolts. Replacement of all upper bowl railing anchors and refurbishment of baseplates should occur at the same time.

UPPER BOWL SEAT AND RAIL ANCHORS

SB 4.0: CONSTRUCTION JOINTS

Formed construction joints on the club and upper levels are concave and appear to be holding water. Upper bowl expansion joint covers appear to be in good condition. The joints themselves were not visible. Some joint covers appear to be configured in a way that would allow water intrusion.

RECOMMENDATION: NECESSARY IMPROVEMENT

Continue a phased replacement of all club and upper bowl formed joints. Correct any cover configurations that allow water seepage.

CONSTRUCTION JOINTS

SB 5.0: SEATING BOWL SPALLING AND CRACKING

The seating bowl is in good condition. Some spots are showing signs of cracking and some locations exhibit a modest spalling condition. However, there are no obvious structural concerns.

RECOMMENDATION: NECESSARY IMPROVEMENT

Continue established maintenance procedures and develop a plan for addressing spalling and cracking.

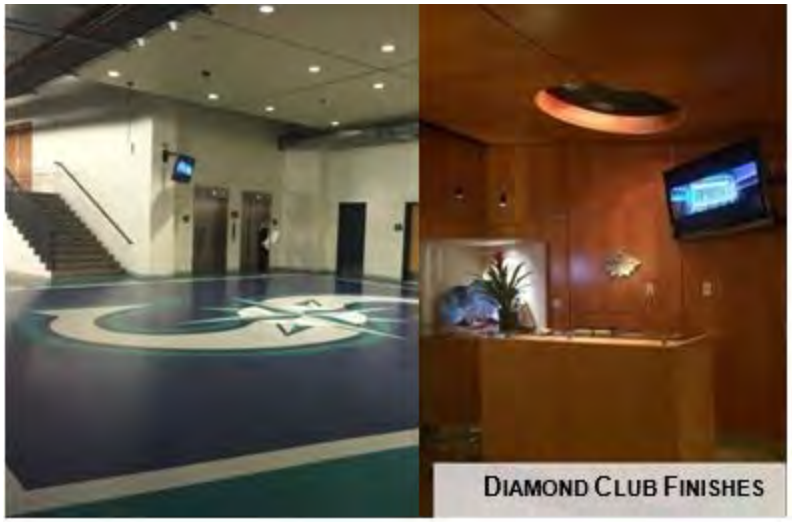
UPPER SEATING BOWL CRACKS

PR 1.0 & 1.1: DIAMOND CLUB FINISHES & FF&E

The Diamond Club serves as Safeco Field's most exclusive club. The club is located on the field level and is accessed by a private entrance located next to the Ellis Pavilion. The space is very well kept, but finishes are beginning to age and delaminate in some spots. The furniture inside the club is basic and should be upgraded to provide a feel commensurate with the associated Ticket price.

RECOMMENDATION: NECESSARY IMPROVEMENT

Implement a programmed modernization of Diamond Club finishes and outfit the space with upgraded furnishings within the first five years of the 20-year plan. The Consulting Team estimates that finishes and FF&E will last eight years, requiring refreshment twice during the 20-year plan.



DIAMOND CLUB FINISHES

DIAMOND CLUB FF&E

PR 2.0 & 2.1: TERRACE CLUB FINISHES & FF&E

The Terrace Club contains over 4,600 seats on the 200 level. Each club seat holder is provided access to adjacent lounge areas on the first- and third-base sides of home plate. The adjacent lounge finishes, such as the flooring and woodwork, are very basic and have an industrial feel. Furniture is a mixture of high-top tables and other basic furniture.

RECOMMENDATION: NECESSARY IMPROVEMENT

Implement a programmed modernization of club finishes and FF&E within the first five years of the plan. The Consulting Team estimates that finishes and FF&E will last 10 years, requiring refreshment twice during the 20-year plan.

RECOMMENDATION: UPGRADE IMPROVEMENT

Consider expanding the third-base side floor plate over the left field entry to add additional, upgraded lounge space. Further detail is provided in Section 8.0, Upgrade Improvement Analysis.

TERRACE CLUB FINISHES

TERRACE CLUB FF&E

PR 3.0 & 3.1: SUITE LEVEL FINISHES & FF&E

The suite level contains over 55 leasable suites, eight group suites, and a limited number of suites reserved for team and ownership use. The suites examined have mostly original furnishings that are dated from an aesthetic standpoint. The Consulting Team also observed that upholstery and operable partitions are worn in many places, while wood is chipped and scratched.

RECOMMENDATION: UPGRADE IMPROVEMENT

Program a phased modernization of the suite level, including the suite corridor and individual units. The Consulting Team estimates that finishes and FF&E will last eight years, requiring refreshment twice during the 20-year plan.

SUITE LEVEL FURNISHINGS

SUITE CORRIDOR AND FINISHES

MECHANICAL

Overview

The mechanical systems in the ballpark have been well maintained and are in good working order. The facilities personnel employ a very good preventative maintenance plan and have been proactively addressing potential problems. Equipment and system obsolescence and end of service life concerns are the most pressing issues. Future ballpark improvements could potentially place a greater strain on the existing infrastructure, requiring a better understanding of existing capacity and distribution systems. Potential engineering upgrades or modifications to a limited number of systems (i.e., the existing tempered water distribution loop) are worth exploring to improve the patron experience.

↘ M 1.0: CONDENSER WATER SYSTEMS

Three cooling towers produce condenser water for the water source heat pump loop. There are two 400-ton (nominal) and one 200-ton (nominal) towers. The towers have been upgraded recently and are in good operational condition. Most of the major equipment in the condenser water system is equipped with variable speed drives to optimize energy efficiency.

Facilities personnel reported that the condenser water systems have adequate capacity. They have a standard operating procedure to help maintain system capacity during event days and are actively shedding and managing plant capacity. There are concerns that future facility upgrades may tax the existing cooling tower capacity.

↘ RECOMMENDATION: UPGRADE IMPROVEMENT

Replace the cooling towers within the first 10 years of the plan in accordance with its recommended service life. A study of the plant operating capacity is recommended if future load is added to the system.

M 2.0: WATER DISTRIBUTION PUMPS

The condenser water distribution systems consist of plate and frame heat exchangers between the condenser water loop and the open cooling tower loop, system pumps, and distribution piping. The pumping system is an N+1 design (redundant pumping system), and staff indicated that at times they have run all pumps simultaneously to maintain system pressure.

RECOMMENDATION: NECESSARY IMPROVEMENT

As part of the study recommended in M1.0, the distribution system should be analyzed for future capacity. Replacement of the pumps will be needed within the next five years.

CONDENSER WATER PUMPS

M 3.0: HEAT PUMPS

Condenser water systems serve a combination of central station and distributed heat pumps. All heat pumps currently use R-22 as the refrigerant, which is being phased out, and facility personnel report concerns about refrigerant leaks. They also noted that the office areas can struggle to maintain temperature control. Generally, the heat pumps have performed well and are being replaced or re-built as they fail. However, distributed heat pumps are mostly original and have a recommended service life of 15 to 20 years.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a phased replacement of heat pumps over the first half of the 20-year plan.

HEAT PUMP SYSTEM

M 4.0: BUILDING AUTOMATION SYSTEM

The Building Automation System (BAS) is a Johnson Controls Metasys platform. Facilities personnel indicated that most systems are connected to the BAS; however, not all sub- systems are adequately metered for diagnostics or consumption.

RECOMMENDATION: NECESSARY IMPROVEMENT

The system should continue to be upgraded and expanded over time to maximize efficiency. As sub-systems are replaced, rebuilt, or reconfigured, the control side of the device should be evaluated and BAS integration included.

M 5.0: KITCHEN AIR CONDITIONING

Kitchens are inundated with excessive heat and moisture when in operation. Mechanical and ventilation systems should be reconfigured to mitigate the excessive heat and humidity loads generated from dishwashing.

RECOMMENDATION: NECESSARY IMPROVEMENT

Add air conditioning in the suite and Hit-it-Here Café kitchens to address excessive heat and humidity within the first three years of the plan. Air conditioning is being added to the main kitchen in 2016 capital improvement plans.

M 6.0: MECHANICAL REPLACEMENT & RENEWAL

Several mechanical components and sub-systems will need annual replacement and refurbishment. This includes items such as hydronic water piping, louver screening, fan systems, and terminal units, among others.

RECOMMENDATION: NECESSARY IMPROVEMENT

Develop an annual replacement and renewal program to address component failure and equipment replacement based on historical levels of investment.

ELECTRICAL

Overview

The ballpark electrical system is reliable due to two incoming utility services that are connected to an automatic throw-over switch that will energize the system should one of the incoming services feeders fail. In addition, the ballpark has back-up generation for the life safety systems. The area of concern on the power distribution is the limited power in the outfield and the long distance required to add major power to the first base (south) side of the facility due to the main electrical rooms existing on the east and west sides of the ballpark. An improvement to rectify this condition is contained in the upgrade improvements matrix.

The stadium's general building lighting and sports lighting are in good condition. However, certain areas such as the main concourse, parts of the suite corridor, and garage were observed to be below recommended illumination levels. The lighting control system is in fair condition but with the manufacturer no longer in business and support of this system dwindling, replacement of this system will need to be considered.

↘ E1.0 & 1.1: LIGHTING AND LIGHTING CONTROLS

The interior public area lighting, such as the concourses, concessions, and public restrooms, are mostly lit with metal halide and fluorescent fixtures. The club, suites, and adjacent lounge areas are illuminated with fluorescent fixtures, downlights, and adjustable LED fixtures. In all areas, the light fixtures appear to be working properly and are energy efficient.

The main concourse level and parking garage lighting is low and LED fixtures should be implemented to increase the light levels. In areas of the suite corridor that are not open to the club below, light levels are low, but can be improved by illuminated artwork.

Lighting control at the ballpark is performed with switchable breakers and local switches that interface with the control system. The control system is independent of the building automation system and becoming obsolete.

↘ RECOMMENDATION: NECESSARY IMPROVEMENT

Review upgrading the lighting on the main concourse and in the parking garage with LED fixtures. In conjunction, upgrade the building lighting control system (excluding the sports lights) so it is compatible with the BAS for more efficient consumption.

CONCOURSE LIGHTING

E 2.0 & 2.1: POWER DISTRIBUTION

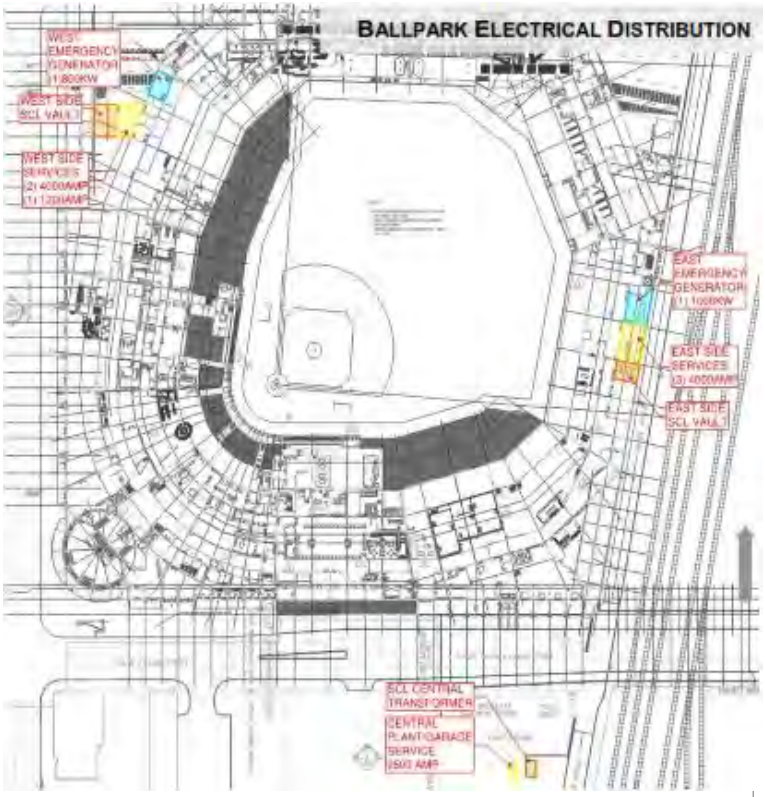
The existing ballpark has three major 480V services from Seattle City Light (SCL). The main services are the west vault, east vault, and central plant. The central plant also has two incoming 27k volt feeders from the utility that feed the vaults and the central plant transformer. The utility system dual source configuration provides the means to automatically switch to alternate source and re-energize the 480V vaults and transformers should a failure occur on the utility feeder.

The ballpark has seven 480V services. Six of these services are connected to the ballpark vaults on the east and west sides. The other service is connected to a pad-mounted transformer next to the central plant. The central plant transformer services a 2500 amp switchboard that feeds both the plant and parking garage loads. Each vault within the ballpark has three 480V services that it handles. The east vault feeds three 4000 amp services, the west vault feeds two 4000 amp services and a 1200 amp service for retail. Each 4000 amp service distributes 480/277volt power to lighting, mechanical equipment, and 208V step down transformers, which in turn serve receptacles and food service equipment. One of the east side 4000 amp services is dedicated to the scoreboard and roof motor loads.

The total distribution transformation capacity on the 480V system is approximately 19,500k VA. Based on the current peak load readings, the system should have plenty of growth capacity for future renovations. The seven 480V main services are monitored by a Siemens 4700 power monitoring system. This system is starting to fail and should be upgraded in the near future.

RECOMMENDATION: UPGRADE IMPROVEMENT

Future modifications should consider providing additional show and distribution power in the outfield. In addition, the central plant service will need to be upgraded in the future to handle the increased broadcast loads and potential new loads on the south side of the ballpark.



E3.0: ELECTRICAL RENEWAL AND REPLACEMENT

Similar to mechanical systems, several electrical systems will need replacement and/or refurbishment. They include switchboards, panelboards, generators, and wiring, among others.

RECOMMENDATION: UPGRADE IMPROVEMENT

Develop a replacement and renewal fund to address component failure and equipment replacement based on historical levels of investment reflected in the baseline improvements matrix.

P1.0: SANITARY SYSTEMS

The ballpark is served by multiple sanitary services that exit below the field level. Three duplex sewage ejector pumps appear to pump a majority of the sanitary waste. Facility personnel did not indicate any concerns with the system as a whole.

Remote concessions are provided with individual slab-recessed grease traps. Grease traps are beginning to fail throughout the ballpark. Additionally, many of the traps are not provided with cleanouts. Some of the concession floor sinks are failing, due to discharge from the soda machines.

RECOMMENDATION: UPGRADE IMPROVEMENT

Replace the grease traps as they fail and re-pipe to include proper cleanouts. Replace concession stand floor sinks as needed and verify the integrity of the cast iron piping.

EJECTOR PIT

P2.0: Water Heating System

The hydronic heating boiler plant consists of a primary-secondary hot water system. Hot water is generated via five 2,000 MBH condensing Aerco Benchmark boilers. Facility personnel indicated that the boiler plant is under-utilized and has ample spare capacity. They indicated that the current piping configuration leads to a sub-optimal operation of the boiler plant.

RECOMMENDATION: UPGRADE IMPROVEMENT

An engineering review of the current boiler-piping scheme is suggested in order to optimize the boiler operations. Boiler replacement will be needed approximately halfway through the 20-year plan.

P3.0: DOMESTIC WATER

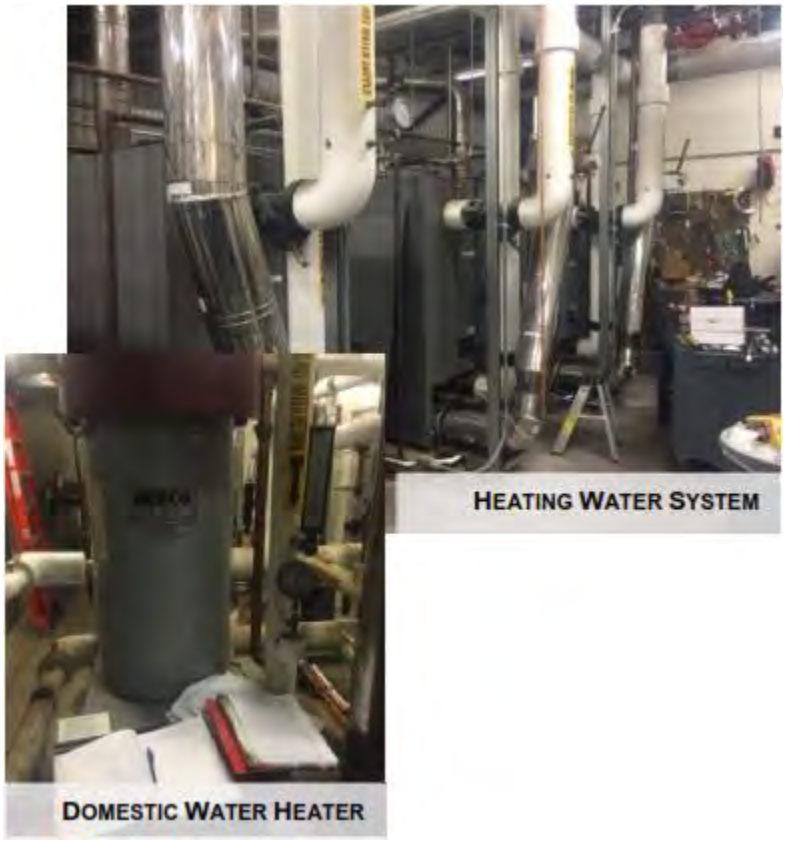
Centralized domestic hot water is produced via six 1,000 CFH domestic water heaters. Several of the heaters were replaced, while others are scheduled for future replacement. The domestic hot water loop is not continuous on the field level and does not extend throughout the upper levels of the park. Distributed water heaters on upper levels of the ballpark are failing and being replaced on an as-needed basis. Facilities personnel noted that wait times for hot water can be longer than desired and the re-circulation loop does not perform as intended.

A tempered water loop is also provided for public restrooms. At times, the tempered loop does not provide consistent water temperature. A dedicated seating area hydrant system is also provided to allow staff to operate pressure-washing equipment.

RECOMMENDATION: NECESSARY IMPROVEMENT

Continue to replace domestic water heaters in the central plant. Examine the feasibility of completing the domestic hot water loop on the field level, which may allow some of the remote areas of the ballpark to be connected to the central loop and discontinue the need for some distributed hot water heaters.

Perform an engineering evaluation on the domestic water re-circulation loop and the tempered water loop. Both loops should be rebalanced. Since complete winter drain-down is not possible in some restrooms, additional piping or some re-piping will need to be investigated.



HEATING WATER SYSTEM

DOMESTIC WATER HEATER

P4.0: PLUMBING RENEWAL AND REPLACEMENT

Plumbing components and sub-systems will need replacement throughout the duration of the plan, including piping for water, gas, and circulation, and replacement of fixtures and fire protection equipment.

RECOMMENDATION: NECESSARY IMPROVEMENT

Develop a replacement and renewal plan to address component failure and equipment replacement based on historic levels of investment.

BALLPARK PIPING

PLAYING FIELD

Some portions of the playing field systems are original to the facility. Since many of the supporting systems cannot be observed, the Consulting Team relied on subject matter expert interviews regarding the system's functionality and previous investments made in the baseline matrix to develop recommendations.

PF 1.0: PLAYING FIELD SOD

The playing field is primarily Kentucky bluegrass with some rye. The mixtures of turf need different maintenance and are difficult to maintain in a uniform fashion.

RECOMMENDATION: NECESSARY IMPROVEMENT

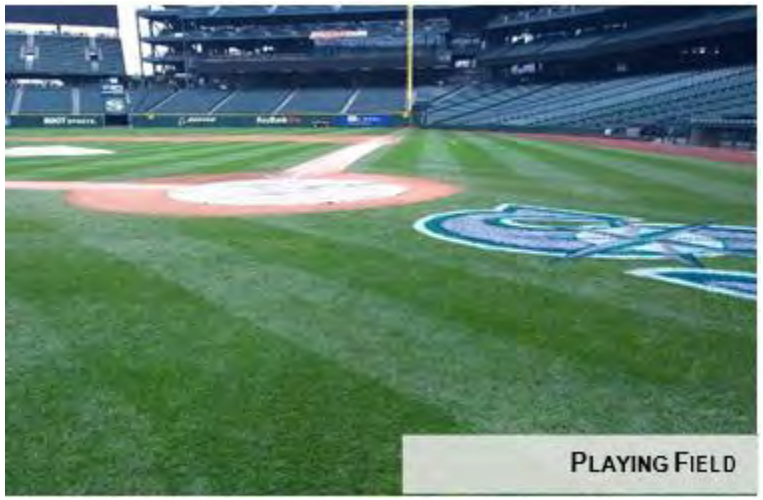
Program a replacement of the playing surface within the first five years of the plan with one type of surface.

PF 1.1: SURFACE HEATING SYSTEM

The existing field heating system has not been able to be fully optimized due to varying lighting conditions that produce shadows on the field. Facilities personnel also indicated concerns with slow, limited leaking of this system that will need further investigation.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace and rezone the system in conjunction with the replacement of the playing surface.



PF 1.2: SUB AIR SYSTEM

An existing "Sub Air" system is utilized to dry, drain, and aerate the field. Facilities personnel did not report any concern with the system.

RECOMMENDATION: NECESSARY IMPROVEMENT

The system should be replaced and remodeled in conjunction with PF 1.0 and 1.1 as it reaches the end of its recommended service life, estimated at 20 years.

PF 1.3: IRRIGATION SYSTEM

Zoning of the irrigation system is not ideal for maintenance of the playing field and will need to be evaluated for replacement within the 20-year plan.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace the irrigation system in conjunction with improvements PF 1.0, 1.1, and 1.2.

PF 1.4: PERIMETER DRAINAGE

Perimeter field drains do not properly drain and allows for the ponding of water along the outfield wall during large storms.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace the perimeter field drains with a modern system in conjunction with PFs 1.0 through 1.3.

PF 2.0: WALL PADS

Outfield wall pads are in good condition. The Mariners employ a contractor to make repairs and wrap the pads on an as-needed basis.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace the wall pads in accordance with their recommended service life of 10 years.

VERTICAL TRANSPORTATION SYSTEMS

Vertical transportation systems are presently maintained by the Mariners through a service contractor. The facility contains 12 elevators, 11 escalators, and six ADA lifts. All systems are in good repair and included under the maintenance plan. The greatest area of recent investment has been in escalator step chains. In subject matter expert interviews, it was revealed that manufacturer support for the various systems will be available for approximately 10 more years. As such, the Consulting Team has identified a limited number of necessary improvements to prevent the systems from reaching a point of functional obsolescence.

V 1.0 & 1.1: ELEVATOR MODERNIZATIONS

Elevators are presently in good repair but will need modernization approximately half-way through the plan as manufacturers phase out support.

RECOMMENDATION: NECESSARY IMPROVEMENT

Modernize elevators with contemporary equipment to maintain reliability. Elevators 1, 10, G1, and G2 have previously received investment and will need a comparatively lower level of investment.

V 2.0: ESCALATOR STEPS

Escalator steps are in fair condition and will need continued maintenance and replacement as they become chipped and damaged from use.

RECOMMENDATION: NECESSARY IMPROVEMENT

Program a replacement of the escalator steps approximately mid-way through the plan.

V 3.0: ELEVATORS 7 AND 8

Although not designated for freight use, elevators seven and eight are utilized by operations personnel for transporting items to all levels of the ballpark. The condition of these elevators is fair to poor because of their high utilization.

RECOMMENDATION: NECESSARY IMPROVEMENT

Consider repurposing these elevators for freight use only. Doors should be reconfigured for freight usage to reduce wear and tear.

T 1.0: SOUND REINFORCEMENT SYSTEMS

Sound reinforcement systems are well cared for, but dated. A need for new amplifiers will likely drive a replacement of digital-signal processing. Outdoor speaker cabinets are reaching the end of their recommended service lives, thereby requiring replacement around 2020.

RECOMMENDATION: NECESSARY IMPROVEMENT

The in-bowl sound reinforcement systems will need to be completely replaced within the first five years of the plan.

T 2.0, 2.1, & 2.2: VIDEO DISPLAY SYSTEMS

The out-of-town video display was installed in 2010, while the LED fascia displays were installed in 2011. The main video display, seen to the right, was installed in 2013. The reasonable life expectancy for these technologies is 10 years from the date of purchase. New display technologies will inevitably require greater power distribution from the facility.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace each display system according to its estimated 10-year lifecycle.

SOUND REINFORCEMENT SYSTEM

MAIN VIDEO DISPLAY

T 3.0: PRODUCTION SYSTEM

In-game video production systems are 1080p HDTV compliant/capable and in excellent condition. They can accommodate a very light complement of 4K acquisition and recording equipment, but current production system infrastructure will not enable a full turnover to 4K.

RECOMMENDATION: NECESSARY IMPROVEMENT

In-game video production systems and infrastructure should be replaced in their entirety at such time that demand (Root Sports Broadcasting or MLB), common equipment availability, and reasonable cost intersect. This should be considered in the first 5 years of the plan.

T 4.0: SECURITY CAMERAS

Replacement of analog security cameras with digital systems is under way. Outfitting the main seating bowl camera replacement with fixed cameras (as opposed to pan-tilt-zoom style), covering all seating at all times, is ongoing.

RECOMMENDATION: NECESSARY IMPROVEMENT

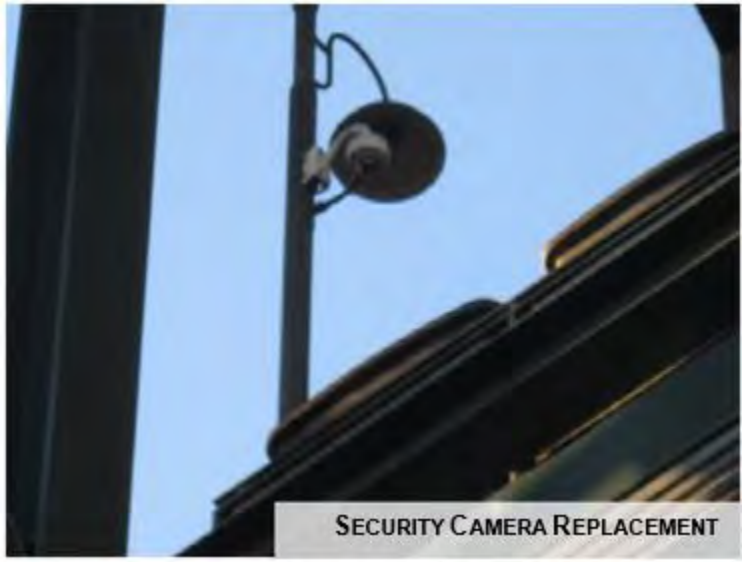
New security camera systems are budgeted in the 2016 capital improvement plan. Deployment of these systems relies upon the incremental upgrades being made to the facility's data infrastructure in the form of adjustments to terminal equipment.

T 5.0: DIGITAL ACCESS

Replacement of keyed entry points with digital access systems would improve staff functionality, facilitate better staff movement through the facility, and increase security and control. The last facility "re-key" was performed 2005-06.

RECOMMENDATION: NECESSARY IMPROVEMENT

Doors are presently being retrofitted for better game day staff movement through the facility and overall visibility on access within the building.



SECURITY CAMERA REPLACEMENT

T 6.0: MOBILE RADIO SYSTEMS

RF mobile radio systems used for all facets of game day operations are analog. The existing analog system presents potential failure points that can disable any one of seven key points of game day communication. (Security, Events, and Guest Services are key examples.)

RECOMMENDATION: NECESSARY IMPROVEMENT

Review the feasibility of replacing current equipment with a digital system with increased channel count within the first five years of the plan.

T 7.0 & 7.1: POINT OF SALE SYSTEM

The point of sale system is a five-year old Micros 9700 platform. This system is widely utilized throughout public venues. Micros will support this software for another five years; however, current regulations require merchants to accept chip-embedded credit and debit cards, which the current registers cannot. Failure to use the chip readers, which may eventually add the personal identification number (PIN) requirement, transfers the burden of invalid card usage from the bank to the merchant.

In addition to mandated issues such as the chip readers, point of sale systems should allow value-added tickets to be integrated with CRM software. The selected point of sale system should have the capabilities to handle the new software demands.

RECOMMENDATION: NECESSARY IMPROVEMENT

Replace the point of sale system in 2021 in accordance with the system's estimated 5- to 10-year service life.

RECOMMENDATION: NECESSARY IMPROVEMENT

Chip readers should be added to the current registers if deemed necessary.

T 8.0: VIDEO COACHING SYSTEMS

Video coaching analysis hardware and field cameras are high definition capable, but limited to four capture angles (BATS System). Cameras are SDI signal-based and only one is IP-based.

RECOMMENDATION: NECESSARY IMPROVEMENT

Migration of field cameras and associated cabling and hardware to IP-based HD systems should be completed. STATS System is cloud-based and would provide the Mariners with better mobility. Systems and associated infrastructure will need to be upgraded to 4K equipment by 2020, at the latest.

IN 1.0 & 1.1: UNINTERRUPTIBLE POWER SUPPLY

Uninterruptible power supply ("UPS") systems for both data and sound reinforcement are well maintained, but this is originally installed equipment that will become unreliable over time.

RECOMMENDATION: NECESSARY IMPROVEMENT

UPS systems and batteries should be replaced within the next five years as needed. These devices provide bridge power switchover to generator power for both the IP-based security camera system as well as the seating bowl sound system, which is required for emergency response.

UNINTERRUPTIBLE POWER SUPPLIES

IN 2.0: DISTRIBUTED TELEVISION SYSTEMS

The distributed television systems, both TVs and facility cable infrastructure, are dated but operable and sufficient for current intended use.

RECOMMENDATION: NECESSARY IMPROVEMENT

Expectations for viewing (4K broadcasting; flexibility for ad, menu, and wayfinding, etc.) will eventually drive a change to IP delivery and associated systems.

DISTRIBUTED TELEVISION SYSTEM

IN 3.0 & 3.1: BROADCAST CABLE INFRASTRUCTURE

The broadcast cabling infrastructure is as originally installed and needs significant overhaul. Coax video cabling is obsolete and its presence in the facility will hinder the implementation of new technologies in the near future.

RECOMMENDATION: NECESSARY IMPROVEMENT

Coax video cabling will need to be replaced with fiber optic cabling. Triax camera cabling will need to be reduced and supplemented with new SMPTE camera cabling to all current broadcast enclosures. Root Sports has identified additional desired camera and announcer locations for modern broadcast coverage. Recommend completion of this improvement during the first five years of the plan.

IN 4.0: CRUSHED PATHWAY

Broadcast cabling pathways under the driveway of the truck dock are reportedly crushed. Cable infrastructure additions are being accommodated through use of large conduit mounted to walls of by the player access to the ballpark (from the parking garage).

RECOMMENDATION: NECESSARY IMPROVEMENT

This pathway to the ballpark should be excavated, investigated, and renovated in conjunction with any cabling infrastructure renovations.

BROADCAST CABLING OBSOLESCENCE

BROADCAST TRUCK DOCK CABLE PATH

IN 5.0, 5.1, & 5.2: FACILITY DATA CABLING AND EQUIPMENT

Facility data cabling infrastructure is original to the ballpark.

RECOMMENDATION: NECESSARY IMPROVEMENT

Fiber cabling will be needed from minimum point of entry ("MPOE") from the data center to the data closets. Copper cabling between data closets and access points will need to be replaced within the next five years to accommodate new technologies. This improvement will need to include additional remote data enclosures to allow broader access distribution and data terminal equipment for the entire system.

IN 6.0: EXTERIOR PRODUCTION

Within 10 years, it is possible network broadcast production will no longer occur in trucks localized to the venue on day of game. Utilization of diverse path terrestrial fiber connectivity to remote, centralized network production facilities is likely to take place. This change may be as close as Root Sports Northwest in Bellevue or cross country.

RECOMMENDATION: UPGRADE IMPROVEMENT

"First mile" connectivity out of the ballpark will eventually need to be negotiated with local network/phone providers. An analysis of bandwidth, speed, and quality of service requirements will need to be made in advance and existing vs. required fiber optic cabling quantities would be assessed at that time.

DATA CABLING

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6.0

Patron Survey

6.0 – SURVEY ANALYSIS

OBJECTIVES

The Consulting Team conducted an Internet-based survey to understand patron attitudes with regard to the physical configurations of Safeco Field and the surrounding neighborhood. The analysis is divided into three categories: (1) the patron experience prior to the game (2) the experience once inside the ballpark; and (3) perceptions of the neighborhood surrounding Safeco Field. The survey does not examine pricing or marketing strategies. The findings from the survey are utilized to inform both the necessary and upgrade improvement matrices.

METHODOLOGY

The Consulting Team developed the survey instrument with review and approval by both the Mariners and PFD. The survey was administered by the Mariners through a third party, available for completion for two weeks, and distributed via e-mail to season ticketholders and those who purchased single game tickets. These groups were surveyed due to their familiarity with the ballpark. The survey was completed by nearly 4,000 individuals and has a margin of error of approximately two percent (2%) at a 95% confidence interval. Detailed results from the survey follow.

Respondent Composition

Understanding the location from where patrons originate provides useful context. Over half of all respondents (57%) reside outside of King County. The remaining respondents live in the city (18%) or elsewhere in the county (25%).

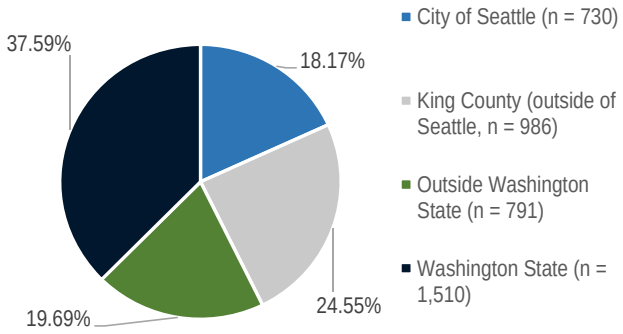

FIGURE 6.1: Respondent Location

In the most recent year, approximately 75% of respondents purchased single game tickets, while remaining respondents purchased season tickets. Respondents who live in the city or county, the two most proximate jurisdictions to the ballpark, had the highest percentages of respondents who purchased season tickets in the most recent year (39% and 36%, respectively).

Season Ticketholder	City of Seattle		King County (outside of Seattle)		Outside Washington State		Washington State (outside King County)	
No	438	61%	621	64%	765	97%	1,211	81%
Yes	282	39%	356	36%	21	3%	290	19%

FIGURE 6.2: Season Ticket by Location

Prior to the Game

Survey respondents were asked how they get to Safeco Field. Respondents were given the options of driving, utilizing public transportation, biking, or walking from work or home. Overall, nearly three-quarters (73%) of respondents reported they drive to the ballpark. Most of the remaining respondents (20%) use public transportation.

FIGURE 6.3: Method of Transportation

Respondents were asked to indicate their level of satisfaction with parking availability proximate to the ballpark. Only half of respondents indicated they were satisfied or very satisfied. In comparison to satisfaction levels with other components of the ballpark experience (overwhelmingly positive), satisfaction with parking is clearly lagging.

Respondents were asked to indicate why they do not attend additional Mariners' home games. The vast majority of respondents (68%) indicated they live too far away. Those who did not cite distance, a problem that cannot be rectified, cited traffic (77%, n = 558) as the most common reason they do not attend additional home games. The other reasons why patrons do not attend additional games is shown in Figure 6.4.

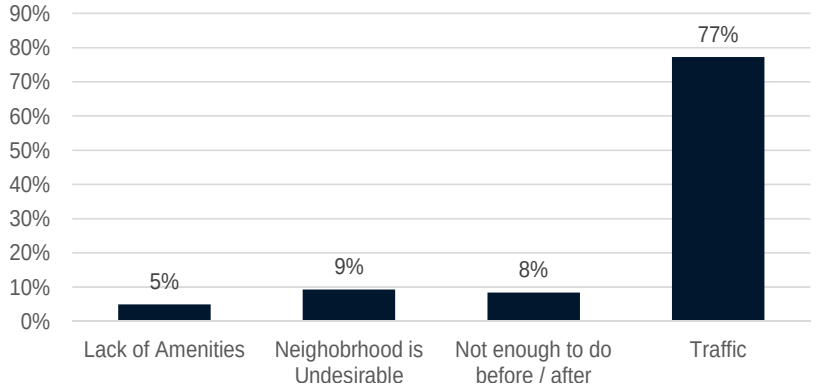

FIGURE 6.4: Reasons for Not Attending Additional Games

Inside the Ballpark

Respondents were asked to indicate which entrance to the ballpark they utilize. The home plate gate (35%) was the most popular entrance, followed by left and right field gates at 19% and 13%, respectively.

Entrance Utilized	Count (n = 3,104)	Percent
Center Field Gate	329	11%
Club Skybridge	215	7%
Home Plate Gate	1,073	35%
Left Field Gate	604	19%
Right Field Gate	400	13%
Suite Skybridge	21	1%
The 'Pen Gate	276	9%
Third Base Entry	186	6%

FIGURE 6.5: Entrance Utilized

Respondents were also asked to indicate their level of satisfaction with the convenience of reaching their seats. Nearly all respondents (91%) indicated they were satisfied or very satisfied. Levels of satisfaction were also found to be consistent across all points of entry. When asked what amenities could improve the experience in accessing their seats, 32% of respondents indicated additional food options, 29% cited "other" various amenities, and 19% indicated additional restrooms.

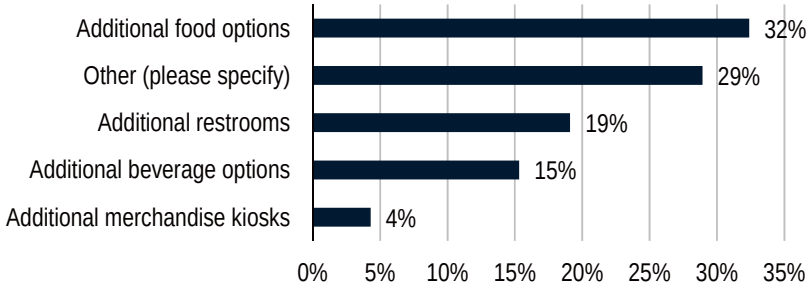

FIGURE 6.6: Additional Amenities to Improve Convenience of Getting to/from Seat

The Consulting Team also examined which amenities would improve the fan experience by entrance utilized. Key findings included:

- ✓ Nearly half (43%) of respondents utilizing the club skybridge indicated the need for additional food options. These findings are consistent with the Consulting Team's professional opinion that food options on the club level are very limited in comparison to other spaces in the building.

- ✓ One-third of respondents who utilize the home plate gate indicated additional food options would improve the experience. Further, 22% of respondents indicated additional restrooms would improve the experience.

- ✓ Over 30% of respondents who enter via left or right field gates indicated additional food options would improve the experience of accessing their seats.

- ✓ Besides additional food options, interest in additional points of sale for beverages was low for all gates. Interest was highest (18%) among those who utilize the left field gate, presumably due to the high composition of young adults using the gate to patronize the "'Pen."

- ✓ Six percent (6%) of respondents who utilize the right field gates indicated that additional merchandise kiosks would improve their experience. The right field gate was the only one that had more than 5% of respondents indicating additional merchandise points of sale would improve the experience.

Over 70% of respondents indicated the existing team store and kiosks provide sufficient opportunity to purchase merchandise. Just nine percent (9%) indicated they do not offer sufficient opportunity.

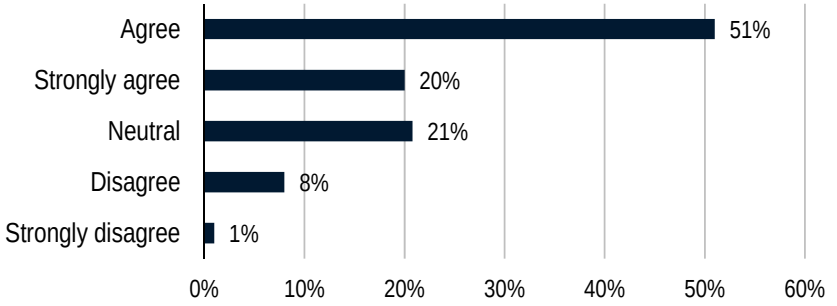

FIGURE 6.7: Satisfaction with Opportunity to Purchase Merchandise

Respondents were asked about their satisfaction levels with regard to food and beverage variety, quality, and wait times in comparison to regional venues. Key findings included:

- ✓ Nearly all patrons (95%) indicated that **food and beverage variety** is similar to or better than what is provided at other regional venues. These results confirm the Consulting Team's professional opinion that Safeco Field offers a wider variety of offerings compared to many peer MLB parks.

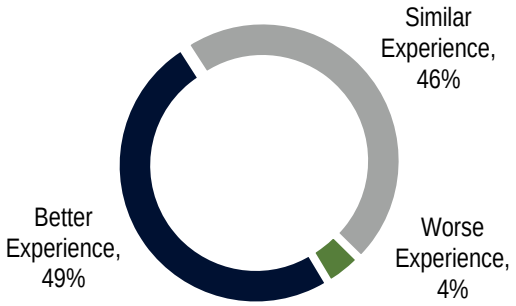

FIGURE 6.8: Food and Beverage Variety Compared to Other Regional Venues

- ✓ Ninety-five percent (95%) of respondents also indicated that **food and beverage quality** was similar to or better than other regional venues. In comparison to variety, however, the "better experience" response dropped to 41%.

- ✓ Respondents thought **food and beverage wait times** were similar to those found at venues elsewhere in the region. Only 24% believe the wait times are better. As shown in the assessment, the point of sale ratios at Safeco Field are below recommended ratios to deliver the best patron experience.

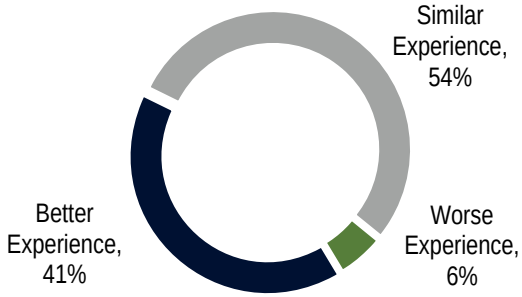

FIGURE 6.9: Food and Beverage Quality Compared to Other Regional Venues

FIGURE 6.10: Food and Beverage Wait Times Compared to Other Regional Venues

The Consulting team further examined attitudes with regard to food and beverage variety, quality, and wait times by ticket price. Only those who purchased season tickets were included since respondents who purchase single game tickets frequently move up or down levels. No respondent indicated the All-Star Club experience was lagging behind other regional venues. The Diamond Club, in comparison to other venues, logically

offers a superior experience. Season ticketholders in the 300 level had a comparatively lower level of satisfaction with regard to variety and quality in relation to other levels. Just seven percent (7%) of respondents indicated wait times were worse as the level is least frequently utilized by patrons

All but 93 respondents (2.3%) indicated they considered the physical configuration of Safeco Field as "family friendly." Furthermore, respondents who utilize the existing children's area either frequently or occasionally indicated a high level of satisfaction. Nearly 80% of respondents indicated they are either satisfied or very satisfied with the experience. Respondents and patrons clearly consider the existing configuration of Safeco Field to be very conducive to family visits.

Respondents who purchase season tickets were also asked to indicate their satisfaction with restroom availability on the level they most often purchase tickets. Respondents were overwhelmingly satisfied or very satisfied.

Level	Very Dissatisfied	Dissatisifed	Neutral	Satisfied	Very Satisfied
All-Star Club	0%	0%	3%	28%	69%
Club (200) Level	0%	0%	4%	40%	57%
Diamond Club	0%	11%	5%	37%	47%
Left Field Bleachers	0%	12%	12%	58%	19%
Main (100) Level	1%	3%	13%	58%	25%
View (300) Level	0%	1%	11%	48%	40%

FIGURE 6.12: Satisfaction with Restroom Availability

Seat Location	Variety (n = 929)		
	Better	Similar	Worse
All-Star Club	75%	25%	0%
Terrace Club	49%	44%	7%
Diamond Club	82%	12%	6%
Left Field Bleachers	53%	41%	6%
100-Level	51%	44%	5%
300-Level	43%	46%	11%
	Quality (n = 929)		
	Better	Similar	Worse
All-Star Club	71%	29%	0%
Terrace Club	44%	47%	9%
Diamond Club	67%	28%	6%
Left Field Bleachers	43%	51%	6%
100-Level	41%	53%	6%
300-Level	36%	51%	13%
	Wait Times (n = 929)		
	Better	Similar	Worse
All-Star Club	65%	35%	0%
Terrace Club	31%	57%	12%
Diamond Club	56%	22%	22%
Left Field Bleachers	18%	71%	12%
100-Level	23%	66%	11%
300-Level	25%	68%	7%

FIGURE 6.11: Food and Beverage Satisfaction Metrics by Level

Respondents were also asked to indicate their favorite physical characteristic of Safeco Field. The most popular responses were the retractable roof, views of downtown, the main videoboard, and food and beverage options. Although parking and traffic are not physical features, respondents most often cited these factors as their least favorite. Many

respondents left the free-form text box blank or indicated they did not have a “least favorite” physical characteristic of Safeco Field.

Outside Safeco Field

Survey respondents were also asked questions regarding their experiences and perceptions of the neighborhood outside Safeco Field. Over one-third of respondents consider the neighborhood unsafe before and after games. Nearly half (44%) indicated the neighborhood is generally undesirable, while 23% indicated the neighborhood is not well lit. Respondents were also given the option of selecting “other” and developing a free-form response. The two reoccurring themes observed by the Consulting Team were a lack of visible police presence and vagrancy.

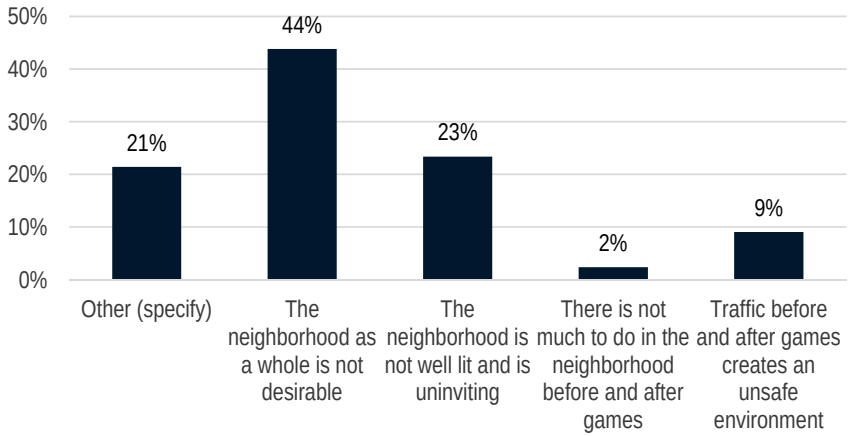

FIGURE 6.13: Reasons for Considering the Neighborhood Unsafe

Respondents were asked where they typically patronize establishments for pre- and post-game activities. Nearly half of all respondents (48%) indicated they do not visit establishments before and after games. Those respondents who do typically patronized Pioneer Square (56%), followed by areas outside the city (16%), the Waterfront, Chinatown, and Retail core.

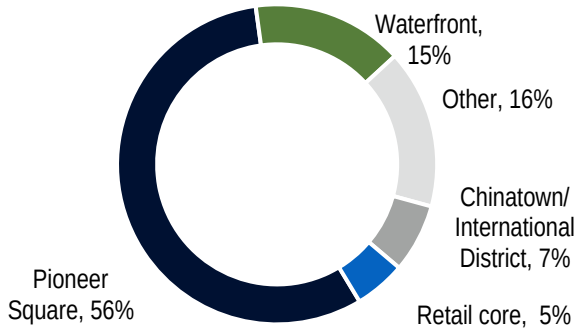

FIGURE 6.14: Neighborhoods Patronized Before and After Games

Respondents were sorted by their home addresses to examine how residency influences the likelihood of patronizing establishments before or after games. Not surprisingly, those coming from outside the state most frequently patronize establishments before and after games. One-third of patrons stay in the Pioneer Square neighborhood, while 15% visit the Waterfront area. Thirty-nine percent (39%) of respondents from the city also patronize establishments in the Pioneer Square neighborhood.

Neighborhood	City of Seattle	King County	Washington State	Outside the state
Chinatown/International District	6%	4%	3%	2%
First Hill	0%	0%	0%	1%
I typically do not visit establishments	40%	56%	52%	38%
Other (specify)	9%	8%	7%	5%
Pioneer Square	39%	25%	25%	33%
Retail core	2%	2%	2%	6%
Waterfront	2%	4%	9%	15%
West Edge	1%	0%	1%	0%

FIGURE 6.15: Neighborhood Patronization by Respondent Location

Neighborhood	18-24	25-31	32-40	41-50	51-60	61-70	70 +
Chinatown/International District	4%	4%	3%	3%	3%	4%	3%
First Hill	0%	1%	1%	0%	0%	0%	0%
I typically do not visit establishments	52%	33%	46%	47%	46%	53%	65%
Other (specify)	3%	7%	7%	7%	9%	7%	6%
Pioneer Square	27%	46%	33%	30%	28%	24%	18%
Retail core	3%	2%	3%	3%	3%	2%	2%
Waterfront	10%	6%	6%	8%	10%	8%	6%
West Edge	0%	0%	1%	1%	1%	1%	0%

FIGURE 6.16: Neighborhood Patronization by Respondent Age

The Consulting Team also sorted respondents by age. Nearly half (46%) of young adults (25 – 31 years) patronize establishments in the Pioneer Square neighborhood. This demographic is the only one in which a particular neighborhood elicited a more popular response than "I typically do not visit establishments."

Respondents were also asked to indicate the amount spent on retail, food and beverage, and incidental purchases when attending games. Respondents living in the city and county spent an average of **$24** per game. This figure increased to **$31** for those residing in state but outside the county. Respondents attending from other states indicated spending an average of **$50** per game. These figures are utilized in the economic and fiscal benefits analysis, which is presented later in this report. The patron spending is a significant economic driver for King County, in particular, given the large number of patrons originating from elsewhere.

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7.0

Necessary Improvements Analysis

7.0 – NECESSARY IMPROVEMENTS ANALYSIS

OBJECTIVES

The necessary improvements matrix quantifies the estimated capital investments needed to maintain the ballpark in a first-class condition through 2036. The matrix serves as a continuation of the baseline improvements matrix, which allows for comparing and contrasting historical investment levels with those projected for the future. When combined, the baseline and necessary improvement matrices provide a description of actual and projected investments from 2000 to 2036. The necessary improvements matrix serves as a planning tool and is not a maintenance plan. The Consulting Team's experience at AT&T Park, Coors Field, Nationals Park, and PNC Park was utilized as a resource for developing the matrix.

METHODOLOGY

All improvements listed in the necessary improvements matrix are described briefly in this section and include the suggested period for implementation, estimated cost in 2015 dollars, and recommended service life. Figure 7.1 below provides an example of this methodology for replacement of televisions. The Consulting Team recommends that television replacement begin in 2019 and be phased over two years. The 2015 estimated cost is inflated to the appropriate year, as shown in the gray row. The Consulting Team also utilized the following assumptions for all matrix entries:

- ✓ Costs utilized in the matrix were estimated utilizing historical data, industry resources, relevant experience, and input from the Mariners;
- ✓ Investment reoccurrence assumptions were established based on the Consulting Team's prior experience;
- ✓ All budget numbers include an annual 3% construction escalation; and
- ✓ A 15% contingency was also applied to each year's annual estimate.

Item #	Item	Frequency of Repairs/Replacements	Estimated Cost (2015 $)	Projected					
				3	4	11	12	19	20
				2019	2020	2027	2028	2035	2036
Technology				*$844,132*	*$869,456*	*$1,069,321*	*$1,101,400*	*$1,354,583*	*$1,395,221*
1	Replace televisions	Every 8 years, phased over 2	$1,500,000	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000

FIGURE 7.1: Necessary Improvement Matrix Example

There are instances where the establishment of a "replacement and renewal" fund was recommended. These funds account for smaller investments that could not be observed in the assessment, but are likely to occur based on the frequency of investment observed in the baseline matrix. Annual allowance funds are utilized for nine sub-categories, including the garage, retractable roof, operational equipment, FF&E, mechanical, electrical, plumbing, vertical systems, and code and regulatory.

NECESSARY IMPROVEMENTS PHASING

Identifying the original investment year is arguably the most critical step in quantifying the total investment needed since it establishes the basis for reoccurrence. However, since many of the building's systems and equipment are original and exceeding their recommended service lives, a number of investments are recommended within the first seven years of the plan. As a result, there are many competing investment needs within this timeframe. In an effort to develop achievable early-year investment levels within the overall 20-year investment period, the Consulting Team utilized the following approach to program the first investment occurrence:

1. **The improvement is necessary to maintain overall facility or equipment functionality.** Improvements responding to this criterion remained in their originally programmed year, regardless of competing investment needs.

2. **The improvement protects the Mariners' ability to generate revenue from key spaces.** Improvements in this category were often reallocated to years with fewer competing needs for investment. Adjustments were typically one to three years in either direction, depending on the investment needed.

3. **The improvement maintains aesthetic appeal and spectator impressions.** These improvements received lowest priority and the Consulting Team often deferred these investments to years with lower investment levels.

The key factors influencing phasing decisions included:

- ✓ Food service interiors, such as floors, walls, and ceiling tiles, all should be replaced within the first five years of the plan to maintain normal operating conditions. Administrative office interiors are dated and have been deferred until 2021 and 2022 despite showing need of near term replacement.

- ✓ Much of the interior and exterior signage and graphics are original and deteriorating. A replacement of all signage and graphics is programmed from 2017 to 2020.

- ✓ The current retractable roof bogie wheel replacement is slated to continue through 2020. The remaining non-structural major components are slated to be replaced in 2022 as manufacturers will likely cease supporting the original components.

- ✓ The majority of food service equipment is original and many pieces are well beyond their recommended service lives. The Consulting Team has programmed a one-for-one exchange of equipment on a consistent basis throughout the 20-year plan.

- ✓ A replacement of all bowl seating and anchors is programmed from 2021 through 2023. In 2021, the majority of seating will be 22 years old, putting it two years past its recommended service life of 20 years. Although seats could potentially be kept longer, their age and the condition of the anchors necessitate that all hardware should be replaced.

- ✓ The three primary premium spaces in the facility (Diamond Club, Terrace Club, and suites) are well kept, but noticeably dated. In the Consulting Team's professional opinion, finishes in these spaces do not deliver an experience consistent with similar spaces in peer ballparks. As a result, the marketability of each space has the potential to be compromised, marginalizing the space's ability to be monetized; therefore, the Consulting Team programmed a comprehensive modernization within the first five years for all spaces.

- ✓ The original playing field and its subcomponents will eventually need a complete modernization. The Consulting Team assumes the modernization will take place in 2020.

- ✓ Vertical transportation systems are in good condition, but will need investment approximately mid-way through plan as manufacturer support is phased out. Accordingly, the Consulting Team has programmed a complete modernization of the vertical systems from years 2026 to 2031.

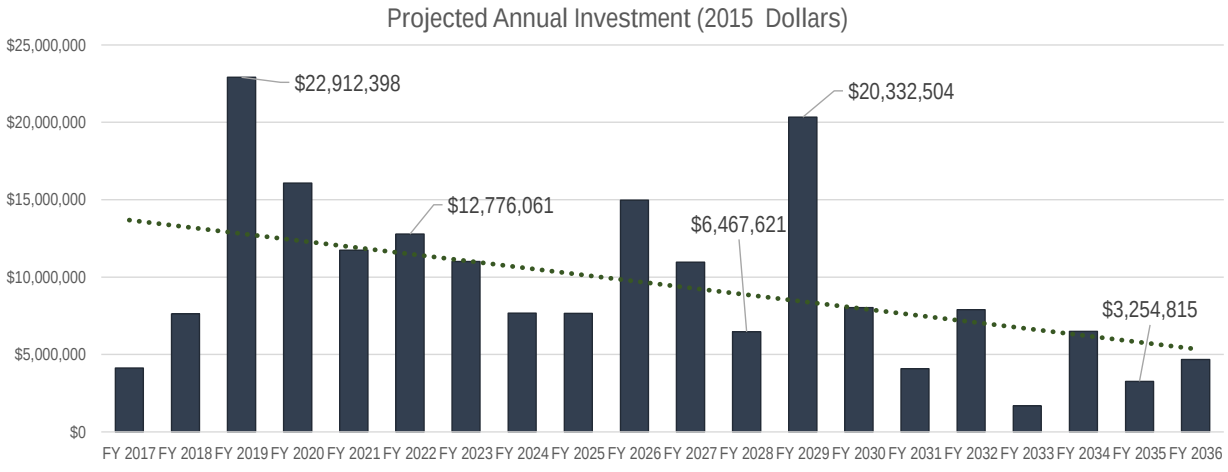
- ✓ Several major investments in technology will be needed from 2017 to 2021. The facility's sound reinforcement system is original and produces muffled audio in some areas. The production system should be replaced prior to 2020 in preparation for 4k television. The facility's primary video displays are scheduled to be replaced once their 10-year service lives are reached, requiring investment in 2019, 2020, and 2022.

- ✓ The broadcast and data-cabling infrastructure is original and needs significant overhaul. Coaxial video cabling is obsolete and its presence will inhibit the implementation of 4k technologies. These improvements should be implemented prior to 2020.

The investments described above are the primary reason why significant investments are needed from 2017 to 2023. The following page examines the needed annual investments. All figures are adjusted to 2015 dollars.

ANNUAL INVESTMENT NEEDED

Safeco Field will need an estimated $190 million (in 2015 dollars) in capital investment through 2036. This figure is prior to the application of any contingency or escalation, the impacts of which are discussed on the following pages. Over the duration of the plan, the average annual investment needed is approximately $9.5 million. This figure represents a 48% increase over the $6.4 million previously invested on an average annual basis. The year with the greatest investment is 2019 at $22.9 million while 2033, the fourth-to-last year, needs the least at $1.7 million.



FY	Investment	FY	Investment
2017	$ 4,126,290	2027	$ 10,963,446
2018	$ 7,628,985	2028	$ 6,467,621
2019	$ 22,912,398	2029	$ 20,332,504
2020	$ 16,071,167	2030	$ 8,026,093
2021	$ 11,742,457	2031	$ 4,078,016
2022	$ 12,776,061	2032	$ 7,899,115
2023	$ 11,003,258	2033	$ 1,685,649
2024	$ 7,670,920	2034	$ 6,487,681
2025	$ 7,660,052	2035	$ 3,254,815
2026	$ 14,962,466	2036	$ 4,673,400
Investment (2015 Dollars)		$	190,422,394

FIGURE 7.2: Annual Investment Required Through 2036 (2015 Dollars)

The downward trend line in necessary annual investments demonstrates the abundance of competing needs within the first seven years of the plan. Mid-way through the 20-year plan, investment reoccurrences drive a similar multi-year peaks from 2026 and 2027. In four of the last six years, investment falls below the historical investment average of $6.4 million.

EXPENDITURE COMPARISON: BASELINE VS. PROJECTED

The table below examines the variance between baseline and necessary improvements matrices. As previously noted, there is a 48% increase in necessary investment when costs are normalized to 2015 dollars. Investment composition among major categories stays mostly consistent, with two primary exceptions:

- ✓ The retractable roof needs 10% of the overall new investment compared to the historical 6%. This increase is due to the cost of replacing expensive non-structural system components (e.g., membrane, power cables, logic controller), most of which are original.

- ✓ Technology and infrastructure compose 45% of the average amount invested in the baseline matrix. This figure drops to 39% over the next 20 years. This comparison is skewed by the $12.5 million distributed antenna system investment ($780,000 of the $1.44 million annually) made in 2011.

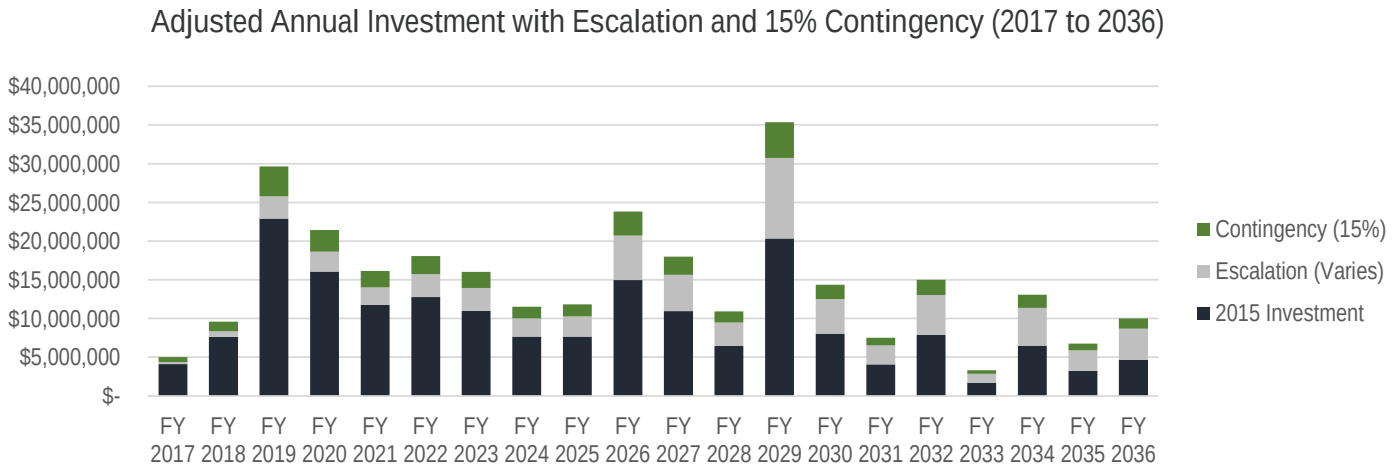
While the average investment needed in the next 20 years is considerably greater, expenditures across major categories are consistent with historical levels, lending credence to the integrity of the necessary improvements projections.

#	Major Category	Baseline Average	Projected Average	Before	After	Diff.
1	Architectural	$1,308,577	$2,209,375	20%	23%	3%
2	Retractable Roof	$397,258	$928,250	6%	10%	4%
3	Garage	$79,307	$41,000	1%	0%	1%
4	Spectator Requirements	$1,132,903	$1,754,245	18%	18%	1%
5	Building Systems	$620,495	$911,075	10%	10%	0%
6	Technology	$1,467,831	$2,820,675	23%	30%	7%
7	Infrastructure	$1,435,418	$856,500	22%	9%	13%
Annual Average (2015 Dollars)		$6,441,789	$9,521,120			

FIGURE 7.3: Baseline and Necessary Improvement Matrix Comparison

ADJUSTED ANNUAL INVESTMENT

To improve the accuracy of projections and to estimate necessary investment through 2036, the Consulting Team applied an annual 3% escalation and a 15% contingency estimates to the necessary improvements costs. Consequently, the total investment needed is $297 million over the duration of the plan, or approximately $14.9 million annually. Six of the years with the greatest investment occur in the first half of the plan, despite being less affected by escalation. After much of the original equipment is replaced within the plan's first six years, there is a brief investment valley prior to 2027 and 2028. Investment levels fall off sharply after 2029 since approximately half of the first investment reoccurs at some point after that time.



	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
2015 Investment	$4,126,290	$7,628,985	$22,912,398	$16,071,167	$11,742,457	$12,776,061	$11,003,258	$7,670,920	$7,660,052	$14,962,466
Escalation (Varies)	$251,291	$707,413	$2,875,708	$2,559,720	$2,278,651	$2,936,883	$2,935,340	$2,337,891	$2,634,417	$5,749,086
Contingency (15%)	$656,637	$1,250,460	$3,868,216	$2,794,633	$2,103,166	$2,356,942	$2,090,790	$1,501,322	$1,544,170	$3,106,733
Investment Required	$5,034,218	$9,586,858	$29,656,322	$21,425,521	$16,124,274	$18,069,885	$16,029,387	$11,510,132	$11,838,639	$23,818,285

	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
2015 Investment	$10,963,446	$6,467,621	$20,332,504	$8,026,093	$4,078,016	$7,899,115	$1,685,649	$6,487,681	$3,254,815	$4,673,400
Escalation (Varies)	$4,667,806	$3,030,298	$10,422,233	$4,478,298	$2,466,002	$5,156,918	$1,184,056	$4,888,507	$2,623,743	$4,020,501
Contingency (15%)	$2,344,688	$1,424,688	$4,613,210	$1,875,659	$981,603	$1,958,405	$430,456	$1,706,428	$881,784	$1,304,085
Investment Required	$17,975,940	$10,922,607	$35,367,947	$14,380,050	$7,525,621	$15,014,438	$3,300,161	$13,082,617	$6,760,341	$9,997,985

FIGURE 7.4: Adjusted Investment Needed

ADJUSTED ANNUAL INVESTMENT BY GROUPS

The table below examines investment composition by major category in three-year groups. Cells are shaded progressively green as a greater percentage of investment is attributed to each major category. Key drivers behind major investments in each group are:

- ✓ Technology and infrastructure investments makeup a large portion of **Group 1**. Investments in sound reinforcement and production systems drive the majority of the $17.4 million in technology spending. Investments in distributed television and broadcast cable drive the infrastructure category needs of slightly over $10 million.

- ✓ **Group 2** represents the second largest three-year investment group. Investment in spectator requirements are driven by a phased replacement of spectator seating, food service equipment, and the first major investment in premium spaces throughout the facility. Other notable investments include replacement of the playing field and the fascia and outfield video displays.

#	Major Category	Projected						
		Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7
		Years 1 to 3	Years 4 to 6	Years 7 to 9	Years 10 to 12	Years 13 to 15	Years 16 to 18	Years 19 & 20
1	Architectural	$4,666,613	$9,459,050	$22,967,357	$15,749,616	$6,278,681	$6,638,008	$3,701,368
2	Retractable Roof	$5,899,461	$5,388,020	$450,343	$14,343,137	$627,356	$342,615	$363,480
3	Garage	$106,476	$183,007	$202,162	$223,367	$151,809	$266,712	$233,146
4	Spectator Requirements	$4,015,119	$18,924,664	$6,666,475	$7,333,013	$10,200,357	$3,922,127	$2,975,584
5	Building Systems	$2,184,215	$5,517,976	$2,714,743	$9,088,002	$5,028,152	$1,085,730	$3,435,612
6	Technology	$17,385,151	$15,230,012	$4,876,590	$5,139,627	$24,499,106	$17,007,990	$5,943,415
7	Infrastructure	$10,020,365	$916,951	$1,500,489	$840,069	$10,488,157	$2,134,034	$105,721
	Total by Grouping	*$44,277,398*	*$55,619,680*	*$39,378,159*	*$52,716,832*	*$57,273,618*	*$31,397,215*	*$16,758,326*
	Percent of Total	*15%*	*19%*	*13%*	*18%*	*19%*	*11%*	*6%*

FIGURE 7.5: Three-Year Investment Groups by Major Category

- ✓ Approximately 60% ($22.9 million) of **Group 3** investment is concentrated in the architectural category. Painting of the retractable roof structure occurs twice during this period and accounts for over $13 million in investment. The final phase of seating replacement accounts for 60% of spectator requirement spending, which is estimated at $6.7 million.

- ✓ **Group 4** contains significant investments across five of the seven categories. The final phase of roof painting is included under the architectural category while the membrane is slated to be replaced in year 2026. Significant investments in mechanical, electrical, and plumbing systems are also included, each of which accrue to the building systems category.

- ✓ **Group 5** is the largest three-year group. Spectator requirements are driven by the first reoccurring investment in premium spaces. Similarly, a reoccurrence of investment is programmed for the production and video display systems (not including the main board). The impact of escalation magnifies the investment required in this group significantly.

- ✓ **Groups 6** and **7** are most impacted by escalation. Items included in these two groups include the first reoccurrence of the main video board, investments in security, and the second reoccurrence of television replacements.

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8.0

Upgrade Improvements Analysis

8.0 – UPGRADE IMPROVEMENTS ANALYSIS

INTRODUCTION

The Consulting Team developed a list of potential upgrade improvements and design concepts that could be considered for implementation. In contrast to necessary improvements, which prevent physical obsolescence, upgrade improvements address market or economic obsolescence. Although noteworthy upgrades such as the All-Star Club, the "'Pen", and Edgar's have been made in the past, the Consulting Team considers additional upgrade improvements as desirable for the purpose maintaining Safeco Field's competitive position in the Seattle marketplace. Upgrade concepts were developed with input from the Mariners and PFD with one of four primary drivers in mind:

1. Maintaining or improving upon the patron experience;
2. Expanding or maintaining revenue streams;
3. Attracting new demographic groups to the facility; and
4. Maintaining Safeco Field's competitive position within the market.

A brief description of potential upgrade improvements is provided below and corresponding design concepts are attached as Exhibit D. A listing of upgrade improvements discussed in Section 5.0, Facility Assessment are also listed at the conclusion of this section. The cost of these upgrade improvements would be *in addition to* the cost of the necessary improvements described in Section 7.

1. **Expansion of the existing parking garage:** Three expansion schemes have been developed to provide additional parking options. As discussed in Section 6.0, Patron Survey – parking availability is presently one of the least favorite aspects of the Safeco Field experience. The options include expansion of the garage to the east, west, or adding levels on top of the structure. The options offer up to a maximum of 900 additional spaces.

2. **Perimeter / Façade Art Addition:** Three potential schemes were developed to enhance Safeco Field's pedestrian experience and exterior appearance. The first concept is focused on improving the aesthetics of the existing ramp structure proximate to 1st Ave. The other concepts address the east and west façades through creative lighting schemes and artwork. Transparent lighting schemes suggested in the concepts also could be utilized for advertising depending on what is allowed by regulatory agencies.

3. **Brewpub Addition:** This concept would reconfigure the existing Ellis Pavilion space into a "brewpub" concept. The brewpub is envisioned as a 175-seat restaurant that would remain open year round. The addition would allow ticketed patrons access to the main concourse during events through a new staircase. The existing entrance for Diamond Club patrons would be improved and relocated to the first base side of the facility.

4. **Home Plate Entrance Reconfiguration:** The primary feature in this concept is development of a new hall of fame that would expand and improve upon the existing Baseball Museum of the Pacific Northwest. The space would begin immediately to the left

of the main staircase and include the addition of a walkway that would encircle the existing rotunda. Concessions behind home plate on the third base side would also be reconfigured to offer a better experience and views outside the facility.

5. **Club-Level Reconfiguration:** This concept would extend the left field 200-level floorplate over the existing left field entrance. The concept includes additional bar and lounge space, outdoor seating, and development of kitchen space. The extension would offer fantastic views of downtown Seattle and is ideal for staging meetings, banquets, and special occasions. The second story of the extension would provide additional meeting and conferencing space. The extension would allow those renting suites on a single game basis an opportunity to hold meetings prior to the game and immediately access their suite. The reconfiguration would be transformative for the entire club level.

6. **Upper-Concourse Kids Zone:** This concept includes a new kid's area on the 300-level of the ballpark. The space would be located immediately behind home plate in an area presently populated with basic tables and chairs. The primary feature of the kid's zone is a scaled-down infield covered by a new roof structure over the rotunda. Additional themed spaces for kids would be located on the side of the facility facing 1st Ave. The concept also includes a concession stand immediately to the north for parents.

7. **"Tree House" Addition:** This primary feature of this concept is the development of an enclosed bar and lounge option on the northernmost portion of the 300-level in the area of Lookout Landing. The area is envisioned as a "general admission club" and would offer fantastic views of downtown and the playing field. The concept embraces two trends in public assembly venue design, including (1) the development of clubs that are available to all patrons and (2) enhancing the spectator experience on the upper levels.

The Consulting team also identified seven other upgrade improvements discussed in Section 5.0. These improvements are considered "optional" and are listed below:

- ✓ Replacing static menu board signage with digital boards (FS 4.0);
- ✓ A central CO^2 system (FS 8.0);
- ✓ Additional show power to the outfield (E 2.0 & 2.1);
- ✓ The expansion of central plant services for additional loads generated by implementation of new technologies (E 2.0 & 2.1);
- ✓ The retrofit of doors and interior cab finishes of elevators seven and eight for service use (V 3.0); and
- ✓ The establishment of connectivity to production entities located offsite (IN 6.0).

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9.0

Analysis

9.0 –BENEFITS ANALYSIS

OBJECTIVES

The purpose of the benefits analysis is to understand then quantify the economic and fiscal benefits generated by operation of Safeco Field. The analysis answers the question: "What are the economic and tax revenue implications associated with Safeco Field?" The Consulting Team conducted separate analyses to measure the economic benefits to King County and the State of Washington. Fiscal benefits were quantified for both jurisdictions and the City of Seattle. An examination of escalation in the total land value of parcels located in the "stadium district" adjacent to Safeco Field was also completed. All Calculations rely on estimates of team- and ballpark-related spending in the year 2015.

METHODOLOGY

Impacts are measured in terms of economic output, employment, and earnings, which are further divided into direct and indirect impacts. The direct impacts represent the economic activity created by the Mariners and ballpark operations. The indirect impacts represent the value of additional economic demands for goods and services that the team and ballpark place on supplying industries in the county and state economies. The sum of the direct and indirect impacts includes all transactions attributable to the project and, as such, represents the total economic impact. The linkage between direct and indirect spending is provided below in Figure 9.1

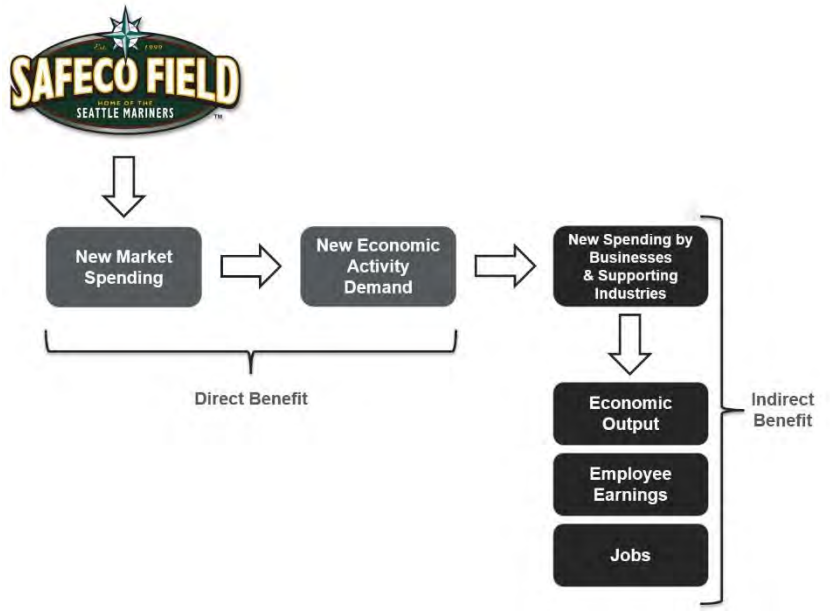

FIGURE 9.1: Economic Benefit Flow Chart

The economic benefit analysis relies on Minnesota Implan Group ("MIG"), Inc.'s I-RIMS input-output multipliers to model the direct and indirect quantitative impacts generated by the operation of the Mariners and Safeco Field. These multipliers are developed based on information published by the United States Bureau of Economic Analysis. This analysis relates industries and households within a specified region. Team and ballpark expenditures create demand for goods and services in the market and multipliers provide the basis for estimating what portion of the demand is satisfied locally and within the state.

Direct Impacts

All money spent on franchise and ballpark operations and by building patrons is considered a direct impact. To analyze the benefits specific to the county and state, the direct impacts are discounted to account for out-of-market leakage. For example, a direct impact would include purchase of catering services for premium seating areas. The fee paid to the catering company represents a direct impact. Some purchases may be provided by out-of-market companies and some supported jobs may be filled by out-of-market residents. Consequently, all direct impacts in the analysis are discounted to account for the leakage on a case-by-case basis. Each leakage assumption is developed based on an understanding of geography and based on the expenditure type. For instance, scouting and player development expenditures are far less likely to impact the local market economy as opposed to marketing and advertising, which are primarily local purchases.

Direct impacts provide the basis for calculating indirect and induced benefits. For example, the same catering company may need to purchase beef in order to produce concessions items for a game. This spending creates business for a food distributor, which, in turn, creates new employment opportunities and additional earnings for the distributor. Further, induced economic activity, which measures new spending patterns generated because of operations, are quantified.

Approach

Direct impacts in this analysis include operational expenditures, cost of sales for concessions and novelties, and off-site spending at hotels, retail stores, restaurants, and on transportation items. Revenues, such as ticket sales and in-stadium spending, are not considered direct impacts since much of this spending is displacement or “substitution” spending and would take place without the presence of Safeco Field and the Mariners. While this approach often yields somewhat conservative projections, it is more reliable in terms of estimating net new spending to a market.

The SAM-type (Social Accounting Matrix) multipliers used in the analysis are specific to King County and the State of Washington. Multipliers are classified as final demand and direct-effect multipliers. Final demand multipliers reflect the increase in demand for a particular product in a market (e.g., concessions supplies). Direct-effect multipliers are considered a “jobs-to-jobs” multiplier, which relies on estimates of changes in initial jobs and associated wages in a final demand industry. For the purposes of this analysis, the Consulting Team utilized the state and local multipliers in Figure 9.2.

The Consulting Team conducted the analysis based on *independent estimates* of the Mariners’ operating performance. The estimates were confirmed and developed with assistance from resources throughout MLB and publicly available documents. No estimate of overall team profit and loss was developed since the business and occupation tax is based on gross receipts, not net operating income.

Type SAM Multipliers (2013)	Final Demand			Direct-Effect	
	Output	Earnings	Emp.	Earnings	Emp.
King County					
Accommodation	1.51	0.55	12.36	1.61	1.37
Admin & Support Services	1.60	0.89	8.59	1.54	2.11
Apparel Manufacturing	1.58	0.49	10.82	1.98	1.49
Food Manufacturing	1.40	0.32	4.60	1.96	1.96
Food Services	1.57	0.66	17.93	1.49	1.23
Ground Transportation	1.86	0.95	15.27	1.56	1.51
Other Services	1.71	0.78	12.73	1.55	1.52
Professional Services	1.72	0.86	10.63	1.54	2.11
Spectator Sports	1.78	0.84	21.59	1.63	1.38
State of Washington					
Accommodation	1.72	0.55	14.32	1.79	1.48
Admin & Support Services	1.87	0.89	20.21	1.50	1.40
Apparel Manufacturing	1.79	0.51	12.12	2.18	1.65
Food Manufacturing	1.83	0.38	7.20	3.25	3.40
Food Services	1.82	0.68	20.27	1.63	1.32
Ground Transportation	2.55	0.99	18.78	1.76	1.67
Other Services	1.98	0.75	14.61	1.75	1.71
Professional Services	1.97	0.84	12.94	1.66	1.95
Spectator Sports	2.04	0.75	25.72	1.90	1.45

Source: MIG, Inc.

FIGURE 9.2: Final Demand and Direct-Effect Multipliers

ANNUAL ECONOMIC BENEFITS

Annual economic and fiscal benefits are generated through operational expenditures, off-site visitor, and team spending. In total, the Consulting Team estimates there is approximately $308 million in 2015 gross spending from operations. All economic benefit projections rely on the assumptions of 81 home games and total attendance of 2,193,041. Other events, such as music concerts, were not considered in this analysis due to their unpredictable schedules. However, hosting outside events would create incremental benefits over those reflected in this section as would attendance increases above the 2015 season. For reference, the average attendance of Safeco Field for the full 16 seasons is 2,533,842.

Visitor Spending

The Consulting Team assumes that 40% of attendees come from within the local market, 55% come from outside the county, and 5% require overnight stays. Based on the Consulting Team's understanding of the marketplace and information obtained in the survey, the Consulting Team assumes that attendees not requiring an overnight visit spend between $10 and $18 per visit, depending on their origination. Those requiring an overnight stay spend an average of $195 per visit. In total, gross visitor spending is estimated at $43 million. After applying leakage factors of 10% for the state and 30% for the county, visitor spending drives an estimated $30 million in annual direct spending in the county and $39 million in the state.

Visiting teams average an estimated 50 persons in a traveling party per MLB game. The figure includes players, coaches, staff, umpires, administrative personnel, and local media. Visiting teams generate an estimated 4,500 total days within the local market and approximately 3,000 room nights annually. The Consulting Team estimates that each person spends an average of $310.00 on accommodations, food and beverage, retail, and transportation, equating over $1 million in net direct spending each year in the county and state after leakage.

Operational Spending

Franchise (supplies, equipment, team transportation, etc.) and ballpark operations (maintenance, utilities, grounds keeping, etc.) generate approximately $41 million in annual purchases of goods and services and other cost components in the county. An estimated $52 million in purchases of goods and services are procured in the state. Although there is nearly $150 million in annual wages supported by operations, the Consulting Team estimates only $35 million is retained in the county and $44 million in the state. The vast majority of payroll is devoted to player salary and the Consulting Team has assumed that players are in market for limited parts of the year.

County Benefits

Annual direct economic benefits from operations to the county totals an estimated $71 million in economic activity, $35 million in wages, and supports 700 jobs. With an average multiplier of 1.67, indirect and induced benefits total $48 million in economic activity, $65 million in wages, and 1,500 jobs. Collectively, Safeco Field and the Mariners

generates $119 million in annual economic activity, supports $100 million in wages ($45,000 per job), and 2,200 associated jobs in King County. Just over 35% of gross activity is retained by the county.

State Benefits

Direct benefits from operations to the State of Washington totals approximately $92 million in annual economic activity, $44 million in wages, and supports 1,000 jobs. With an average multiplier of 1.96, indirect and induced benefits total $88 million in annual economic activity, $84 million in wages, and 2,300 jobs. In total, the ballpark and team generates $180 million in annual economic activity, supports $128 million in wages ($39,000 per job), and 3,300 associated jobs in the state. These totals are not additive and include benefits within the county. The state retains 44% of gross activity due to its larger geographic footprint.

When calculated on a 20-year net present value basis, Safeco Field is projected to generate $2.1 billion in economic output and support $1.8 billion in wages in King County. When measured at the state level, Safeco Field is projected to produce $3.1 billion in economic activity and support approximately $2.2 billion in wages through 2036.

Recurring Benefit	King County	State of Washington
Annual Direct Benefit		
Estimated Output	$71,400,000	$91,900,000
Estimated Wages	$35,100,000	$44,000,000
Estimated Employment	700	1,000
Annual Indirect & Induced Benefits		
Estimated Output	$47,500,000	$87,800,000
Estimated Wages	$64,700,000	$84,100,000
Estimated Employment	1,500	2,300
Annual Total Benefits		
Estimated Output	$118,900,000	$179,700,000
Estimated Wages	$99,800,000	$128,100,000
Estimated Employment	2,200	3,300
20-Year Net Present Value		
Estimated Output	$2,089,000,000	$3,104,000,000
Estimated Wages	$1,754,000,000	$2,213,000,000

FIGURE 9.3: Estimated Recurring and NPV of Economic Benefits

FISCAL BENEFITS

In addition to the direct and indirect economic benefits, Safeco Field generates tax revenues for the PFD, state, city, and county. As shown in Figure 9.4, the PFD receives a 5% admissions and 10% parking tax, while the state collects a business and occupation tax and sales tax. Lastly, local jurisdictions receive five taxes applicable to the analysis, including a business and occupation tax, commercial parking tax, sales tax, utility tax, and hotel tax.

Jurisdiction / Entity	Rate
Washington State MLBS PFD	
[1] Parking Tax	10.0%
Admissions Tax	5.0%
State of Washington	
Business and Occupation Tax	0.471% & 1.5%
Sales Tax	6.5%
City of Seattle & King County	
Business and Occupation Tax	0.215% & 0.415%
Commercial Parking Tax	12.5%
Sales Tax	1.0%
Utility Tax (Light Tax)	6.0%
Hotel Tax (Convention and Trade)	6.1%

[1] Parking tax is collected on cars parked in Safeco Field garage

FIGURE 9.4: Applicable Tax Rates

As seen in Figure 9.5, fiscal benefits to the PFD in 2015 measured an estimated $4.3 million. The state of Washington benefited from $7.2 million in estimated fiscal benefits, largely due to state sales tax. The county and city benefited from an estimated $2.4 million in tax revenues across the five types. Measured on a 20-year net present value basis, Safeco Field is projected to generate $81 million in tax revenues to the PFD, $140 million to the state, and $46 million to local jurisdictions. Total fiscal benefits are estimated at approximately $267 million through 2036.

Jurisdiction / Entity		2015
Washington State MLBS PFD Tax Revenue		$ 4,260,000
20-Year Net Present Value	$81,400,000	
State of Washington Tax Revenue		$ 7,190,000
20-Year Net Present Value	$139,700,000	
King County and City of Seattle Tax Revenue		$ 2,400,000
20-Year Net Present Value	$46,300,000	
Annual Benefit		$ 13,850,000

[1] NPV calculations rely on 4% discount rate and 3% growth

FIGURE 9.5: Recurring Fiscal Benefits (Year 2015 Shown)

LAND VALUE GROWTH

The total land value of the 63 parcels located in the "Stadium District," shown in yellow in Figure 9.6, has increased substantially since the Safeco Field site was selected in 1996. In 1996, the total land value of all properties in the district was just over $6.5 million. As of 2015, that figure stands at nearly $167 million, equating to compound annual growth of 18%. In comparison, King County's total land value increased by 6% annually over this timeframe. However, the increase in land value cannot be solely attributed to Safeco Field. CenturyLink Field, home to the Seattle Seahawks, was developed in tandem with Safeco Field. The increase in total land value may also be fueled by speculative investment surrounding the proposed arena development. However, up to 2008 the compound annual growth rate still measured 13%. While not all growth is attributable to Safeco Field, its presence has had a meaningful impact on land values throughout the adjacent area.

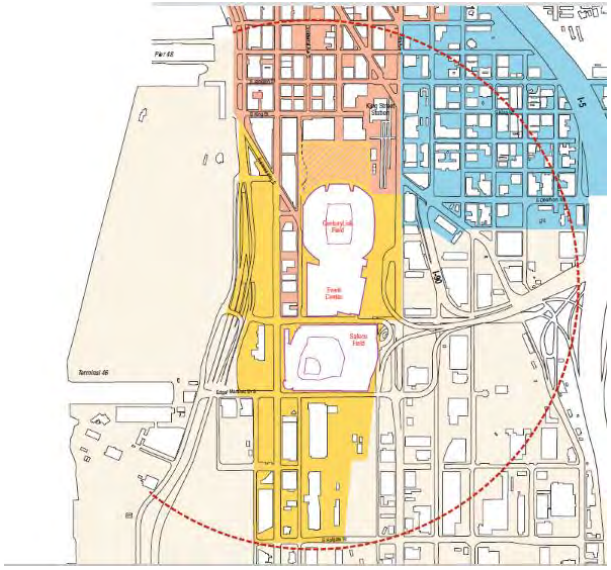

FIGURE 9.6: Stadium District Boundaries (courtesy: AECOM)

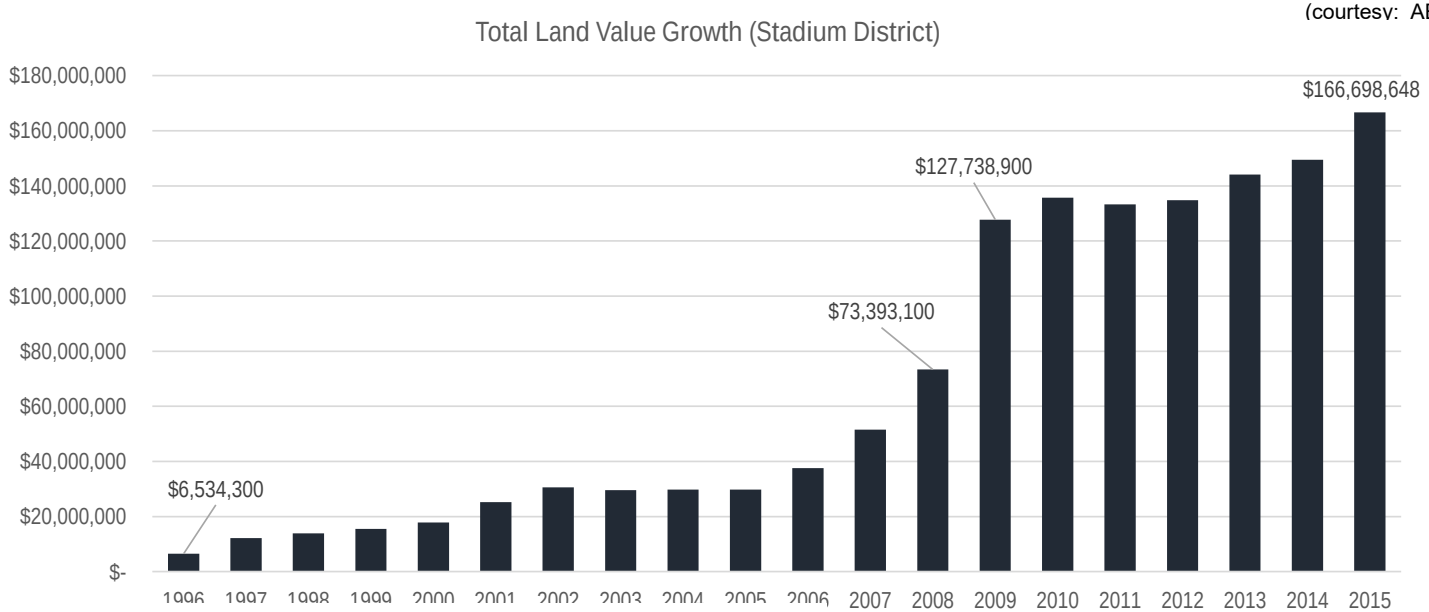

FIGURE 9.7: Total Land Value Growth (Stadium District)