

## **Appendix D**

# Alternatives Preliminary Engineering Project Quantities Table

*(11/17/2017)*

**Final Environmental Assessment and Section 4(f) Determination  
Proposed Improvements 2016-2020 at BWI Marshall Airport**

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No.	Project Name/Area	Area Description	Floodplain (SF)		Wetlands (SF)		SWM Ponds (SF)		Infiltration Trenches (LF/SF)		Wetlands Buffer (SF)		Stream Channel (SF)		Stream Channel (LF)		New Retaining Wall (LF/SF)	New Stormdrain (LF)	Approx. Total Cut (CY)	Approx. Total Fill (CY)	Forest Clearing (Reforested Area) (SF)		Impervious Area (SY)		Net Impervious Area (SY)	Approx. Overall Limit of Disturbance (SF)	Comments/Assumptions		
			TEMP.	PERM.	TEMP.	PERM.	TEMP.	PERM.	LF	SF	TEMP.	PERM.	TEMP.	PERM.	TEMP.	PERM.					Clearing	Reforested Area	Removal	New					
[ALP]1	Relocate Taxiways Romeo (R) and Foxtrot (F) Draft ALP (01/2105)	Portions of the parallel taxiway system to Runway 10-28 will be demolished and reconstructed at a separation distance of 502 feet from the Runway 10-28 centerline. The project shift Taxiway R 102 feet from its current location to meet FAA design standards for runway/taxiway separation. This project also includes demolishing and reconstructing Taxiway Foxtrot (F) between Runway 15R-33L and the Runway 10 end. Taxiway F will be demolished and reconstructed between Runway 15R-33L and the Runway 10 end. Taxiway F will be relocated 350 feet from the parallel Taxiway R to provide for a dual taxiway system to access Runway 10-28 which will improve the overall efficiency of the airfield. Any existing Taxiway F connector pavement no longer needed for shoulder will be demolished.																										Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'. Area for SWM ponds includes entire area of pond even if only partially withing LOD.	
[ALP]1 - Alt 2	Relocate Taxiways Romeo (R) and Foxtrot (F)	Same as above with the following modification: Taxiway R has been deferred to a future project, Taxiway F (from Runway 15R-33L and Taxiway G) is mill and overlay only, Taxiway R (from Runway 15R-33L and Taxiway G) is removed.				9500		262000								1325		4900		591000		220000		144000	228000	84000	111 (Acres)	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'. Area for SWM ponds includes entire area of pond even if only partially withing LOD.	
[ALP]1 - Alt 3	Relocate Taxiways Romeo (R) and Foxtrot (F)	Same as ALP1 with the following modification: Taxiway F (from Runway 15R-33L and Taxiway G) is mill and overlay only.						97400									4900		186000		210000		75000	123000	48000	59 (Acres)	Original Alt-3 has been deleted. Old Alt-4 is now Alt-3. Area for SWM ponds includes entire area of pond even if only partially withing LOD.		
[ALP]2 - Alt 1	Taxiway Uniform (U) 3 - Phase 1 - Alternative 1 Draft ALP (01/2015)	A new taxiway (U3), located west of taxiway U2 will be constructed to provide access to/from Runway 10-28 and Taxiway U. Taxiway U3 will be constructed in concrete based on the prevalence of queuing, slow-moving aircraft. Phase 1 Taxiway U3 construction includes the area north of Runway 10-28.						262000								420		4900		900	310000		210000		118000	165000	47000	84 (Acres)	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'
[ALP]2 - Alt 2	Taxiway Uniform (U) 3 - Phase 1 - Alternative 2	Alternative version of the Taxiway U3 as per latest MPU																	2,600	5,100				4,700	12,500	7,800	222,400	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'	
[ALP]3	International Terminal Area Taxiway Fillets and Shoulders Draft ALP (01/2015)	As a result of the recent revisions to FAA standards for fillet geometry, the terminal Area pavement projects include improvements to all substandard fillets to meet the latest criteria. Locations include taxiways adjacent to Runway 15L-33R and the adjacent terminal area. Several of these areas were also identified to be in need of pavement rehabilitation in accordance with the PMP. In addition, the temporary remain-overnight (RON) area adjacent to the International concourse will be converted to a taxiway as part of the miscellaneous projects. This conversion will extend Taxiway B and Maintain the 275-foot separation that exist today between Taxiways B and S.																	3,400	10,000				9,500	23,500	14,000	472,000	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder = 1.0'	
[ALP]4	New Infill Pavement Near Taxiways T, P, and Future P Draft ALP (01/2015)	Subsequent to the Airfield Lighting Vault (ALV) relocation project, infill pavement will be added to the former ALV site and to the grassy area bounded by Taxiways T, P, P1 and C. In conjunction with these infill areas, Taxiway E will be rebuilt 300 feet to the east. The new impervious areas will be paved to support standard Group V parallel taxiway separations and to accommodate a Vehicle Service Roadway (VSR) that will be repositioned closer to the airfield to provide for the necessary aircraft parking clearances at gates around the ends of concourse C and D.								7,100							300		27,300	4,400				34,000	51,000	17,000	644,000	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'. P14 was combined to this project.	
[ALP]6	Relocate Taxiways Kilo (K) & Lima (L) Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	These taxiways will be relocated to prevent direct access from the General Aviation (GA) apron to the runway. The relocated taxiways will connect the GA apron to Taxiway Q. The existing Taxiways K and L will be demolished.															500		25,700	4,800				24,400	35,000	10,600	504,000	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder = 1.0'	
[ALP]7	Isolation/RON Apron Construction Draft ALP (01/2015)	A portion of the decommissioned Runway 4 end and Taxiway Y will be converted to a parking apron and isolation area for aircraft. The area will include two parking positions to accommodate up to Group V aircraft in each position. The apron parking and isolation area will include access to and from Taxiway D3, which crosses Runway 15R-33L. It will also be developed to connect to the parallel taxiway of Runway 10R-28L in the future (Phase 3).															250		57,000	2,800				5,200	13,700	8,500	342,000	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'	
[ALP] 7A	Isolation/RON Apron Construction Alternative Option with no relocation of RTR	A portion of the decommissioned Runway 4 end and Taxiway Y will be converted to a parking apron and isolation area for aircraft. The area will include two parking positions to accommodate up to Group V aircraft in each position. The apron parking and isolation area will include access to and from Taxiway D3, which crosses Runway 15R-33L. It will also be developed to connect to the parallel taxiway of Runway 10R-28L in the future (Phase 3).															1,200	400	216,000	44,000				32,000	72,000	40,000	37 (Acres)	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'	
[ALP]8 - Alt 1	Runway 28 Deicing Pad Expansion Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	The Runway 28 Deicing Pad will be expanded to maintain existing capacity and parking positions and meet new aircraft deicing separation standards in accordance with AC 150/5300-14B Airport Deicing Facilities. This expansion will add an extra lane with possible two positions for operations. Expansion would include reconstruction of the concrete apron located on the existing pad including reconfiguration of the infrastructure to accommodate the new parking positions per the FAA standard. Snow dump area is included.															200		4,600	750				43,300	49,000	5,700	619,500	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder = 1.0'	
[ALP]8 - Alt 2	Runway 28 Deicing Pad Expansion	Similar to above except less concrete reconstruction.															200		4,600	750				43,300	49,000	5,700	619,500	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder = 1.0'	
[ALP]12 - Alt 1	Taxiway H Relocation - Alternative 1 Draft ALP (01/2015)	Relocate exit Taxiway H approximately 500 feet to the south to better serve aircraft landing on Runway 33L with the recently displaced threshold (500'). The relocation will reduce the Runway Occupancy Time (ROT) by capturing aircraft that would otherwise have to roll to the runway end and Taxiway P. The relocation would also eliminate the direct access from the RON apron to Runways 15R-33L that is prohibited by AC 150/5300-13A.								1,000	8,500						800		11,500					13,700	14,100	400	384,000	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'	
[ALP]12 - Alt 2	Taxiway H Relocation - Alternative 2 Draft ALP (01/2015)	Relocate Taxiway H approximately 150 feet North per the Master Plan.								800	7,900						700		10,500	6,600				11,400	10,500	-900	310,000	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'	
[ALP]12 - Alt 3	Taxiway H Relocation - Alternative 3 Draft ALP (01/2015)	Taxiway H to be relocated approximately 500 feet North.								900	6,400						100		8,500	5,600				14,100	13,300	-800	385,000	This project is combined with the P45 project.	
[ALP]13	VSR Section from Runway 33L to Future Fire Training Facility Draft ALP (01/2015)	• (See P-45) Relocate Fire Training Facility																											
[ALP]14	New Sky Bridge C Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	The concourse C Sky Bridge will provide direct access from level 6 of the Hourly Garage to the terminal.																	1,000					200	200	0	3,300	Three 500 SF foundations with 5' depth, plus 4' buffer around all sides of each foundation for any additional earthwork (cut) required for installation.	
[ALP]15	Terminal Roadway Widening and Access Improvements Draft ALP (01/2015)	The terminal road will be widened to modify vehicular access in the vicinity of the hotel and hourly garage. Widening include reconfiguring the roadway for service vehicle access, improving hotel patron egress, constructing an additional lane for hotel/garage access, and closing the existing employee access roadway.																										Further investigation needs to be conducted on the study for this ALP project and its feasibility with its proximity to the existing retaining wall.	
[ALP]16	Northwest Quadrant Perimeter Road Construction (Runway 10) Draft ALP (01/2015)	The roads will be two-lanes, paved, with a maximum grade of approximately three percent. The proposed secure roadways would be used by the airport maintenance vehicles, security vehicles, and air cargo tug vehicles. Vehicles would enter the secure roadways through a security gate located off of Stony Road Run.						14,500												400				2,300	2,900	600	88,000	24' VSR (two 12' lanes). Assume a 2" pavement section to bring ground to final grade.	
[ALP]17	Taxiway Victor (V) Relocation Draft ALP (01/2015)	Taxiway V will be demolished and reconstructed at a separation distance of 600 feet from the Runway 10-28 centerline. This project removes nonstandard Taxiways V from its current location and reconfigures it to meet FAA design standards for runway/taxiway separation.										22,600								2,100		547,000		14,500	14,500	30 (Acres)	Area for SWM wetland and wetlands buffer areas includes entire area of each specific wetland and wetland buffer area even if only partially withing LOD. Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'		
[ALP]18	Runway 15R Deicing Pad Expansion Demolition Draft ALP (01/2015)	The existing Runway 15R deicing pad will be expanded and also include an area for snow dumping (P41). In addition to providing deicing operations, the 15R pad will simultaneously allow for RON parking in the colder months. In the warmer months when deicing is not required, the pad can be wholly used for RON parking.																									674,000	Demolition Exhibit Includes: D-148, D-167, D-170, D-173, D-271. Values generated for this item are included within the ALP 18 - Alt 2 Proposed projections.	
[ALP]18	Runway 15R Deicing Pad Expansion Proposed																										674,000	Proposed Exhibit includes: P-40, P-41, P-148. Task also contains a 20' (approximate) tall retaining wall. Airfield Pavement (Including subbase) = 2.5'.	
[ALP]19	Upper Level Roadway Widening at Concourse E Draft ALP (01/2015)	Consistent with the existing terminal curbside/road between Concourse A and D, this project entails widening the outer lanes at the terminal roadway and segregating public vehicle operators (outer lanes) from private vehicle operators (inner lanes) near Concourse E.															1,450	1,750	75,600	950				33,000	59,000	26,000	674,000	For ramp only; assume 100 foundations to be conservative & assume each foundation is 10 CY of cut.	
[ALP]20	Airfield Maintenance Complex Perimeter Road																							13,000	22,000	9,000	352,000		
																									4,500		82,000		

No.	Project Name/Area	Area Description	Floodplain (SF)		Wetlands (SF)		SWM Ponds (SF)		Infiltration Trenches (LF/SF)		Wetlands Buffer (SF)		Stream Channel (SF)		Stream Channel (LF)		New Retaining Wall (LF/SF)	New Stormdrain (LF)	Approx. Total Cut (CY)	Approx. Total Fill (CY)	Forest Clearing (Reforested Area) (SF)		Impervious Area (SY)		Net Impervious Area (SY)	Approx. Overall Limit of Disturbance (SF)	Comments/Assumptions		
			TEMP.	PERM.	TEMP.	PERM.	TEMP.	PERM.	LF	SF	TEMP.	PERM.	TEMP.	PERM.	TEMP.	PERM.					Clearing	Reforested Area	Removal	New					
D-101	Airfield Lighting Vault Demolition Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	• (See ALP 4) Relocate Airfield Lighting Vault																									Structures to be removed to TOG		
D-101A	Glycol Pump Control Building Demolition Draft ALP (01/2015)	• (See ALP 4) Relocate Airfield Lighting Vault																										Structures to be removed to TOG	
D-113	Building 113 Demolition Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	• (Refer P-13 for Values). Removal of the former maintenance building to create a site that can be utilized for other purposes																										Values generated for these items are within P-13 projections. Structures to be removed to TOG	
D-148	Taxi/Bus Staging Area Demolition Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	• Taxi/Bus Support Building at Former Hotel Site • (See ALP 18) Runway 15R Deicing Pad Expansion																										Values generated for these items are within ALP 19 projections. Structures to be removed to TOG	
D-167	Hudson General Bus Stop Demolition Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	• (See ALP 18) Runway 15R Deicing Pad Expansion																										Values generated for these items are within ALP 19 projections. Structures to be removed to TOG	
D-170	Deicing Control Building (RW 15R) Demolition Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	• (See ALP 18) Runway 15R Deicing Pad Expansion																										Values generated for these items are within ALP 19 projections. Structures to be removed to TOG	
D-173	Glycol Storage Building Demolition Draft ALP (01/2015)	• (See ALP 18) Runway 15R Deicing Pad Expansion																										Values generated for these items are within ALP 19 projections. Structures to be removed to TOG	
D-271	RTR Building Demolition Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	• (See ALP 18) Runway 15R Deicing Pad Expansion																										Values generated for these items are within ALP 19 projections. Structures to be removed to TOG	
P7	Second FBO Draft ALP (01/2015)	Construct additional general aviation facilities on the east side of the airfield between the existing general aviation facilities and the existing long-term parking lot. The project includes Pilot Center, GA hangar buildings, aircraft ramp, fuel storage facility, vehicle parking, and other necessary facilities																700		54,200	5,000			62,000	60,000	-2,000	605,000	Assume 2.5' pavement section for apron pavement and 1' pavement section for parking lot pavement section. Cut and fill volumes include further excavation for pavement section depths.	
P9	Northrop Grumman Hangar																												
P10	Existing Aircraft Rescue and Firefighting Facility (ARFF) Expansion Bays Draft ALP (01/2015) and conditionally approved ALP (02/01/2013-P26)	Construction of two additional parking bays for BWI Marshall Fire/Rescue equipment immediately adjacent to the existing ARFF building as well as additional office space.																	30,900	18,500	236,600				38,600	38,600		498,500	Assume 1.5' pavement section for arff bay and road. Assume 5' cut depth for building.
P11	New Aircraft Maintenance Facilities Draft ALP (01/2015)	Additional aircraft maintenance facility to proposed to accommodate a combination of ADG IV and ADG V aircraft an elevation of 235 feet MSL.				15,000					59,000								1,092,900	67,100	2,236,400			3,600	131,200	127,600	72 (Acres)	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'; Building Slab On Grade (Including Subbase) = 1.5'	
P11- Alt 3	New Aircraft Maintenance Facilities Draft ALP (01/2015)	Additional aircraft maintenance facility to proposed to accommodate a combination of ADG IV and ADG V aircraft an elevation of 235 feet MSL.				15,000				59,000									1,270,500	0	1,703,700			1,600	117,000	115,400	55 (Acres)	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'; Building Slab On Grade (Including Subbase) = 1.5'	
P12	New Aircraft Maintenance Facilities Draft ALP (01/2015)	Additional aircraft maintenance facility to proposed to accommodate a combination of ADG IV and ADG V aircraft an elevation of 210 feet MSL.				38,400				117,900									343,100	73,000	1,133,300			4,800	81,000	76,200	36 (Acres)	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'; Building Slab On Grade (Including Subbase) = 1.5'	
P13	Runway Deicing Chemical Storage and Access Road Draft ALP (01/2015) and conditionally approved ALP (02/01/2013-P41)	• (See D-113). An additional 20,000 gallons glycol storage tank is proposed to be added with the two existing glycol tanks in order to meet the current demand at BWI Marshall. An access road is also proposed to improve the circulation to the storage tanks.																	200					570	570		11,600	This project added to ALP-4	
P14	Relocate Airfield Lighting Vault Draft ALP (01/2015) and conditionally approved ALP (02/01/2013)	• (See ALP 4). A new airfield lighting vault (ALV) is proposed to be constructed adjacent to future Taxiway P (decommissioned Runway 4-22) and the Runway 28 deicing pad. The existing ALV at BWI Marshall was originally an ARFF station and was never intended to remain the ALV for an extended period of time.																											
P148	Taxi/Bus Support Building at Former Hotel Site Draft ALP (01/2015)	• (See ALP 18-PROPOSED) Runway 15R Deicing Pad Expansion. The bus/taxi staging area and associated administrative support building will need to be relocated. A new administrative support facility will be built to manage the taxi operations.																		3,100					700	700		35,500	Building Slab On Grade (Including Subbase) = 1.5'
P30 - Alt 1	Airport Maintenance Complex Relocation and Consolidation (Phase 1) Draft ALP (01/2015)	Phase 1 of the Airport Maintenance Complex Relocation and Consolidation is to construct a Snow Removal Equipment Building at the Gold Lot Site. The maintenance functions to be relocated and consolidated into the Airport Maintenance Complex include the Current airport maintenance facilities, offices, and related amenities at the Elms Road complex, as well as the additional staging and storage of the snow removal equipment currently at parking locations midfield and north of the economy lot.																	2,450	6,300				73,000	75,000	2,000	773,000	Assume 2' pavement section for parking lot area surrounding building. Building slab on grade including subbase = 2'	
P30 - Alt 2	Airport Maintenance Complex Relocation and Consolidation (Phase 1)	Same as above with the following modification: Snow Removal Equipment (SRE) Building located further west.																	2,490	160,000								773,000	Assume 2' pavement section for parking lot area surrounding building. Building slab on grade including subbase = 2'
P40	Glycol Storage/Truck Staging Relocation Draft ALP (01/2015)	• (See ALP 18) Runway 15R Deicing Pad Expansion. The glycol storage equipment will need to be relocated.																											
P41	New Area for Snow Dumping Draft ALP (01/2015)	• (See ALP 18) Runway 15R Deicing Pad Expansion. An area for snow dumping will be constructed as part of the expansion of the runway 15R deicing pad.																							0	1,300	1,300		
P45 - ALT 1	Relocate Fire Training Facility Draft ALP (01/2015)	Replace the fire training facility at a site that can accommodate the necessary facilities, to include a burn pit area, firefighting maneuvering area, training operations area, realistic interior fire building, accessory facilities, and other facilities and roadway access necessary to serve as the regional training facility.																								3,500	3,500		
P45 - ALT 2	Relocate Fire Training Facility Draft ALP (01/2015)																												
P45 - ALT 3	Relocate Fire Training Facility					5,000				18,500																			
PMP-1	Taxiway G Mill and Overlay	Taxiway G will be milled and overlaid due to predominant distresses in the pavement. However, Emergency Mill and Overlay was performed as part of contract MAA-CO-112-008 Runway 10-28 Runway Safety Area, pavement rehabilitation and standard compliance.																											
PMP-2	Taxiway P Mill and Overlay	Predominant distresses are alligator cracking, rutting, and weathering. A 3 inch mill and overlay is recommended.																											
18-01 (PMP-3)	Taxiway T reconstruction	Reconstruction of Taxiway T in the vicinity of Concourse A/B. Appropriate fillets and shoulders should be added per advisory circular.																											
18-02 (PMP-4)	Taxilane at Ramp AB Mill and Overlay	Predominant distresses are weathering as well as longitudinal, transverse and block cracking. A 3 inch mill and overlay is recommended.																											
20-01 (PMP-5)	B Gates, Concrete Pavement Restoration	Predominant distresses are spalling, linear cracking, shattered slabs and corner breaks. This pavement is at a critical time in its life cycle where the deterioration rate is expected to increase. Concrete Pavement Rehabilitation is recommended.																											
17-02 (PMP-6)	ARFF Access Road Reconstruction	Predominant distresses are alligator cracking, rutting and weathering. This pavement is functionally failing. Deferring rehabilitation may allow it to deteriorate quickly to the point where more costly reconstruction may be required. A 2 inch mill & overlay of the asphalt pavement is recommended.																											
PMP-7	Cargo Ramp, Mill and Overlay	Predominant distresses are alligator cracking, longitudinal and transverse cracking, rutting and weathering. A 3 inch mill and overlay is recommended.																											
PMP-8	Cargo Ramp, Concrete Pavement Restoration	Predominant distresses are spalling, linear cracking, and joint seal damage. Concrete Pavement Rehabilitation is recommended.																											
PMP-9	Taxilane AA, Mill and Overlay	Predominant distresses are weathering and longitudinal/transverse cracks. A 3 inch mill and overlay is recommended.																											

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			TEMP.	PERM.	TEMP.	PERM.	TEMP.	PERM.	LF	SF	TEMP.	PERM.	TEMP.	PERM.	TEMP.	PERM.		LF	SF			Clearing	Reforested Area	Removal	New				
17-03 (PMP-10)	Ramp BC, Mill and Overlay	A 6 inch mill and overlay of Ramp BC is recommended.																		400					1,100	1,100		96,000	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
21-02 (PMP-11)	Ramp DY, Mill and Overlay	A 6 inch mill and overlay of Ramp DY is recommended.																		500					1,600	1,600		137,500	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-12	Taxiway A Reconstruction	Reconstruction of Taxiway A in the vicinity of Concourse C. Appropriate fillets and shoulders should be added per advisory circular.							400	4,200							200			8,200	1,500				13,500	16,300	2,800	194,000	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'
PMP-13	Ramp DD, Complete Reconstruction	Predominant distresses are alligator cracking, rutting, weathering, patching, and longitudinal and transverse cracking. Complete reconstruction of Ramp DD is recommended.															100			14,000					39,700	39,700		357,000	Aircraft Pavement (Including Subbase) = 2.5'
PMP-14	Ramp EE, Mill and Overlay	Predominant distresses are alligator cracking, longitudinal and transverse cracking, rutting and weathering. This pavement is at a critical time in its life cycle where the deterioration rate is expected to increase. A 6 inch mill and overlay is recommended.																		800					2,200	2,200		191,000	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-15	Taxilane JJ, Complete Reconstruction	Reconstruction of Taxilane JJ.																		300					760	760		67,700	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-16	Ramp DE, Complete Reconstruction	Predominant distresses are alligator cracking, rutting, weathering, patching, and longitudinal and transverse cracking. Complete reconstruction of Ramp DE is recommended.																		5,000					1,500	1,500		132,000	Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'
PMP-17	A Gates, Concrete Pavement Restoration	Predominant distresses are joint seal damage, low severity cracks and patches. Recommended concrete pavement restoration actions include joint sealing, patching and spall repairs																		1,100					3,700	3,700		321,000	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
20-02 (PMP-18)	C Gates, Concrete Pavement Restoration	Predominant distresses are joint seal damage, low severity cracks and patches, with the exception of C9 and C14 that also exhibit shattered slabs and higher severity cracks. While reconstruction is recommended for the latter two gates, a project level review and design should be completed to ensure the correct treatment, which may be less costly than what has been estimated.																		1,700					5,000	5,000		449,000	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
20-03 (PMP-19)	E Gate, Concrete Pavement Restoration	Surface restoration (i.e. crack sealing, etc.) to concrete pavement area surrounding Concourse E																		1,200					4,000	4,000		358,000	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-20	GA Ramp (GA3, GA4, GA5, GA8), Mill and Overlay	A 3 inch mill and overlay of the General Aviation Ramps is recommended.																		1,700					5,400	5,400		481,000	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-21	GA Ramp (GA6, GA7), Mill and Overlay	A 3 inch mill and overlay of the General Aviation Ramps is recommended.																		2,600					8,100	8,100		721,000	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-22	Mid-Cargo Ramp and Taxiways G, R, Mill and Overlay	This area was recently paved due to failures exhibited during 2014. Some of the areas are starting to show failures again. A 6 inch mill and overlay is recommended.																		3,300					9,800	9,800		878,000	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
20-06 (PMP-25)	Taxi Lot 2" Mill and Overlay	2" mill and overlay is recommended for the Taxi Lot.																		730					850	850		73,000	<b>Formerly PMP-25</b> 10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-26	GA Parking AC Reconstruction (By Others)	Predominant distresses are alligator cracking, longitudinal and transverse cracking, rutting and weathering. This pavement is at a critical time in its life cycle where the deterioration rate is expected to increase. A 2 inch mill and overlay is recommended.																		200					400	400		33,700	10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
19-02 (PMP-27)	Cargo Service Road 2" Overlay	Predominant distresses are alligator cracking, longitudinal and transverse cracking, rutting and weathering. This pavement is at a critical time in its life cycle where the deterioration rate is expected to increase. A 2 inch mill and overlay is recommended.																		300					700	700		62,000	<b>Formerly PMP-27</b> 10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
19-03 (PMP-28)	Fuel Farm Rd 2" Mill and Overlay and PCC Restoration	Predominant distresses are alligator cracking, longitudinal and transverse cracking, rutting and weathering in AC sections and large patching, joint spalling, scaling and linear cracking in the PCC section. This pavement is at a critical time in its life cycle where the deterioration rate is expected to increase. A 2 inch mill and overlay is recommended for AC sections and spall repairs and patching are recommended for PCC sections.																		340					1,900	1,900		171,000	<b>Formerly PMP-28</b> 10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
19-01 (PMP-33)	Long-Term Parking Lot A 2" Mill and Overlay	2" mill and overlay with some full-depth reconstruction of Long-Term Parking Lot A.																		6,800					20,500	20,500		46 (Acres)	<b>Formerly PMP-33</b> 10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
19-04 (PMP-34)	Mathison Way 2" Mill and Overlay	Predominant distresses are alligator cracking, longitudinal and transverse cracking, rutting and weathering. This pavement is at a critical time in its life cycle where the deterioration rate is expected to increase. A 2 inch mill and overlay is recommended.																		1,340					6,500	6,500		585,000	<b>Formerly PMP-34</b> 10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-38 Page 1	Taxiways J, Q Mill and Overlay	A 3 inch mill and overlay is recommended for Taxiway Q. For Taxiways J and K, a mill and overlay of undefined thickness at this time is recommended.																		4,500	800				3,000	7,200	4,200	208,000	There is a net increase in impervious area to construct fillets in compliance. 10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-38 Page 2	Taxiways J, Q Mill and Overlay	A 3 inch mill and overlay is recommended for Taxiway Q. For Taxiways J and K, a mill and overlay of undefined thickness at this time is recommended.																		5,500	900				1,650	13,000	11,350	307,000	There is a net increase in impervious area to construct fillets in compliance. 10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
PMP-39	Taxiways K, L, M Mill and Overlay	A mill and overlay of undefined thickness at this time is recommended.																											Due to the severity of the geometry change, it is assumed that full depth reconstruction is necessary to accommodate grading standards. It is also assumed that no centerline lighting is being constructed because there is no existing centerline lighting to tie into. Aircraft Pavement (Including Subbase) = 2.5'; Shoulder/Parking/VSR Pavement (Including Subbase) = 1.0'
PMP-40	Taxiways M and S Mill and Overlay	A mill and overlay of undefined thickness at this time is recommended.							700	5,800							400			20,000	5,000				11,600	29,500	17,900	815,900	There is net increase in impervious area to construct fillets in compliance. 10% of pavement rehabilitation area is assumed to be reconstruction for permitting purposes. Undercut depth assumed to be 1.0'.
									300	1,900							200			11,200	3,800				17,300	33,000	15,700	29 (Acres)	