G Financial Implementation Plan

INTRODUCTION. The long-term development program or Capital Improvement Program (CIP) for King County International Airport/Boeing Field (BFI or Airport) is intended to establish a strategy to fund airport improvements and maximize the potential to receive federal grant funds, while also establishing a financially prudent plan for improvement funding on a local level. From the FAA's perspective, the CIP provides a detailed listing of projects and costs that is critical for their use in establishing priorities and budgeting expenditures at this airport, when compared with the needs of other airports. From the local sponsor's perspective, the CIP identifies improvement needs and allows budgeting/ financial decisions to be made with a comprehensive understanding of financial implications.

The overall concept is to maximize the opportunities to receive federal grants, within the context of, and in recognition of, the amount of local funds that are available for capital needs. Although the CIP will be used for programming by the FAA, there is no financial commitment for the federal government or the sponsor to provide funding for the CIP. If federal matching funds are unavailable for a certain project during the specified time frame, the project will almost certainly be unaffordable using only local money, and the improvement project will not go forward until appropriate funding is available.

The potential improvements necessary to accommodate the future needs of BFI have been placed into three phases: Phase I (0-5 years), Phase II (6-10 years), and Phase III (11-20 years). The suggested program for the phasing of these projects is provided in the following tables, and the proposed improvements are also illustrated graphically, by time period, in the following figures.

Implementation Schedule and Project List

Using the documentation previously presented regarding anticipated facility demands, a list of capital improvement projects has been assembled. The projects for the first five years are listed in priority order by year and are closely aligned with the Airport's ACIP which is on file with the FAA. In the second and third phases (years 6-20), the projects are listed without specific year designators and are more of a shopping list that is tied to improvements recognized as needed in the facility requirements section and/or facility improvement needs identified in the Airport Layout Plan drawing set. The Master Plan's proposed phased Capital Improvement Program is presented as **Tables G2**, **G3** and **G4** in this chapter. It is anticipated that the project phasing will invariably be altered as local and federal priorities evolve over the coming months and years.

The details of the Development Program (including a capital improvement project list, project cost estimates and phasing recommendations) have been formulated in consideration of comments received from airport management.

Cost Estimates

Cost estimates for individual projects, based on current year construction costs, have been prepared for the improvement projects that have been identified as potentially being needed during the 20-year planning period. Costs listed are in 2020 dollars, which have not been escalated with regard to proposed timing of actual construction. These estimates are intended to be used for planning purposes only and should not be construed as construction cost estimates, which can only be compiled following the preparation of detailed engineering design documents.

Airport Grant-In-Aid Funding Programs

The following section describes the traditional federal and state airport-in-aid funding programs administered by the FAA and WSDOT. **Table G1** lists the funding categories and typical participation available to the Airport as a FAA Non-Hub Primary funding classification. As a primary commercial service facility, most projects are FAA-eligible, and will be funded from federal grant-in-aid programs (FAA entitlement and discretionary), with the Airport matching participation typically at five to 10 percent.

TABLE G1 **AIRPORT FUNDING PROGRAMS AND PARTICIPATION**

Grant Program/Funding Category	Federal (FAA) Participation	State (WSDOT) Participation	Airport (BFI) Participation
Federal Funding Programs (FAA)			
FAA Passenger Entitlement	$1M Annually	-	-
FAA Cargo Entitlement	$475K (FY 2020)	-	-
FAA 'Pure' Discretionary	90%	5% (See Note)	5% to 10%
FAA State Apportionment	90%	5% (See Note)	5% to 10%
FAA Small Airport Fund	90%	5% (See Note)	5% to 10%
State of Washington Airport Funding Programs (WSDOT)			
WSDOT Airport Aid Program (Pavement Projects)	-	95%	5%
WSDOT Airport Aid Grant Program (Safety Projects)	-	95%	5%
WSDOT Airport Aid Program (Security and Planning Projects)	-	95%	5%
WSDOT Airport Aid Program	100% Airport Low Interest Loan Through State of WA		

***SOURCE**: Mead & Hunt CIP Analysis.*

Notes: Funding programs and participation levels subject to FAA/WSDOT budget reauthorization.
WSDOT funding participation and levels per SWDOT program and project discretion.

FAA Funding Programs and Guidance

The federal government has funded civilian airport development since 1946. The FAA currently funds airport improvements through a dedicated Aviation Trust Fund, collected from user-generated fees and taxes (airline passenger tax, aircraft parts, and fuel). The Trust funds are reinvested at FAA-eligible airports through the Airport Improvement Program (AIP); the current FAA Airport Improvement Program is authorized under the Airport and Airway Improvement Act of 1982, administered in accordance with FAA Order 5100.38, "Airport Improvement Program Handbook". Although subject to congressional authorizations, the FAA AIP program and funding levels are not anticipated to change significantly throughout the 20-year Airport CIP period.

The FAA funding sources available to support airport capital improvements are:

FAA Entitlement

Commercial service airports enplaning more than 10,000 annual passengers are classified as primary and receive FAA entitlement funds. Per FAA formula, the Airport is allocated $1.0 million annually in passenger entitlement funds. These funds can be committed to AIP-eligible projects with FAA approval, and can be accumulated up to four years. Projects funded with entitlement grants typically receive 90 percent FAA participation and 10 percent Airport (local) participation.

FAA Discretionary

FAA discretionary dollars are the remaining funds not assigned to FAA entitlements or mandated by FAA set-asides. Typical projects funded with discretionary money are:

- Airport capacity
- Safety and security
- Noise related
- Those identified as FAA national priority projects

Subject to FAA formula, discretionary balances and available funds are uncertain from year-to-year. Discretionary funds commonly provide grants for large capital projects (airfield pavement rehabilitation and land acquisition), and support 80 to 95 percent of the total eligible project cost. Discretionary funding levels are typically identified in the FAA ACIP three to five years in advance of the project, in which the Airport must commence the project within six months of the fiscal-year grant agreement.

FAA Apportionment

FAA apportionment funds are distributed amongst individual states based on an area/population formula and national funding considerations. The use of apportionments for funding individual airport project grants is at the discretion of the FAA and varies based on funding formula and balances.

FAA Project Priorities

The demand for FAA AIP funds exceeds the availability; an FAA National Priority Rating system is used to calculate the apportionment and distribution of AIP grant funds for specific airport projects. This formula system, which is occasionally adjusted to reflect national priorities, takes into consideration the airport type and project role. The following are the FAA AIP funding categories and point system:

- Safety/Security – 10 points
- Statutory Emphasis Programs – 9 points
- Planning – 8 points
- Reconstruction – 8 points
- Environment – 8 points
- Capacity – 7 points
- Standards – 6 points
- Other – 4 points

State of Washington (WSDOT) Funding Programs and Guidance

The Washington State Department of Transportation (WSDOT) administers an Airport Aid Grant Program for airports within the State of Washington. The program is funded by a per-gallon aviation fuel fee and aircraft registrations. Projects are required to be identified in the WSDOT Aviation's five-year Statewide Capital Improvement Program (SCIP), including projects not funded or eligible under the FAA.

The program distributes funds to three major project categories:

1. Pavement projects
2. Safety projects
3. Maintenance, security and planning projects, in which projects must be accessible by the public and depicted on the Airport Layout Plan (ALP)

The maximum WSDOT grant amount is $750,000 per project, in which WSDOT may fund up to 95 percent, with a minimum of five percent local Airport participation. In addition, WSDOT may participate in matching the local share of FAA AIP projects, where WSDOT contributes up to half of the 10 percent match of the total FAA funded project.

Capital Funding Sources

In the past, the Airport has used a combination of FAA Airport Improvement Program entitlement and discretionary grants, WSDOT grants, private third-party financing, and cash reserves/net operating revenue to fund capital improvements. These funding sources will continue as the Airport's primary sources to finance Capital Improvements in the future.

Airport Improvement Program Grants

The Airport receives grants from the Federal Aviation Administration (FAA) to finance the eligible costs of certain capital improvements. These federal grants are allocated to commercial passenger service airports through the Airport Improvement Program (AIP). AIP grants include passenger entitlement grants. BFI receives $1,000,000 per year in primary airport entitlement grant funding. In addition, the Airport receives Cargo Entitlement grant funding each year. In FY 2020, the Airport received $475,083 in Cargo Entitlement grant funding. The Airport also receives discretionary grants which are awarded in accordance with FAA guidelines. Under current AIP legislation, eligible projects are funded on a 90 percent AIP grant/10 percent local match basis for primary commercial service airports such as King County International Airport.

The approval of AIP discretionary funding is based on a project eligibility ranking method the FAA uses to award grants, at their discretion, based on a project's priority and importance to the national air transportation system. In the past, King County International Airport has received discretionary funding support for various eligible capital projects. It is reasonable to assume that the Airport will receive additional discretionary funding during the planning period for higher priority, eligible projects, such as various runway/taxiway/apron projects. Since the future availability of AIP discretionary grants is not certain until an actual grant is awarded, it should be noted that any CIP projects which rely discretionary funds may need to be delayed until such funds actually become available.

Passenger Facility Charges (PFC)

The Aviation Safety and Capacity Expansion Act of 1990 established the authority for commercial service airports to apply to the FAA for imposing and using a Passenger Facility Charge (PFC) of up to $3.00 per enplaned passenger. With the passage of AIR-21 in June 2000, airports could apply for an increase in the PFC collection amount from $3.00 per eligible enplaned passenger up to $4.50. The proceeds from PFCs are eligible to be used for AIP eligible projects and for certain additional projects that preserve or enhance capacity, safety, or security; mitigate the effects of aircraft noise; or enhance airline competition. PFCs may also be used to pay debt service on bonds (including principal, interest, and issue costs) and other indebtedness incurred to carry out eligible projects. BFI does not currently collect a PFC on their passenger enplanements.

Private Third-Party Financing

Many airports use private third-party financing when the planned improvements will be primarily used by private businesses or other outside organizations. Such projects are not eligible for federal funding. Projects of this kind typically include general aviation development areas, hangars, FBO facilities, cargo facilities, private aircraft parking aprons, industrial development areas, non-aviation commercial areas, and various other projects. The implementation analysis assumes that private third-party funding would be used to finance such private projects on the Master Plan Update CIP. For BFI, projects that fall under this category include design and construction of the new fuel storage facility and expansion/upgrades of the existing UPS cargo apron development area.

Other Unidentified Funding Sources

The traditional airport capital funding sources described in the preceding paragraphs are insufficient in amount and timing to finance some projects. The source of this non-traditional "other" funding has not yet been determined and represents a shortfall for the capital project implementation plan. This "other" funding may potentially include sources such as state funding, economic development grants, future federal economic stimulus grants, and other possible sources that are not certain at this time. If other funding sources cannot be obtained in the time frames needed, the project will have to be delayed until such funding can be identified.

Capital Improvement Program (CIP)

The FAA, with input from Airport Management, keeps an up-to-date Airport Capital Improvement Program (ACIP) for BFI, which is similar in format to the tables presented below. The FAA ACIP is the programming mechanism FAA uses to identify, prioritize, and assign federal airport funds. The FAA ACIP is submitted annually for federally eligible projects. The FAA evaluates each CIP project for eligibility, justification, cost reasonableness, priority rating, phasing, participation, and funding availability.

The purpose of the of the Master Plan's proposed project list, phasing, and costs is to provide a progressive projection of capital needs, which can then be utilized in local and federal financial programming. It is realized that, as soon as this long-range planning document is published, the project list starts to be out of date; therefore, it will always differ to some degree with the Airport's CIP on file with the FAA. It is also recognized that the Airport Sponsor has reasonable flexibility in accommodating planned or other strategic improvements as demand warrants and the financial resources become available. However, this flexibility is dependent upon the adherence to the following CIP development guidelines/considerations:

- Airport Master Plan projects must be depicted on the ALP to be considered for FAA funding. A project absent of being identified on the ALP would have to go through extenuating FAA procedures, and risk not being implemented or funded. The Airport cannot risk this circumstance, especially with scheduled commercial air cargo and airline passenger service.
- A full assessment of Airport project improvements and site development considerations ensures that the Airport is being developed in a strategic, sequential, and orderly manner. Thereby, planned

projects can occur and be implemented without the Airport second-guessing the long-term implications or wondering if projects would compete for the best-use of available space.

- There are often many procedural and pre-project requirements to implement even basic project improvements. These include environmental, land use regulations, codes, and stakeholder support. Addressing these strategically allows the Airport to avoid the more arbitrary 'build-on-demand' arrangements. Also, a well envisioned Airport Master Plan offers a more appealing sense of opportunity and development.
- FAA programming and discretionary funds can change rapidly, so the Airport should be prepared for these opportunities, including possible FAA reimbursable agreements. Airport CIP projects can often be scaled-back, combined, or accelerated as needed, and some FAA grants are reimbursable to the Airport.
- The Airport lobbies extensively to compete for limited FAA resources and funding. Projects identified in this Airport Master Plan Update are similar to projects being pursued aggressively and competitively by similar commercial service airports.

Future Project Development & Coordination

Federally obligated airports operate under increasingly complex project implementation and grant-in-aid funding procedural requirements. The competition for federal and state funds places an emphasis on the Airport Master Plan as a means to reasonably commit towards the project improvement schedule, in terms of project justification, costs, funding sources, and matching participation. It should be noted that the Airport Master Plan represents the development views of the Airport Sponsor and does not commit or obligate financial support to the recommended Airport projects, even if identified in the Airport CIP or depicted on the Airport Layout Plan (ALP) drawings.

Regular coordination with the FAA and WSDOT is important to facilitate project formulation and arrange funding in a timely manner. Projects also need to be scheduled and coordinated in a manner which does not unnecessarily burden or prevent Airport operations. All Airport projects should be reassessed and updated annually, including necessary adjustments in project sequencing, multi-year phasing considerations, cost opinions, enabling requirements, and funding participation.

It is important to develop a well-planned and executable Airport CIP that minimizes project changes, which are difficult for the FAA to make short-term program or funding adjustments. FAA programmed projects cannot be traded out for other projects and FAA grants are only issued on bids or negotiated fees. In addition, the FAA can only commit funds to a multiyear grant for years within the current program authorization. These are critical considerations, particularly if pursuing FAA discretionary funding on large projects. As part of the CIP development, the Airport should also coordinate with the FAA regarding environmental efforts, funding cost/benefit, and other project justification requirements. As part of this, the Airport must assure timely coordination and completion of applicable FAA pre-construction efforts and environmental processing, including an up to date Airport Layout Plan and Exhibit 'A' Property Map.

Phasing Plan

To supplement the information provided by the project list and project cost estimates, a series of phasing illustrations have been prepared. The following illustrations indicate the suggested phasing for the proposed improvement projects throughout the 20-year planning period.

The plans represent a suggested schedule and variance from it may be necessary, especially during the latter time periods. Attention has been given to the first five years because the projects outlined in this time frame include many critical improvements. The demand for certain facilities, especially in the latter time frame, and the economic feasibility of their development, are to be the prime factors influencing the timing of individual project construction. Care must be taken to provide for adequate lead-time for detailed planning and construction of facilities to meet aviation demands in a timely fashion. It is also important to minimize the disruptive scheduling, where a portion of the facility may become inoperative due to construction, and to prevent extra costs resulting from improper project scheduling.

TABLE G2 **PHASE I (0-5 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project Description		Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
2020 Projects							
A.1	Design large Aircraft Parking Apron adjacent to Passenger Terminal Building, including Terminal Area roadway/parking modifications and removal of the South Arrivals Building		$6,250,000	$0	$0	$ 6,250,000	$0
A.2	Prepare request and submittal for update of existing ATC Operational Waiver to address non-standard centerline separation distance between existing parallel runway configuration		TBD	TBD	$0	$0	$0
A.3	Construct new UPS cargo improvements		TBD	$0	$0	$0	TBD
Sub-Total/2020 Projects			***$ 6,250,000***	***$0***	***$0***	***$6,250,000***	***$0***
2021 Projects							
A.1	Prepare consolidated EA or EIS for various Phase I projects: acquire property (multiple parcels), relocate/construct new fuel storage facility, and implement pavement maintenance/ reconstruction[1]		$400,000	$360,000	$0	$40,000	$0
A.2	Prepare request and submittal for modification of standards to address multiple existing non-standard conditions: 1) Runway 14R/32L OFA, 2) Runway 14R/32L to Taxiway A centerline separation, and 3) Runway 14R/32L to Taxiway B centerline separation		$55,050	$0	$0	$55,050	$0
A.3	Renovate existing FAA Flight Service Building for Airport Administration use		TBD	$0	$0	TBD	$0
A.4	Modify alignment and reconstruct existing west side Airport Service Road (ASR), including the relocation of the Boeing Pump Station, to mitigate existing non-standard Taxiway B Object Free Area (OFA)		$5,189,769	$4,670,792	$0	$518,977	$0
A.5	Design and construct Phase 3 stormwater system rehabilitation		$1,800,0000	$1,620,000	$0	$180,000	$0

[1] Subsequent to the preparation of the Draft Report for this study, the FAA will require separate environmental processing for individual projects rather than consolidating multiple projects for environmental review.

TABLE G2 **PHASE I (0-5 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project Description		Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
A.6	Design, engineer, and implement Taxiway A11 and B9 pavement reconstruction projects (i.e., full reconstruction) with signage and edge/centerline lighting modifications, including install of in-pavement runway guard lights. (TW B9 @ 75' width & >100,000 lbs. sw, TW A11 @ 35' width & 60,000 lbs. sw)		$2,372,500	$0	$0	$ 2,372,500	$0
A.7	Acquire Jorgensen Forge property: 20.58 acres (fee simple)		$30,227,000	$ 27,204,300	$0	$ 3,022,700	$0
A.8	Construct large Aircraft Parking Apron adjacent to Passenger Terminal Building, including Terminal Area roadway/parking modifications and removal of the South Arrivals Building		$11,500,000	$ 10,350,000	$0	$ 1,150,000	$0
A.9	Construct Steam Plant Access Road		$1,200,000	$0	$0	$ 1,200,000	$0
Sub-Total/2021 Projects			***$52,744,319***	***$44,205,092***	***$0***	***$7,339,227***	***$0***
2022 Projects							
A.1	Acquire property north of Airport Maintenance Building and vacate roadway for RPZ (Elizabeth St): 0.6 acres (fee simple)		$1,529,500	$0	$0	$ 1,529,500	$0
A.2	Design new Fuel Storage Facility		TBD	$0	$0	$0	TBD
Sub-Total/2022 Projects			***$1,529,500***	***$0***	***$0***	***$1,529,500***	***$0***
2023 Projects							
A.1	Design and construct Phase 4 stormwater system rehabilitation		$1,477,777	$1,329,999	$0	$147,778	$0
A.2	Design, engineer, and construct new Taxiway A4 to align with Taxiway B3 with signage and edge/centerline lighting modifications in accordance with ADG IV design standards, including install of in-pavement runway guard lights. (75' width & >100,000 lbs. sw)		$3,499,000	$3,149,100	$0	$349,900	$0
A.3	Design and remove existing Taxiway A3 and A4 connectors with signage and lighting modifications		$837,500	$753,750	$0	$83,750	$0

TABLE G2 **PHASE I (0-5 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project Description		Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
A.4	Design, engineer, and reconstruct Taxiway A5 to 90° connector with signage and lighting modifications, including install of in-pavement runway guard lights. (35' width & 12,500 to 60,000 lbs. sw)		$532,500	$479,250	$0	$53,250	$0
A.5	Design, engineer, and implement Runway 14L/32R pavement reconstruction project (i.e., 25% reconstruct & 75% rehabilitation) & replacement of MIRLs. (100' width & >100,000 lbs. sw)		$7,879,000	$ 7,091,100	$0	$ 787,900	$0
A.6	Design, engineer, and implement Southeast Apron pavement rehabilitation project. (12,500 to 60,000 lbs. sw)		$1,587,500	$0	$0	$ 1,587,500	$0
A.7	Acquire Woods Meadows property: 3.6 acres (fee simple)		$7,253,500	$0	$0	$ 7,253,500	$0
A.8	Demo Existing Southwest GA Facilities to accommodate Future Aviation Redevelopment Area		$7,127,500	$0	$0	$ 7,127,500	$0
A.9	Prepare consolidated EA or EIS for various Phase II projects: 300-foot runway/TW A/TW B extension north; RW 14R approach RPZ property acquisition (multiple parcels); ALS and various other lighting relocation/upgrades; removal of future RW 14R VGAS obstruction, construct new airport maintenance facilities, and implement pavement maintenance/reconstruction[2]		$550,500	$0	$0	$ 550,500	$0
A.10	Construct new Fuel Storage Facility[3]		TBD	$0	$0	$0	TBD
A.11	Design and remove existing Taxiway A8 connector with signage and lighting modifications		$198,500	$ 178,650	$0	$ 19,850	$0
Sub-Total/2023 Projects			***$30,943,277***	***$12,981,849***	***$0***	***$17,961,428***	***$0***
2024 Projects							

[2] Subsequent to the preparation of the Draft Report, the FAA will require separate environmental processing for individual projects rather than consolidating multiple projects for environmental review.

[3] Subsequent to the preparation of the Draft Report, this project will likely be pushed back to a later year within the planning period for this MP Update.

TABLE G2 **PHASE I (0-5 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project Description		Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
A.1	Design, engineer, and implement Taxiway A2 upgrade/pavement reconstruction project (i.e., full reconstruction) with signage and edge/centerline lighting modifications in accordance with ADG III design standards. (75' width & >100,000 lbs. sw)		$2,247,000	$ 2,022,300	$0	$ 224,700	$0
A.2	Design Snow Removal Equipment (SRE) building[4]		$1,101,000	$ 990,900	$0	$ 110,100	$0
A.3	Acquire property for Runway 14 RPZ: 0.43 acres (fee simple)		$3,288,500	$ 2,959,650	$0	$ 328,850	$0
A.4	Prepare OAP and remove future obstruction to Runway 14R VGAS surface (i.e., one tree)		$40,500	$ 36,450	$0	$ 4,050	$0
A.5	Modify existing National Guard leasehold property to accommodate relocation of existing Airport Maintenance Facilities		TBD	$0	$0	TBD	$0
A.6	Design, engineer, and realign/reconstruct segment of Taxiway A (i.e., full reconstruction), between Taxiways A1 and A2, with signage and edge/centerline lighting modifications in accordance with ADG III design standards. (75' width & >100,000 lbs. sw)		$810,500	$ 729,450	$0	$ 81,050	$0
Sub-Total/2024 Projects			**$7,487,500**	**$6,738,750**	**$0**	**$748,750**	**$0**
Total/Phase I (2020-2024)			**$98,954,596**	**$63,925,691**	**$0**	**$33,828,905**	**$0**

Notes: Cost estimates, based upon 2020 data, are intended for preliminary planning purposes, and do not reflect a detail engineering evaluation.

[a] Federal–
FAA Airport Improvement Program (AIP) Entitlement Funds
FAA Discretionary Funds

[b] Washington Department of Transportation - Aviation Grants

[c] King County

[d] Private or Third-Party Financing

[4] Subsequent to the preparation of the Draft Report, this project will likely be pushed back to a later year within the planning period for this MP Update. Also, this project was previously designed for a different location on the Airport but will require some updated redesign for the new site.

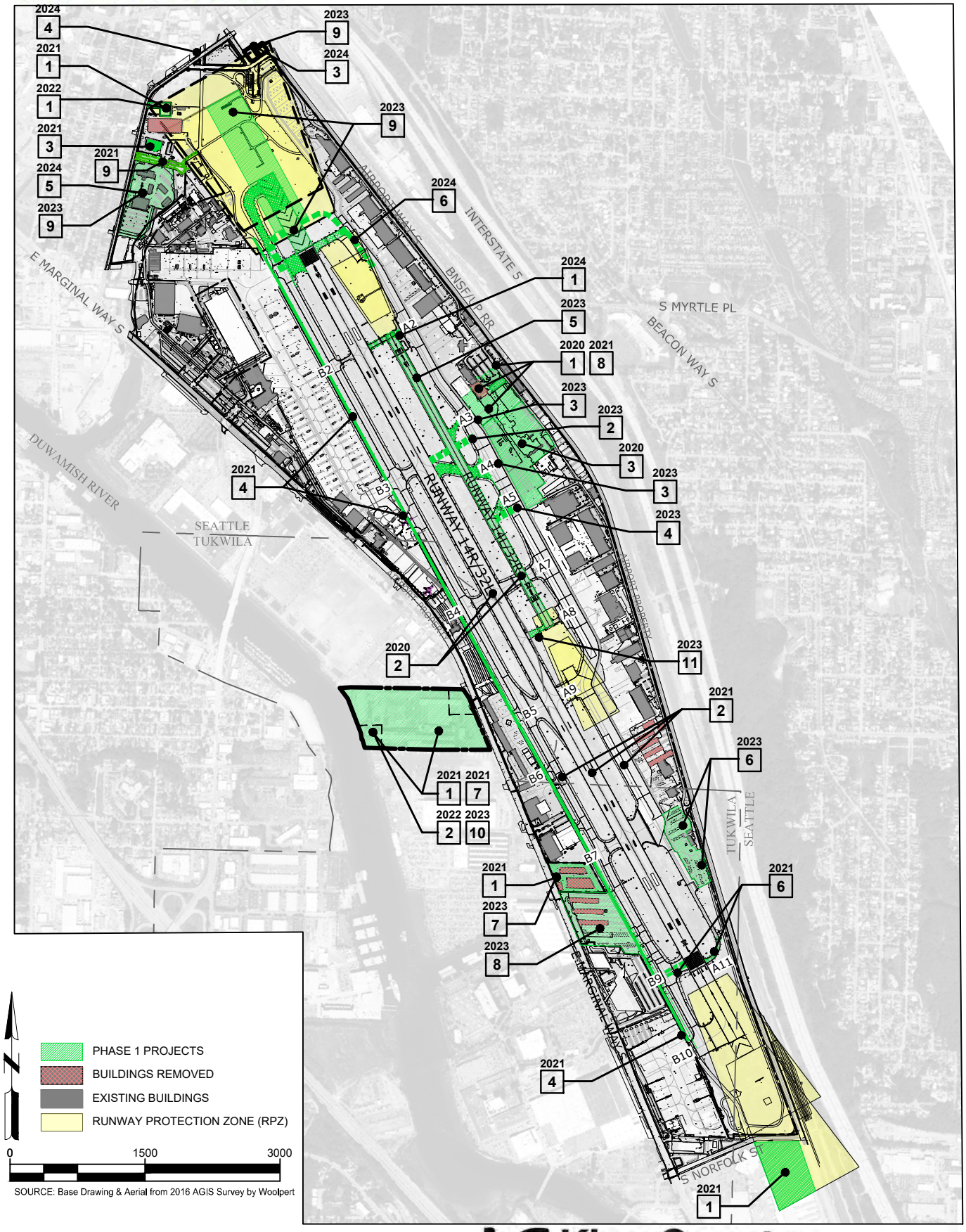

FIGURE G1 **PROJECT PHASING PLAN-PHASE I (0-5 Years)**

Mead &Hunt

King County International Airport/ Boeing Field

Table G3 **PHASE II (6-10 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project Description		Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
B.1	Design and engineer Runway 14R/32L pavement reconstruction project (i.e., 25% reconstruct & 75% rehabilitation), including 300-foot extension north onto existing PPRP, extension/expansion of existing runway shoulder from 25' to 40', Runway 14R MALSF & threshold lights relocation, install RW CL & TDZ lights @ each end, upgrade to airfield signs, and replacement of High Intensity Runway Lights (HIRLs). Project to include design of new TW A & B extensions, TW A1 & B1 connectors with install of in-pavement runway guard lights to serve extended runway, removal of existing A1 & B1 connectors, convert portion of existing PPRP to new blast pad, and remove balance of runway and TW Z PPRP. (200' width & >100,000 lbs. sw)		$7,321,000	$6,588,900	$0	$732,100	$0
B.2	Implement Runway 14R/32L pavement reconstruction project (i.e., 25% reconstruct & 75% rehabilitation), including 300-foot extension north onto existing PPRP, extension/expansion of existing runway shoulder from 25' to 40', relocation of RW 14R threshold lights and MALSF, upgrade to airfield signs, and replacement of High Intensity Runway Lights (HIRLs). Project to include converting portion of existing PPRP to new blast pad and removing balance of runway and TW Z PPRP. (200' width & >100,000 lbs. sw)		$40,015,500	$36,013,950	$0	$4,001,550	$0

Table G3 **PHASE II (6-10 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project Description		Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
B.3	Implement Taxiway B extension/rehabilitation project with signage and edge/centerline lighting modifications to serve extended runway. (75' width & >100,000 lbs. sw). Project to include construction of new TW B1 connector with install of in-pavement runway guard lights and removal of existing TW B1		$4,231,500	$3,808,350	$0	$423,150	$0
B.4	Realign/reconstruct north segment of Taxiway A (800 feet north of Taxiway A1) with signage and edge lighting modifications, including centerline lights, in accordance with ADG III design standards, including realignment of ASR. (50' width & 100,000 lbs. sw). Project to include construction of new TW A1 connector with install of in-pavement runway guard lights to serve extended runway and removal of existing TW A1		$4,560,000	$4,104,000	$0	$456,000	$0
B.5	Prepare ATCT Siting Study for relocation of existing ATCT		$55,000	$0	$0	$ 55,000.00	$0
B.6	Design and implement Taxiway A10 reconstruction project (i.e., full reconstruction) with signage and edge/centerline lighting modifications. (75' width & >100,000 lbs. sw)		$3,637,000	$3,273,300	$0	$363,700	$0
B.7	Design and implement Taxiway B3 reconstruction project (i.e., full reconstruction) with signage and edge/centerline lighting modifications, including install of in-pavement runway guard lights. (75' width & >100,000 lbs. sw)		$1,521,000	$1,368,900	$0	$152,100	$0

Table G3 **PHASE II (6-10 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project Description		Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
B.8	Prepare consolidated EA for various Phase II and Phase III projects: construct new southwest cargo development area, property acquisition for Runway 14R Departure RPZ, and implement pavement maintenance/reconstruction[5]		$220,000	$198,000	$0	$22,000	$0
B.9	Design, engineer, and implement Taxiway B2 upgrade/pavement reconstruction project (i.e., full reconstruction) with signage and edge/centerline lighting modifications in accordance with ADG III design standards. (75' width & >100,000 lbs. sw)		$8,985,000	$8,086,500	$0	$898,500	$0
B.10	Acquire existing Runway 14R Departure RPZ property that extends off Airport property: 7.4 acres (fee simple)		$25,257,000	$22,731,300	$0	$2,525,700	$0
Total/Phase II (2025-2029)			**$95,803,000**	**$86,173,200**	**$0**	**$9,629,800**	**$0**

Notes: Cost estimates, based upon 2020 data, are intended for preliminary planning purposes, and do not reflect a detail engineering evaluation.

[a] Federal–
FAA Airport Improvement Program (AIP) Entitlement Funds
FAA Discretionary Funds

[b] Washington Department of Transportation - Aviation Grants

[c] King County

[d] Private or Third-Party Financing

[5] Subsequent to the preparation of the Draft Report, the FAA will require separate environmental processing for individual projects rather than consolidating multiple projects for environmental review.

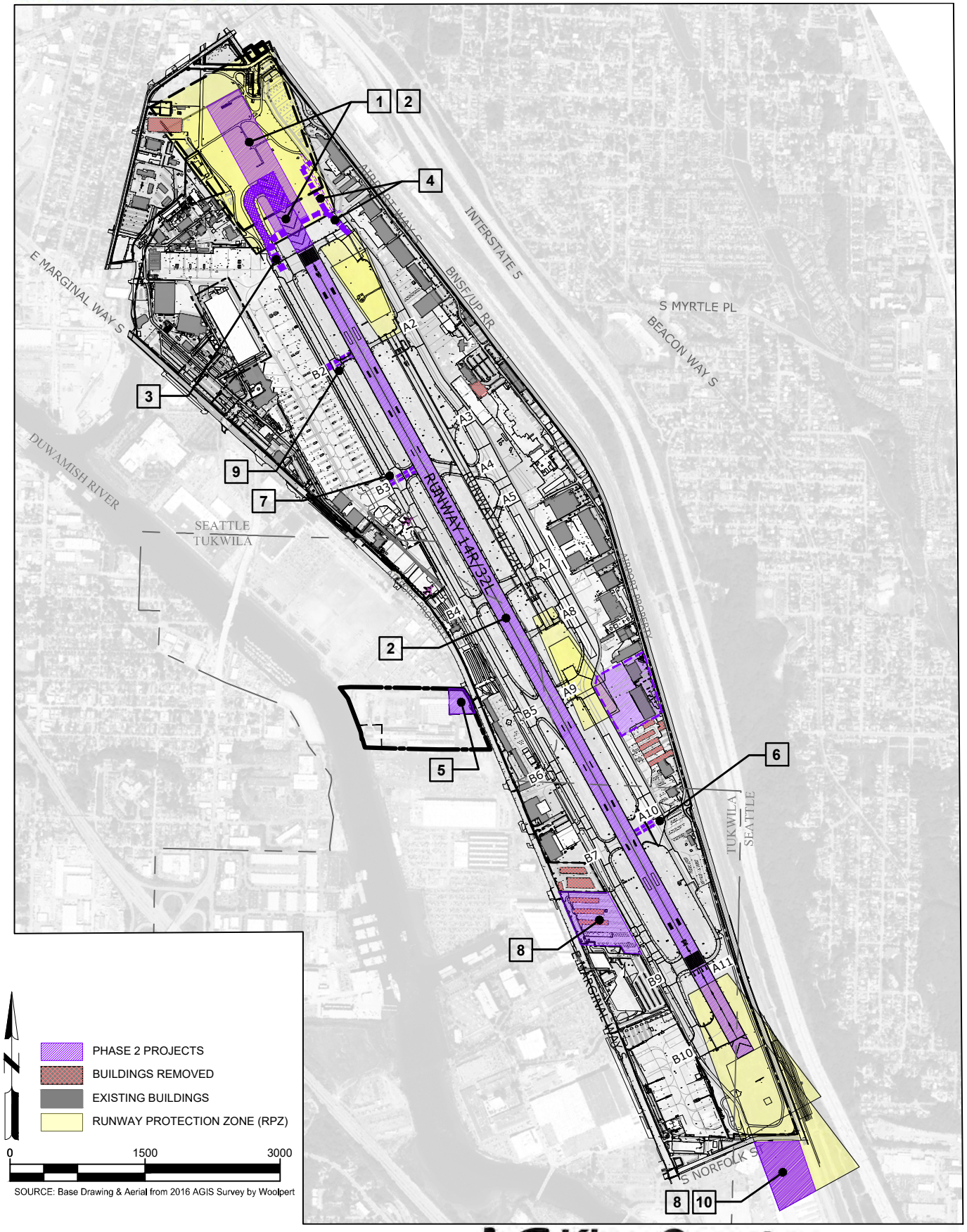

FIGURE G2 **PROJECT PHASING PLAN - PHASE II (6-10 Years)**

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Table G4 **PHASE III (11-20 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project Description		Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
C.1	Design and implement Taxiway A7 rehabilitation project with signage and edge/centerline lighting modifications, including install of in-pavement runway guard lights. (75' width & >100,000 lbs. sw)		$1,045,500	$940,950	$0	$104,550	$0
C.2	Design and implement Taxiway A9 rehabilitation project with signage and edge/centerline lighting modifications, including install of in-pavement runway guard lights. (75' width & >100,000 lbs. sw)		$1,075,500	$967,950	$0	$107,550	$0
C.3	Design and implement Taxiway B reconstruction project (i.e., 50% reconstruct & 50% rehabilitation), between Taxiway B1 and B2, with signage and edge/centerline lighting modifications. (75' width & >100,000 lbs. sw)		$2,121,000	$1,908,900	$0	$212,100	$0
C.4	Design and implement Taxiway B rehabilitation project (between Taxiway B2 and B5) with signage and edge/centerline lighting modifications. (75' width & >100,000 lbs. sw)		$6,772,500	$6,095,250	$0	$677,250	$0
C.5	Design and implement Taxiway B rehabilitation project (between Taxiway B7 and B10), including Taxiway B10 connector, with signage and edge/centerline lighting modifications and install of in-pavement runway guard lights. (75' width & >100,000 lbs. sw)		$5,271,500	$4,744,350	$0	$527,150	$0
C.6	Design and implement Taxiway B6 rehabilitation project with signage and edge/centerline lighting modification. (35' width & 12,500 to 60,000 lbs. sw)		$591,500	$532,350	$0	$59,150	$0

Table G4 **PHASE III (11-20 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project	Description	Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
C.7	Design and implement Taxiway A2 and B2 rehabilitation project with signage and edge/centerline lighting modifications, including install of in-pavement runway guard lights. (35' width & 12,500 to 60,000 lbs. sw)		$1,382,000	$1,243,800	$0	$138,200	$0
C.8	Design and implement Taxiway A rehabilitation project (between Taxiway A2 and A5) with signage and edge/centerline lighting modifications. (75' width & >100,000 lbs. sw)		$6,432,000	$5,788,800	$0	$643,200	$0
C.9	Prepare consolidated EA for various Phase III projects: install Runway 32L ALSF-1, removal of future RW 32L obstructions (OFZ), and implement pavement maintenance/reconstruction[6]		$165,000	$148,500	$0	$16,500	$0
C.10	Design and implement Taxiway A reconstruction project (i.e., full reconstruction), between Taxiway A5 and A8, with signage and edge/centerline lighting modifications. (75' width & >100,000 lbs. sw)		$9,053,000	$8,147,700	$0	$905,300	$0
C.11	Design and implement Taxiway A reconstruction project (i.e., full reconstruction), between Taxiway A8 and A10, with signage and edge/centerline lighting modifications. (75' width & >100,000 lbs. sw)		$17,136,000	$15,422,400	$0	$1,713,600	$0
C.12	Design and implement Taxiway A reconstruction project (i.e., full reconstruction), between Taxiway A10 and A11, with signage and edge/centerline lighting modifications. (35' width & 12,500 to 60,000 lbs. sw)		$2,634,500	$2,371,050	$0	$263,450	$0

[6] Subsequent to the preparation of the Draft Report, the FAA will require separate environmental processing for individual projects rather than consolidating multiple projects for environmental review.

Table G4 **PHASE III (11-20 YEARS) DEVELOPMENT PLAN PROJECT COSTS**

Project Description		Note	Total Costs	Federal [a]	WSDOT [b]	Local [c]	Other [d]
C.13	Design and implement Taxiway B4 and B7 rehabilitation project with signage and edge/centerline lighting modifications, including install of in-pavement runway guard lights. (75' width & >100,000 lbs. sw)		$1,782,000	$1,603,800	$0	$178,200	$0
C.14	Design and implement Taxiway B rehabilitation project (between Taxiway B5 and B7) with signage and edge/centerline lighting modifications, including Taxiway B5 connector, with signage and edge/centerline lighting modifications and install of in-pavement runway guard lights. (75' width & >100,000 lbs. sw)		$3,897,500	$3,507,750	$0	$389,750	$0
C.15	Design and implement West GA Apron pavement rehabilitation project (between Taxiway B5 & B6). (12,500 to 60,000 lbs. sw)		$1,016,000	$914,400	$0	$101,600	$0
C.16	Prepare OAP and remove/relocate future obstructions to Runway 32L OFZ surfaces (i.e., two poles and two power poles)		$256,500	$230,850	$0	$25,650	$0
C.17	Design and install Runway 32L ALSF-1		$3,846,000	$3,461,400	$0	$384,600	$0
Total/Phase III (2030-2039)			**$64,478,000**	**$58,030,200**	**$0**	**$6,447,800**	**$0**
GRAND TOTALS			**$284,082,196**	**$198,615,939**	**$0**	**$54,039,257**	**$0**

Notes: Cost estimates, based upon 2020 data, are intended for preliminary planning purposes, and do not reflect a detail engineering evaluation.

[a] Federal–
FAA Airport Improvement Program (AIP) Entitlement Funds
FAA Discretionary Funds

[b] Washington Department of Transportation - Aviation Grants

[c] King County

[d] Private or Third-Party Financing

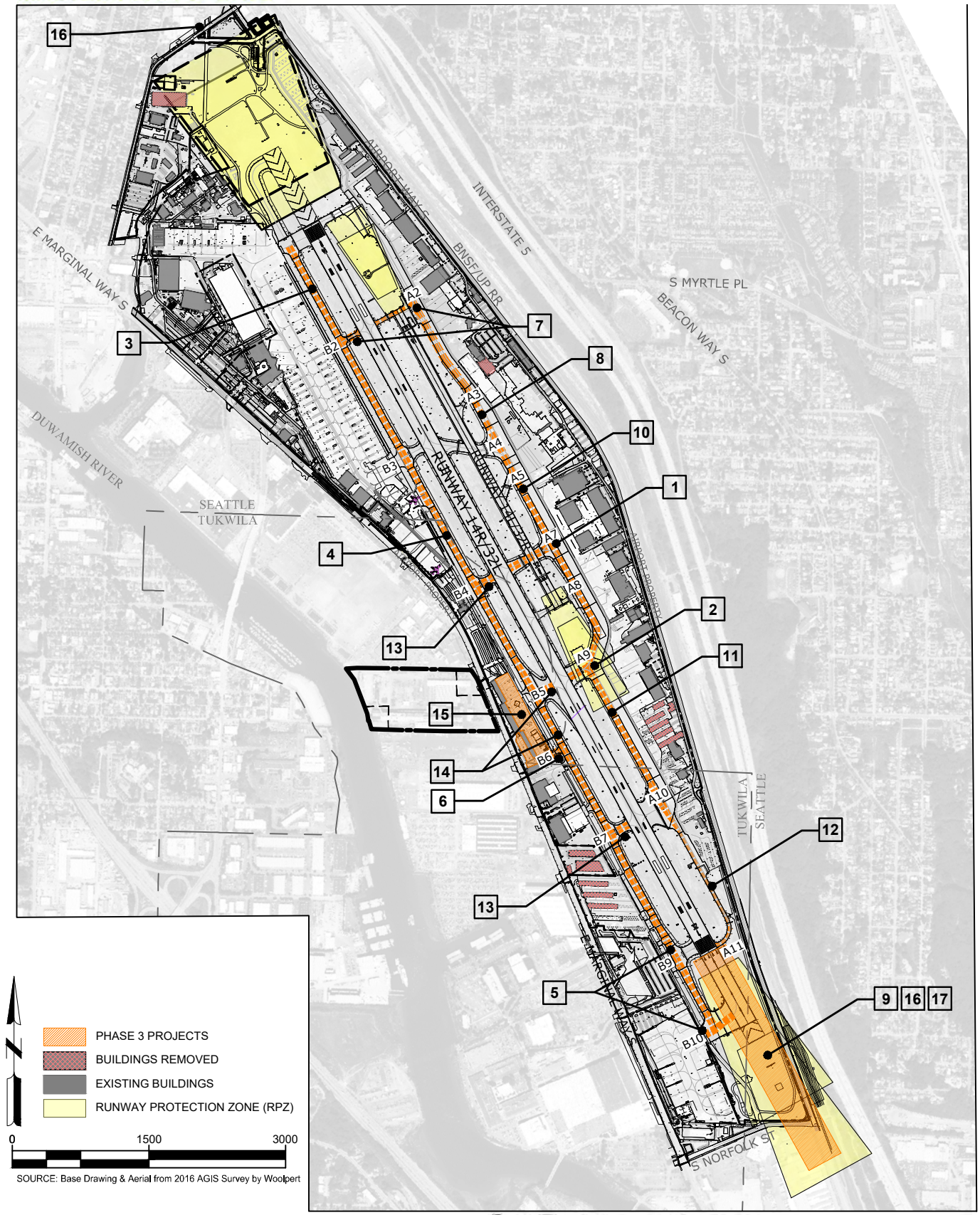

FIGURE G3 **PROJECT PHASING PLAN - PHASE III (11-20 Years)**

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Summary – Master Plan Update Capital Improvement Program

If aviation demands continue to indicate that improvements are needed, and if the proposed improvements prove to be environmentally acceptable, the capital improvement financial implications discussed previously are likely to be acceptable for the FAA and for King County. However, it must be recognized that this is only a programming analysis and not a commitment on the part of the FAA or the Airport Sponsor. If the cost of an improvement project is not financially feasible, its construction will not be initiated.